

IMPERIAL INSTITUTE

THE MINERAL INDUSTRY
of the British Empire and
Foreign Countries

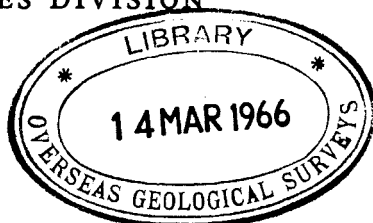
STATISTICAL SUMMARY

(PRODUCTION, IMPORTS AND EXPORTS)

1958 - 1963



OVERSEAS GEOLOGICAL SURVEYS
MINERAL RESOURCES DIVISION



STATISTICAL SUMMARY
OF THE
MINERAL INDUSTRY

WORLD PRODUCTION,
EXPORTS AND IMPORTS

1958-1963

LONDON
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This publication is prepared by the Statistical Section of the Mineral Resources Division of Overseas Geological Surveys. The statistical tables have been compiled from a large number of official and commercial sources. The information obtained from Mines Reports, Trade Returns and other published works, and the assistance given by government and private correspondents throughout the world, are gratefully acknowledged.

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CHANGES IN THIS ISSUE

Statistics relating to Wollastonite are included for the first time.

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EXPLANATORY NOTES

Coverage. Although this Summary attempts to provide a comprehensive world coverage of mineral production and trade, it has not been possible to obtain complete information for every country. In the production tables, estimates for certain countries have been included where necessary in order to arrive at world totals. In the trade tables, however, such estimates have generally not been attempted and the coverage is limited to that available from the official trade returns. The absence of import or export figures for a particular country from a table does not necessarily signify no trade in the commodity concerned, but may mean only that the item has not been separately specified in that country's trade returns.

Arrangement of Countries. In each table, British Commonwealth countries are grouped separately from other countries. Within their respective groups the countries are then listed alphabetically by continents in the following order: Europe, Africa, North and Central America, South America, Asia and Australasia.

For Northern Rhodesia, Nyasaland and Southern Rhodesia, production statistics are recorded separately but the trade statistics are given for the Federation as a whole.

For Swaziland and Bechuanaland, production statistics are recorded separately but the foreign trade is dealt with for Customs purposes as part of that of South Africa. The trade figures for South-West Africa are also generally included with those for South Africa.

For 1963 the trade statistics for Aden may include those of other states in the Federation of South Arabia.

From 1958 to 1959 the trade statistics for Spain and Spanish Dependencies exclude the trade between these territories except in the cases of coal, coke, iron ore, manganese ore, petroleum and allied products, pyrites and salt. As from 1960 the statistics exclude all trade between these territories.

From 1958 to 1961 the trade statistics for Egypt and Syria exclude trade between these countries.

Production of Ores and Metals. In the sections on cobalt, copper, lead, tin and zinc, tables are given showing both the production of ore, in terms of its metal content, and the actual production of metal. The metal content of the ore produced is either as calculated from average assay values or is the amount of metal estimated to be recoverable. The ore is, of course, not necessarily smelted in the country of origin and the metal production in a particular country may be derived from both domestic and imported ores. Secondary metal is excluded, as far as possible, from the metal production tables but where important is given in footnotes to the producing countries.

Imports and Exports. Except in the cases of gold and silver, the figures shown in the tables are intended to represent exports of domestic produce and imports retained, i.e. total imports less re-exports. In certain cases, notably Aden, Hong Kong and Malaya, it has not been possible to allow for re-exports and figures relate to total exports and total imports. Shipments of coal and oil as bunker fuel, which constitute an important part of the trade of some countries, are shown separately in the export tables; where these shipments consist of, or include, foreign produce a footnote is given to that effect. The imports of Pakistan for the years 1961 onwards shown in the tables are not strictly comparable with those for preceding years since they include for the first time estimated quantities of imports entered in the official trade returns by value only.

Units. The units of weight employed in the tables are: the metric carat, the troy ounce, the lb. (avdp.) and the long ton. Their equivalents in certain other units are as follows:

| | | | |
|----------------|--------------------------|---------------|------------------------|
| 1 metric carat | = 0.2 gramme | 1 lb. (avdp.) | = 7,000 grains |
| | = 3.08648 grains | | = 14.5833 troy ounces |
| | | | = 0.453592 kilogrammes |
| 1 troy ounce | = 480 grains | 1 long ton | = 2,240 lb. (avdp.) |
| | = 31.1035 grammes | | = 1.12 short tons |
| | = 155.5175 metric carats | | = 1.016047 metric tons |

The factors used for converting volumes of liquids into long tons are given in footnotes to the tables relating to Coal By-Products (p.89) and Petroleum and Allied Products (pp. 246, 260).

Symbols. The following symbols are used in this Summary:

— = Nil, or negligible. *r* = Revised figure. *n.a.* = Information not available.

ABRASIVES*

PRODUCTION OF NATURAL ABRASIVES

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-----------|-----------|-----------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya— | | | | | | |
| Pumice (b) | 733 | 2,246 | 2,420 | 696 | 1,110 | 280 |
| Southern Rhodesia— | | | | | | |
| Corundum | 4,102 | 2,499 | 3,432 | 2,493 | 2,989 | 5,304 |
| Tripoli | — | — | 147 | 365 | 378 | 269 |
| Tanganyika— | | | | | | |
| Corundum | — | (a) 9 | — | (a) 4 | — | — |
| Garnet | 120 | 181 | 133 | — | — | — |
| Canada— | | | | | | |
| Garnet | — | — | 29 | 71 | 45 | <i>n.a.</i> |
| Grindstones | — | 54 | 9 | 9 | 9 | 9 |
| India— | | | | | | |
| Corundum | 389 | 211 | 246 | 324 | 296 | 648 |
| Garnet | — | 361 | 462 | 237 | 408 | 355 |
| Australia— | | | | | | |
| Garnet | 36 | 65 | 97 | 63 | 53 | 91 |
| New Zealand— | | | | | | |
| Pumice (b) | 23,082 | 28,395 | 43,932 | 32,712 | 32,522 | 16,606 |
| OTHER COUNTRIES | | | | | | |
| Belgium— | | | | | | |
| Grindstones | 44 | 47 | 49 | 57 | 56 | 59 |
| France— | | | | | | |
| Pumice (b) | 6,296 | 1,842 | 889 | 1,299 | 1,675 | 10,700 |
| Millstones | 2,519 | 797 | 1,230 | 1,300 | 1,210 | 1,200 |
| Sharpening stones | 742 | 467 | 523 | 139 | 126 | 60 |
| Germany (Federal)— | | | | | | |
| Pumice (d) | 2,906,000 | 3,607,000 | 4,234,000 | 5,266,000 | 5,617,000 | 6,289,000 |
| Tripoli | <i>n.a.</i> | 30 | 25 | 6 | 25 | 25 |
| Greece— | | | | | | |
| Emery | 7,000 | 7,000 | 7,000 | 7,100 | <i>n.a.</i> | <i>n.a.</i> |
| Pumice | 44,298 | 64,000 | 80,000 | 70,000 | (c) 79,000 | (c) 79,000 |
| Pumicite | 84,311 | 84,000 | 180,000 | 190,000 | (c) 200,000 | (c) 200,000 |
| Iceland— | | | | | | |
| Pumice (b) | (c) 10,000 | (c) 9,000 | (c) 8,000 | (c) 8,000 | (c) 6,500 | 12,500 |
| Italy— | | | | | | |
| Pumice | 252,958 | 361,582 | 419,698 | 396,717 | <i>n.a.</i> | <i>n.a.</i> |
| Sharpening stones | 2,038 | 1,760 | 320 | 213 | <i>n.a.</i> | <i>n.a.</i> |
| Whetstones | 384 | 630 | 472 | 399 | <i>n.a.</i> | <i>n.a.</i> |
| Spain— | | | | | | |
| Tripoli | 11,481 | 10,322 | 12,357 | 17,273 | 11,922 | <i>n.a.</i> |
| Garnet | 363 | 216 | 180 | 185 | 164 | <i>n.a.</i> |
| Sweden— | | | | | | |
| Grindstones and whetstones | 787 | 794 | 672 | 615 | 623 | <i>n.a.</i> |
| Canary Islands— | | | | | | |
| Pumice (b) | — | 1,640 | 1,441 | 1,415 | 1,713 | (c) 1,675 |
| Egypt— | | | | | | |
| Pumice | 1,058 | 2,461 | 2,953 | 3,871 | 2,032 | (c) 2,000 |
| Malagasy Republic— | | | | | | |
| Garnet | 233 | — | — | 49 | 98 | (a) 1 |

*See also Aluminium, Diamonds and Diatomaceous earth.

(a) Exports.

(b) May include pumice for use other than as an abrasive.

(c) United States Bureau of Mines' estimate.

(d) Marketable. Including pumice and pumicite for constructional purposes.

PRODUCTION OF NATURAL ABRASIVES (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| South Africa— | | | | | | |
| Corundum | 1,890 | 555 | 110 | 142 | 312 | 71 |
| United States (c)— | | | | | | |
| Emery | 6,863 | 7,638 | 7,294 | 5,518 | 3,854 | 6,011 |
| Garnet | 10,985 | 13,007 | 9,395 | 10,765 | 12,648 | 13,059 |
| Pumice and pumicite | | | | | | |
| (a) (b) | 1,761,568 | 2,032,250 | 1,973,540 | 2,198,737 | 2,028,000 | 2,337,000 |
| Tripoli | 42,004 | 47,293 | 51,529 | 48,787 | 55,118 | 59,496 |
| Grindstones | 761 | 965 | n.a. | n.a. | n.a. | n.a. |
| Grinding pebbles .. | 1,772 | 1,513 | 1,011 | n.a. | n.a. | n.a. |
| Argentina— | | | | | | |
| Garnet | 281 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Turkey— | | | | | | |
| Emery | 3,363 | 4,753 | 6,706 | 8,195 | 3,354 | 7,372 |

Abrasives are also produced in other countries, statistics for which are not available.

The following crude artificial abrasives were produced in Canada (long tons):

| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------|--------|---------|---------|---------|---------|------|
| Silicon carbide .. | 69,221 | 77,007 | 75,546 | 70,704 | 58,798 | n.a. |
| Fused alumina .. | 97,774 | 135,999 | 167,058 | 111,866 | 144,508 | n.a. |

The United States Bureau of Mines reports the following artificial abrasives sold, shipped or used from plants in the United States and Canada (long tons):

| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------|---------|---------|---------|---------|---------|---------|
| Silicon carbide .. | 98,621 | 118,266 | 118,946 | 112,255 | 103,318 | 97,635 |
| Aluminium oxide .. | 109,704 | 141,421 | 174,916 | 122,278 | 162,432 | 142,914 |
| Metallic abrasives .. | 90,321 | 113,142 | 100,342 | 97,781 | 112,296 | 119,114 |

(United States plants only)

The figures given above include material used for refractories and other non-abrasive purposes.

(a) Including pumice for use other than as an abrasive.

(b) Including volcanic cinders used principally for ballast which amounted to 935,652 tons in 1958, 1,332,363 tons in 1959, 1,436,652 tons in 1960, 1,363,000 tons in 1961, 1,552,000 tons in 1962 and 1,400,000 tons in 1963.

(c) Sold or used by producers.

EXPORTS OF ABRASIVES*

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-----------|-----------|-----------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Abrasives, natural .. | 1,442 | 2,339 | 2,829 | 2,195 | 2,045 | 3,975 |
| do. artificial .. | 3,209 | 3,744 | 4,435 | 3,991 | 5,320 | 2,687 |
| Grinding wheels, etc. .. | 4,150 | 4,968 | 5,752 | 6,777 | 5,835 | } 6,902 |
| Other manufactured abrasives .. | 310 | 357 | 342 | 301 | 559 | |
| Rhodesia and Nyasaland— | | | | | | |
| Corundum .. | 4,343 | 2,940 | 3,342 | 2,620 | 2,926 | 4,660 |
| Tanganyika— | | | | | | |
| Corundum .. | — | 9 | — | 4 | — | — |
| Canada— | | | | | | |
| Natural abrasives, including diatomaceous earth .. | 21 | 59 | 15 | 5 | — | 110 |
| Artificial abrasives, crude .. | 168,393 | 216,869 | 244,946 | 194,328 | 203,246 | 201,219 |
| Artificial abrasive wheels, etc. .. | (£15,105) | (£78,204) | (£26,121) | } (£46,821) | } (£93,721) | } (£48,105) |
| Grindstones .. | (£26,161) | (£24,117) | (£17,028) | | | |
| Hong Kong— | | | | | | |
| Natural abrasives .. | 1 | 590 | 489 | 7 | 3 | 10 |
| Grinding and polishing wheels, etc. .. | (£11,642) | 170 | 175 | 86 | 98 | 65 |
| India— | | | | | | |
| Grindstones, etc. .. | 1,785 | 1,198 | (c) 2,550 | (c) 6,022 | (c) 1,792 | (c) 2,089 |
| Malaya— | | | | | | |
| Grinding and polishing wheels, etc. .. | 52 | 87 | 101 | 59 | 59 | 18 |
| New Zealand— | | | | | | |
| Pumice (a) .. | 1,082 | 1,128 | 995 | 1,155 | n.a. | 667 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Natural abrasives .. | 729 | 41 | 15 | 1 | 3 | 47 |
| Millstones and grindstones .. | 392 | 6 | 5 | 9 | 13 | 5 |
| Corundum, artificial .. | 2,720 | 2,235 | 4,382 | 5,706 | 9,380 | 12,693 |
| Belgium-Luxembourg E.U.— | | | | | | |
| Natural abrasives .. | 35 | 101 | 120 | 112 | 165 | 272 |
| Corundum, artificial .. | 46 | 53 | 80 | 187 | 28 | 82 |
| Millstones, grindstones, etc. .. | 65 | 64 | (b) 517 | (b) 779 | (b) 983 | (b) 1,044 |
| Denmark— | | | | | | |
| Emery .. | 8 | 2 | — | — | 2 | — |
| Millstones and grindstones .. | 385 | 37 | 2 | 6 | 7 | 9 |
| Finland— | | | | | | |
| Grindstones, etc. (b) .. | 120 | 261 | n.a. | n.a. | n.a. | 105 |
| France— | | | | | | |
| Corundum and emery .. | 462 | 724 | 260 | 100 | 84 | 58 |
| Pumice .. | 19 | 56 | 30 | 37 | 33 | 31 |
| Other natural abrasives .. | 60 | 257 | 107 | 314 | 541 | 459 |
| Millstones and grindstones .. | 876 | 804 | 701 | 817 | 617 | } 1,622 |
| Whetstones .. | 60 | 41 | 46 | 76 | 15 | |
| Carborundum .. | 1,351 | 2,720 | 2,660 | 2,059 | 2,066 | 2,445 |
| Corundum, artificial .. | 5,613 | 6,775 | 9,978 | 14,487 | 12,204 | 12,172 |

*See also Aluminium, Diamonds and Diatomaceous earth.

(a) May include pumice for use other than as an abrasive.

(b) Including artificial.

(c) Years ended March 31 following that stated.

EXPORTS OF ABRASIVES (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Emery and corundum | 197 | 321 | 394 | 533 | 453 | 189 |
| Pumice (a) | 545,755 | 495,421 | 649,977 | 680,570 | 622,932 | 694,496 |
| Other natural abrasives | 7 | 40 | 9 | 4 | 9 | 3 |
| Millstones, grindstones, etc. (b) | 2,206 | 2,447 | 1,898 | 1,871 | 1,910 | 1,751 |
| Carborundum | 4,200 | 3,358 | 5,384 | 6,160 | 7,712 | 6,614 |
| Corundum, artificial .. | 14,368 | 16,287 | 20,907 | 17,235 | 18,207 | 17,030 |
| Greece— | | | | | | |
| Emery | 5,872 | 3,316 | 6,090 | 5,218 | 6,772 | 5,423 |
| Pumice | 41,006 | 20,799 | 31,525 | 11,951 | 68,067 | 43,142 |
| Italy— | | | | | | |
| Pumice | 68,256 | 90,948 | 104,209 | 98,860 | 133,306 | 338,395 |
| Emery and corundum | 78 | 46 | 319 | 571 | 24 | 66 |
| Other natural abrasives | 142 | 38 | 48 | 88 | 139 | 487 |
| Millstones | 262 | 386 | 431 | 353 | 9 | 1,237 |
| Grindstones | 124 | | | | | |
| Whetstones | 50 | 85 | 73 | 78 | 71 | |
| Carborundum | 267 | 882 | 3,928 | 5,929 | 6,985 | 7,656 |
| Corundum, artificial .. | 318 | 316 | 1,480 | 1,544 | 743 | 441 |
| Netherlands— | | | | | | |
| Natural abrasives | 2,853 | 3,007 | 3,876 | 4,088 | 4,205 | 4,248 |
| Millstones, grindstones, etc. | 150 | 178 | 274 | 258 | 338 | 363 |
| Corundum, artificial .. | 69 | 99 | 64 | 36 | 35 | 36 |
| Norway— | | | | | | |
| Natural abrasives | 9 | — | — | 2 | 15 | — |
| Carborundum | n.a. | 13,463 | 16,720 | 16,503 | 18,114 | 15,411 |
| Sweden— | | | | | | |
| Emery | — | 1 | 2 | — | 5 | 1 |
| Other natural abrasives | 4 | 15 | 11 | 43 | 36 | 42 |
| Carborundum | 290 | 765 | 710 | 555 | 732 | 446 |
| Corundum, artificial .. | 706 | 852 | 1,227 | 1,360 | 829 | 677 |
| Millstones, grindstones, etc. | 108 | 132 | 126 | 158 | 79 | 486 |
| Switzerland— | | | | | | |
| Carborundum, emery, etc., crude | 167 | 22 | 2,169 | 1,958 | 1,924 | 2,842 |
| do. do. ground | 1,632 | 2,017 | | | | |
| Yugoslavia— | | | | | | |
| Natural abrasives | 58 | — | 723 | 1,838 | 2,949 | 2,009 |
| Millstones, grindstones, etc. | 12 | 3 | 22 | — | 73 | 116 |
| Carborundum | n.a. | n.a. | n.a. | n.a. | 8 | 101 |
| Malagasy Republic— | | | | | | |
| Garnet | 244 | 1 | 49 | 99 | 76 | 1 |
| South Africa— | | | | | | |
| Corundum | 1,206 | 1,048 | 108 | 143 | 517 | 71 |
| Mexico— | | | | | | |
| Pumice, etc. | — | 232 | 735 | 231 | 1,581 | 6,378 |
| United States— | | | | | | |
| Corundum | 149 | 81 | 49 | 86 | 98 | 67 |
| Emery powder | 984 | 1,216 | 1,002 | 1,035 | 731 | 559 |
| Grindstones | 250 | 358 | 285 | 110 | 114 | 37 |
| Whetstones, etc. | 91 | 152 | 166 | 89 | 77 | 62 |
| Other natural abrasives | 10,677 | 9,398 | 9,245 | 10,140 | 9,563 | 11,362 |
| Aluminium oxide, fused | 8,156 | 8,155 | 9,792 | 10,525 | 12,078 | 11,729 |
| Carborundum | 9,506 | 7,347 | 7,316 | 10,921 | 9,130 | 8,762 |
| Unfused alumina | 68 | 59 | 97 | 77 | 133 | 168 |
| Other crude artificial abrasives | 89 | 93 | 99 | 130 | 160 | 93 |

(a) Including pumice and pumicite for construction purposes.

(b) Including artificial.

EXPORTS OF ABRASIVES (*cont.*)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|-------|-------|-------|-------|-------|-------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Japan— | | | | | | |
| Emery | 150 | 172 | 126 | 155 | 237 | 284 |
| Other natural abrasives | 68 | 61 | 118 | 127 | 231 | 58 |
| Grindstones, etc. .. | 152 | 173 | 215 | 159 | 189 | 363 |
| Artificial abrasives .. | 293 | 359 | 345 | 445 | 1,214 | 1,063 |
| Turkey— | | | | | | |
| Emery | 6,468 | 7,096 | 6,975 | 9,649 | 8,570 | 8,220 |

IMPORTS OF ABRASIVES*

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|------------|------------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Emery | 2,314 | 3,024 | 2,850 | 4,416 | 2,650 | 11,998 |
| Garnet concentrates— | | | | | | |
| Unground | 455 | | | | | |
| Ground | 339 | 8,019 | 10,224 | 9,322 | 8,308 | |
| Other natural abrasives | 6,787 | | | | | |
| Corundum, artificial .. | 27,957 | 14,226 | 24,570 | 14,238 | 12,428 | 14,031 |
| Carborundum | 7,883 | 9,161 | 14,030 | 12,510 | 13,744 | 11,508 |
| Grinding wheels of hard abrasives | 177 | 319 | 370 | 540 | 691 | 531 |
| Grindstones and whetstones etc. | | | | | | |
| Malta— | | | | | | |
| Pumice | r 80 | r 139 | r 72 | r 100 | — | 431 |
| Grinding and polishing wheels | (£1,108) | (£909) | (£4,647) | n.a. | (£2,662) | (£3,442) |
| Ghana— | | | | | | |
| Grinding and polishing wheels | (£22,375) | (£28,504) | (£31,365) | 68 | 132 | 60 |
| Kenya and Uganda— | | | | | | |
| Grindstones, etc. .. | 46 | 62 | 59 | 60 | 45 | 50 |
| Mauritius— | | | | | | |
| Grindstones, etc. .. | 30 | 60 | 58 | 54 | 42 | 43 |
| Rhodesia and Nyasaland— | | | | | | |
| Grinding and polishing wheels and stones .. | n.a. | 135 | 166 | 229 | 184 | 201 |
| Tanganyika— | | | | | | |
| Grindstones, etc. .. | 13 | 21 | 8 | 12 | 12 | 13 |
| Canada— | | | | | | |
| Pumice, etc. | (£109,144) | (£74,625) | (£71,816) | (£59,073) | (£79,545) | (£64,685) |
| Emery, etc. | (£86,096) | (£89,533) | (£74,322) | (£66,716) | (£68,553) | (£89,933) |
| Artificial abrasives, ground | (£703,823) | (£877,375) | (£752,561) | (£833,720) | (£963,746) | (£982,982) |
| Artificial abrasive manufactures | (£203,924) | (£234,754) | (£208,550) | (£194,207) | (£190,086) | (£198,462) |
| Grindstones and wheels | (£774,907) | (£940,982) | (£860,635) | (£831,574) | (£903,191) | (£896,632) |
| Jamaica— | | | | | | |
| Natural abrasives .. | 3 | 5 | 2 | 6 | 9 | 5 |
| Grindstones | 10 | 12 | 12 | 11 | 10 | 8 |
| Trinidad and Tobago— | | | | | | |
| Grindstones and wheels | 19 | 25 | 22 | 19 | 15 | n.a. |
| Ceylon— | | | | | | |
| Natural abrasives .. | 13 | 29 | 4 | 112 | 27 | 308 |
| Grinding and polishing wheels, etc. | (£9,529) | (£11,848) | (£13,909) | (£12,581) | (£12,016) | (£8,369) |
| Cyprus— | | | | | | |
| Grindstones and millstones | (£3,440) | (£6,751) | (£8,417) | (£7,757) | (£8,964) | (£11,170) |
| Hong Kong— | | | | | | |
| Natural abrasives .. | 6 | 629 | 568 | 74 | 168 | 261 |
| Grinding and polishing wheels, etc. | (£35,049) | 257 | 324 | 218 | 330 | 858 |
| India— | | | | | | |
| Natural abrasives .. | 986 | 1,973 | (a) 3,679 | (a) 3,673 | (a) 2,590 | (a) 3,196 |
| Carborundum | 175 | 116 | (a) 223 | (a) 202 | (a) 169 | (a) 390 |
| Grinding stones, etc. .. | 144 | 261 | (a) 153 | (a) 219 | (a) 201 | (a) 187 |
| Malaya— | | | | | | |
| Grinding and polishing wheels, etc. | 368 | 462 | 476 | 407 | 462 | 313 |
| Sarawak— | | | | | | |
| Grinding and polishing wheels, etc. | 24 | 41 | 38 | 38 | 44 | 32 |

*See also Aluminium, Diamonds and Diatomaceous earth.

(a) Years ended March 31 following that stated.

IMPORTS OF ABRASIVES (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-----------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Australia (b)— | | | | | | |
| Emery | 132 | 93 | 108 | — | — | — |
| Corundum | 93 | 13 | 35 | — | — | — |
| Pumice | 1,414 | 1,174 | 1,215 | 1,046 | 1,134 | 1,128 |
| Grindstones, etc. .. . | 87 | 99 | 183 | 228 | 150 | 254 |
| Garnet grains | 48 | 53 | 41 | 50 | 43 | 44 |
| Tripoli | 306 | 454 | 303 | 465 | 338 | 453 |
| Other natural abrasives | 151 | 81 | 472 | 457 | 523 | 590 |
| Artificial abrasives .. . | 2,793 | 3,132 | 2,813 | 4,202 | 2,648 | 4,586 |
| New Zealand— | | | | | | |
| Pumice | — | 1 | — | — | — | — |
| Corundum, emery, etc. | 18 | 12 | 19 | 20 | 8 | n.a. |
| Other natural abrasives (£N.Z.) | (£2,966) | (£1,968) | (£3,808) | (£4,169) | (£2,587) | n.a. |
| Carborundum, etc. .. . | 79 | 69 | 44 | 74 | 74 | n.a. |
| Grindstones, etc. (£N.Z.) | r (£15,005) | (£12,896) | (£15,856) | (£16,481) | n.a. | n.a. |
| Irish Republic— | | | | | | |
| Grindstones, oilstones, etc. .. . | 122 | 111 | 136 | 171 | 178 | 178 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Pumice | 417 | 410 | 659 | 835 | 400 | 350 |
| Other natural abrasives | 200 | 173 | 160 | 107 | 135 | 114 |
| Carborundum | } 3,000 | 765 | 1,039 | 1,191 | 1,096 | 1,466 |
| Corundum, artificial .. . | | 1,504 | 2,298 | 2,400 | 2,392 | 2,565 |
| Grindstones | | 86 | } 147 | } 221 | } 146 | } 141 | } 93 |
| Millstones | 97 | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Pumice | n.a. | n.a. | n.a. | 205,028 | 173,635 | 206,435 |
| Other natural abrasives | 945 | 1,117 | 1,063 | 1,491 | 825 | 855 |
| Corundum, artificial .. . | 1,094 | 1,130 | 1,524 | 1,604 | 1,824 | 2,050 |
| Millstones, grindstones, etc. | 161 | 166 | (a) 1,014 | (a) 1,170 | (a) 1,186 | (a) 1,191 |
| Carborundum | 1,040 | 1,204 | 1,463 | 1,918 | 1,943 | 1,729 |
| Denmark— | | | | | | |
| Emery, etc. | 380 | 1,641 | 616 | 416 | 505 | 520 |
| Pumice | 1,696 | 2,008 | 1,986 | 2,655 | 2,927 | 2,177 |
| Carborundum | 697 | 317 | 429 | 286 | 293 | 289 |
| Corundum, artificial .. . | n.a. | 257 | 444 | 431 | 383 | 407 |
| Millstones and grindstones | 210 | 134 | 134 | 83 | 127 | 45 |
| Finland— | | | | | | |
| Emery, pumice, etc. .. . | 479 | 591 | 531 | 434 | 381 | 342 |
| Carborundum | 275 | 351 | 290 | 493 | 729 | 599 |
| Millstones, grindstones, etc. (a) | 726 | 984 | 1,289 | 1,463 | 1,416 | 1,146 |
| France— | | | | | | |
| Emery and corundum | 3,030 | 399 | 1,811 | 1,854 | 1,581 | 2,522 |
| Pumice | 81,843 | 42,734 | 37,979 | 23,726 | 30,387 | 28,384 |
| Other natural abrasives | 412 | 164 | 151 | 303 | 256 | 3,534 |
| Millstones and grindstones | 196 | 271 | 178 | 233 | 386 | } 2,569 |
| Whetstones | 130 | 193 | 142 | 60 | 44 | |
| Carborundum | 1,805 | 1,124 | 2,012 | 4,065 | 4,292 | 3,046 |
| Corundum, artificial .. . | 723 | 494 | 899 | 1,110 | 1,664 | 2,170 |
| Germany (Federal)— | | | | | | |
| Emery and corundum .. . | 991 | 537 | 1,457 | 866 | 1,099 | 762 |
| Pumice, etc. | 6,144 | 6,182 | 9,576 | 8,310 | 6,582 | 186,688 |
| Other natural abrasives | 150 | 436 | 1,211 | 1,415 | 1,771 | 1,475 |

(a) Including artificial.

(b) Years ended June 30 of that stated.

IMPORTS OF ABRASIVES (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Fed.) (cont.)— | | | | | | |
| Millstones, grindstones, etc. (a) | 331 | 300 | 281 | 582 | 341 | 300 |
| Carborundum | 1,551 | 2,375 | 3,450 | 4,868 | 4,033 | 4,424 |
| Corundum, artificial .. | 398 | 530 | 2,539 | 2,117 | 2,587 | 3,290 |
| Greece— | | | | | | |
| Millstones, grindstones, etc. | 26 | 102 | 90 | 138 | 142 | 142 |
| Other abrasives | <i>n.a.</i> | <i>n.a.</i> | 134 | 155 | 135 | 180 |
| Iceland— | | | | | | |
| Millstones, etc. | 16 | 24 | 12 | 14 | 16 | <i>n.a.</i> |
| Italy— | | | | | | |
| Emery and corundum .. | 1,896 | 1,376 | 2,277 | 2,651 | 2,003 | 1,898 |
| Other natural abrasives | 586 | 536 | 938 | 1,244 | 1,143 | 1,358 |
| Millstones | 36 | 326 | 340 | 455 | 34 | 2,996 |
| Grindstones | 95 | | | | | |
| Whetstones | 15 | 20 | 28 | 51 | 31 | |
| Corundum, artificial .. | 2,959 | 2,822 | 4,996 | 4,811 | 5,120 | 5,806 |
| Carborundum | 1,863 | 1,304 | 2,028 | 2,667 | 4,144 | 3,081 |
| Netherlands— | | | | | | |
| Emery | 3,723 | 3,362 | 4,616 | 4,193 | 5,593 | 4,993 |
| Pumice and tripoli .. | 321,145 | 298,144 | 64,996 | 468,332 | 433,504 | 465,654 |
| Other natural abrasives | 1,907 | 2,117 | 1,670 | 614 | 463 | 482 |
| Millstones and grindstones | 132 | 170 | (a) 1,247 | (a) 1,311 | (a) 1,318 | (a) 1,216 |
| Corundum, artificial .. | 1,526 | 1,820 | 2,236 | 2,246 | 2,025 | 2,057 |
| Carborundum | 657 | 739 | 861 | 523 | 610 | 544 |
| Norway— | | | | | | |
| Natural abrasives | 581 | 362 | 429 | 436 | 388 | 381 |
| Whetstones | 3 | 2 | 3 | 2 | 8 | 8 |
| Carborundum | <i>n.a.</i> | 22 | 45 | 31 | 14 | 966 |
| Corundum, artificial .. | <i>n.a.</i> | 378 | 557 | 626 | 525 | 513 |
| Portugal— | | | | | | |
| Emery, etc. | 613 | 579 | 191 | 351 | 186 | 331 |
| Pumice | 242 | 219 | 115 | 176 | 255 | 211 |
| Millstones etc. | 42 | 75 | 20 | 64 | 44 | 170 |
| Spain— | | | | | | |
| Emery powder | 21 | 112 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Carborundum | 395 | 553 | 381 | 572 | 788 | 904 |
| Sweden— | | | | | | |
| Emery | 405 | 487 | 728 | 635 | 405 | 589 |
| Pumice | 263 | 584 | 416 | 361 | 700 | 716 |
| Other natural abrasives | 1,019 | | | | | |
| Carborundum, etc. | 1,815 | 2,582 | 3,819 | 2,947 | 3,891 | 3,492 |
| Corundum, artificial .. | 2,630 | 3,281 | 7,585 | 5,390 | 4,329 | 3,623 |
| Grindstones, etc. | 121 | 176 | 94 | 121 | 99 | 73 |
| Millstones | 48 | | | | | |
| Switzerland— | | | | | | |
| Emery, crude | 532 | 304 | 625 | 1,353 | 1,503 | 737 |
| Carborundum, emery, etc., ground | 1,874 | 1,992 | | | | |
| Pumice (b) | <i>n.a.</i> | <i>n.a.</i> | 23,596 | 20,467 | 18,194 | 14,794 |
| Millstones | 83 | 57 | 148 | 107 | 82 | 72 |
| Grindstones | 169 | 198 | | | | |
| Whetstones | 12 | 16 | 26 | 19 | 21 | 22 |
| Corundum, artificial .. | <i>n.a.</i> | <i>n.a.</i> | 3,532 | 3,751 | 4,250 | 3,413 |
| Yugoslavia— | | | | | | |
| Natural abrasives | 1,418 | 1,179 | 570 | 1,091 | 884 | 766 |
| Millstones, grindstones, etc. | 515 | 539 | 834 | 348 | 245 | 328 |
| Carborundum | 53 | 323 | 289 | 670 | 613 | 596 |

(a) Including artificial.

(b) May include pumice for use other than as an abrasive

IMPORTS OF ABRASIVES (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|------------|------------|------------|------------|------------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Algeria— | | | | | | |
| Emery, corundum, etc. | 78 | 241 | 102 | n.a. | n.a. | n.a. |
| Pumice (b) | 32,625 | 43,671 | 45,947 | n.a. | n.a. | n.a. |
| Millstones and grindstones | 181 | 136 | 113 | n.a. | n.a. | n.a. |
| Congo Republic— | | | | | | |
| Natural abrasives | 22 | 12 | n.a. | n.a. | n.a. | n.a. |
| Corundum, artificial | 227 | 129 | n.a. | n.a. | n.a. | n.a. |
| Egypt— | | | | | | |
| Natural abrasives | 1,105 | 2,555 | 2,034 | 1,726 | 1,647 | n.a. |
| Millstones | 27 | 16 | 1 | 2 | } 66 | n.a. |
| Grindstones | — | 6 | 16 | 2 | | n.a. |
| Whetstones | — | 3 | 1 | 4 | | 93 | n.a. |
| Malagasy Republic— | | | | | | |
| Natural abrasives | 65 | 22 | 15 | 15 | 17 | 18 |
| Morocco— | | | | | | |
| Millstones and grindstones | 46 | 46 | 56 | 50 | 65 | 144 |
| Natural abrasives | 23 | 35 | 30 | 96 | 8 | 27 |
| South Africa— | | | | | | |
| Emery | 96 | 123 | 105 | 37 | 87 | n.a. |
| Pumice | 73 | 60 | 63 | 71 | 105 | n.a. |
| Other abrasives | (£186,205) | (£171,616) | (£186,319) | (£192,400) | (£270,138) | n.a. |
| Abrasive wheels and discs | (£70,044) | (£70,455) | (£124,859) | (£130,512) | (£154,988) | n.a. |
| Grindstones, millstones, etc. | (£4,375) | (£5,349) | (£3,084) | (£4,708) | (£4,400) | n.a. |
| Sudan— | | | | | | |
| Natural abrasives | n.a. | n.a. | n.a. | n.a. | n.a. | 167 |
| Grindstones | 104 | 104 | 108 | 64 | 72 | 221 |
| Tunisia— | | | | | | |
| Pumice | 550 | 25 | 11 | 252 | 42 | n.a. |
| Millstones and grindstones (a) | 109 | 77 | 440 | 79 | 33 | n.a. |
| Costa Rica— | | | | | | |
| Pumice, emery and corundum | 10 | 6 | 15 | 3 | 9 | 45 |
| Cuba— | | | | | | |
| Grindstones | 1,035 | 246 | n.a. | n.a. | n.a. | n.a. |
| Guatemala— | | | | | | |
| Natural abrasives | 24 | 9 | 5 | 3 | 3 | n.a. |
| Mexico— | | | | | | |
| Emery and carborundum | 1,306 | 741 | 746 | 1,125 | 1,018 | 990 |
| Pumice | 7 | 15 | 27 | 9 | 67 | 9 |
| Millstones and grindstones | 784 | 680 | 828 | 887 | 428 | 121 |
| United States— | | | | | | |
| Corundum, crude | 4,183 | 2,978 | 2,370 | 2,139 | 2,170 | 1,817 |
| Emery, crude | 11 | 1,000 | — | 1,000 | 2,000 | 500 |
| Corundum and emery, ground | 462 | 8 | 3 | 15 | 780 | n.a. |
| Pumice, crude | 34,476 | 19,393 | 5,853 | 6,168 | 6,371 | 2,171 |
| do. manufactured | 1,673 | 3,561 | 3,496 | 3,628 | 2,843 | 2,019 |
| Tripoli, etc. | 38 | 15 | 34 | — | n.a. | 20 |
| Crude artificial abrasives | 140,830 | 201,357 | 223,352 | 176,784 | 185,657 | 182,353 |
| Argentina— | | | | | | |
| Emery | 2,628 | 1,919 | 1,540 | 2,359 | 1,447 | 1,098 |
| Grindstones | 1 | — | 5 | 18 | 15 | 14 |

(a) Including artificial.

(b) May include pumice for use other than as an abrasive.

IMPORTS OF ABRASIVES (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Brazil— | | | | | | |
| Emery, pumice, etc. . . | 63 | 51 | 99 | 101 | 71 | 31 |
| Carborundum . . . | 478 | 452 | 462 | 470 | 176 | 155 |
| Millstones, grindstones, etc. | 173 | 144 | 166 | 158 | 98 | 77 |
| Chile— | | | | | | |
| Emery | 24 | 51 | 62 | 121 | 17 | <i>n.a.</i> |
| Carborundum | 11 | 2 | 5 | — | — | <i>n.a.</i> |
| Millstones, grindstones, etc. | 185 | 228 | 397 | 318 | 220 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Emery and pumice . . | 50 | 52 | 65 | 35 | 69 | 102 |
| Tripoli and other natural abrasives . . | 87 | 32 | 39 | 49 | 30 | 46 |
| Millstones and grind- stones (a) | 156 | 136 | 176 | 196 | 224 | 239 |
| Corundum, artificial . . | 7 | 7 | 18 | 31 | 68 | 99 |
| Peru— | | | | | | |
| Emery and pumice . . | 38 | 55 | 34 | 38 | 47 | 53 |
| Millstones, grindstones, etc. (a) | 59 | 86 | 99 | 109 | 160 | 112 |
| Venezuela— | | | | | | |
| Natural abrasives . . | 66 | 88 | 102 | 99 | 77 | 35 |
| Carborundum | 113 | 77 | 38 | 41 | 22 | 16 |
| Burma— | | | | | | |
| Natural abrasives . . | 47 | 471 | 453 | 55 | 194 | <i>n.a.</i> |
| Indonesia— | | | | | | |
| Emery | 33 | 47 | 106 | 66 | <i>n.a.</i> | <i>n.a.</i> |
| Other natural abrasives | 76 | 37 | 39 | 186 | <i>n.a.</i> | <i>n.a.</i> |
| Iran (b)— | | | | | | |
| Emery, etc. | 12 | 21 | 29 | <i>n.a.</i> | <i>n.a.</i> | 4 |
| Iraq— | | | | | | |
| Emery, pumice, etc. . . | 9 | 4 | 28 | 164 | 5 | <i>n.a.</i> |
| Grindstones, whet- stones, etc. | 170 | 149 | 256 | 178 | 123 | <i>n.a.</i> |
| Israel— | | | | | | |
| Natural abrasives . . | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 54 | 193 | <i>n.a.</i> |
| Japan— | | | | | | |
| Emery | 44 | 106 | 157 | 194 | 126 | 89 |
| Other natural abrasives | 393 | 472 | 517 | 594 | 893 | 1,099 |
| Grindstones, etc. . . | 2 | 6 | 10 | 10 | 12 | 18 |
| Artificial abrasives . . | 451 | 479 | 834 | 1,772 | 1,363 | 743 |
| Lebanon— | | | | | | |
| Emery | — | 6 | 5 | 1 | 2 | <i>n.a.</i> |
| Pumice, etc. | 11 | 10 | 673 | 635 | 426 | <i>n.a.</i> |
| Millstones | 7 | 35 | (a) 130 | 106 | 126 | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Emery | 176 | 122 | 211 | 313 | 159 | 178 |
| Pumice | 42 | 31 | — | 4 | 8 | 24 |
| Other natural abrasives | 69 | 45 | 39 | 70 | 19 | 30 |
| Syria— | | | | | | |
| Emery | 98 | 30 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Pumice, etc. | 1,065 | 867 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Thailand— | | | | | | |
| Natural abrasives . . | 549 | 538 | 485 | 607 | 647 | 624 |
| Turkey— | | | | | | |
| Natural abrasives . . | — | 1 | — | — | — | — |
| Carborundum | 1 | 12 | 3 | 98 | 122 | 135 |
| Millstones and grind- stones (a) | 186 | 127 | 561 | 648 | 511 | 443 |

(a) Including artificial.

(b) Years ended March 20 of that following.

ALUMINIUM
(Including Bauxite and Cryolite)
PRODUCTION OF BAUXITE

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|----------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Ghana | 186,400 | 195,300 | 190,700 | 200,700 | 239,500 | 309,400 |
| Sierra Leone (a) | — | — | 4 | — | — | 19,635 |
| Southern Rhodesia | — | — | — | — | 500 | 1,812 |
| Jamaica (b) | 5,721,990 | 5,125,603 | 5,744,791 | 6,663,120 | 7,495,122 | 6,903,115 |
| British Guiana (c) | 1,585,879 | 1,674,416 | 2,471,190 | 2,373,615 | 2,718,997 | 2,129,046 |
| India | 166,188 | 214,548 | 381,262 | 468,389 | 567,963 | 556,189 |
| Malaya | 262,354 | 381,747 | 451,958 | 409,881 | 349,419 | 444,047 |
| Pakistan (f) | 1,979 | 2,139 | 574 | 1,411 | — | — |
| Sarawak | 136,319 | 206,848 | 284,830 | 253,389 | 225,459 | 155,243 |
| Australia | 6,909 | 14,985 | 69,435 | 15,976 | 29,547 | 354,205 |
| TOTAL | 8,068,000 | 7,815,600 | 9,594,700 | 10,386,500 | 11,626,500 | 10,872,700 |
| OTHER COUNTRIES | | | | | | |
| Austria | 23,198 | 23,602 | 25,595 | 17,729 | 16,693 | 17,548 |
| France | 1,800,625 | 1,729,283 | 2,034,654 | 2,189,765 | 2,159,681 | 1,973,000 |
| Germany (Federal) | 3,700 | 4,400 | 3,752 | 4,165 | 4,583 | 4,263 |
| Greece | 842,682 | 903,970 | 869,741 | 1,102,000 | 1,300,405 | 1,260,834 |
| Hungary | 1,032,441 | 923,001 | 1,171,120 | 1,344,478 | 1,444,695 | 1,340,000 |
| Italy | 294,307 | 289,596 | 308,088 | 322,012 | 304,439 | 264,372 |
| Roumania | 72,000 | 70,000 | 87,000 | 68,000 | 30,000 | 10,000 |
| Spain | 8,213 | 7,538 | 2,532 | 5,506 | 5,951 | (e) 6,000 |
| U.S.S.R. (e) | 2,750,000 | 3,000,000 | 3,500,000 | 4,000,000 | 4,200,000 | 4,300,000 |
| Yugoslavia | 721,000 | 802,000 | 1,009,000 | 1,213,000 | 1,311,000 | 1,265,000 |
| Guinea | 325,000 | 296,220 | 1,356,052 | 1,738,775 | (e)1,420,000 | (e)1,475,000 |
| Mozambique | 4,672 | 4,216 | 4,764 | 4,597 | 6,118 | 6,493 |
| Dominican Republic (b) | — | 759,000 | 678,000 | 739,000 | 664,778 | 712,050 |
| Haiti (b) | 280,000 | 255,000 | 268,000 | 263,000 | 370,000 | 327,000 |
| United States (b) | 1,311,000 | 1,700,000 | 1,998,000 | 1,228,000 | 1,369,000 | 1,525,000 |
| Brazil | 68,750 | 95,466 | 118,856 | 109,635 | 187,696 | 166,957 |
| Surinam | 2,941,000 | 3,376,000 | 3,400,000 | 3,351,000 | (a)3,201,830 | (a)3,427,146 |
| Indonesia | 338,473 | 381,137 | 389,429 | 413,225 | 484,000 | 485,000 |
| TOTAL (d) | 12,800,000 | 14,600,000 | 17,200,000 | 18,100,000 | 18,500,000 | 18,600,000 |
| WORLD'S TOTAL (d) | 20,900,000 | 22,400,000 | 26,800,000 | 28,500,000 | 30,100,000 | 29,400,000 |

Bauxite is known to have been produced in China.

(a) Exports.

(b) Dried bauxite equivalent.

(c) Dried bauxite equivalent. Shipments of dried and calcined ore were as follows (long tons):

| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------|-----------|-----------|-----------|-----------|-----------|---------|
| Metallurgical | 1,076,510 | 1,154,713 | 1,645,457 | 1,089,071 | 1,341,846 | 897,922 |
| Chemical | 75,606 | 92,916 | 143,926 | 142,387 | 129,256 | 76,248 |
| Refractory | 95,030 | 146,374 | 160,966 | 203,442 | 219,410 | 236,065 |
| Abrasive | 96,910 | 123,425 | 148,033 | 168,923 | 146,975 | 124,032 |

Exports of calcined ore are shown on page 13.

(d) Estimated.

(e) United States Bureau of Mines' estimate.

(f) West Pakistan.

PRODUCTION (EXPORTS) OF CRYOLITE IN GREENLAND

| Year | Long tons |
|--------------|-----------|
| 1958 | 40,323 |
| 1959 | 41,377 |
| 1960 | 41,785 |
| 1961 | 41,115 |
| 1962 | 40,296 |
| 1963 | 66,076 |

PRODUCTION OF ALUMINIUM

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 26,354 | 24,519 | 28,921 | 32,294 | 34,030 | 30,574 |
| Canada | 566,162 | 530,027 | 680,368 | 592,119 | 616,337 | 642,312 |
| India | 8,185 | 17,081 | 17,967 | r 18,092 | 34,653 | 54,358 |
| Australia | 10,906 | 11,370 | 11,655 | 13,204 | 16,152 | 41,263 |
| TOTAL | 611,607 | 582,997 | 738,911 | r 655,709 | 701,172 | 768,507 |
| OTHER COUNTRIES | | | | | | |
| Austria | 55,996 | 64,528 | 66,897 | 66,585 | 72,665 | 75,256 |
| Czechoslovakia | 25,980 | 25,600 | 39,400 | 49,200 | 49,200 | (b) 58,000 |
| France | 166,168 | 170,279 | 234,723 | 275,042 | 290,436 | 293,653 |
| Germany— | | | | | | |
| Federal | 134,606 | 148,778 | 166,269 | 169,833 | 175,016 | 205,485 |
| East (a) | 35,000 | 35,000 | 40,000 | 40,000 | 37,000 | 40,000 |
| Hungary | 38,892 | 44,947 | 48,752 | 50,256 | 51,899 | 54,621 |
| Italy | 62,772 | 73,741 | r 82,325 | 82,037 | 79,955 | 89,986 |
| Norway | 119,444 | 143,644 | 162,198 | 168,847 | 202,626 | 215,700 |
| Poland | 22,088 | 22,400 | 25,600 | 46,800 | 47,300 | 45,900 |
| Spain | 15,865 | 22,284 | 23,597 | 37,053 | 41,030 | 42,841 |
| Sweden | 13,493 | 15,277 | 15,732 | 15,592 | 15,696 | 21,100 |
| Switzerland | 31,000 | 33,827 | 39,103 | 41,543 | 48,787 | 60,214 |
| U.S.S.R. (b) | 540,000 | 620,000 | 670,000 | 880,000 | 890,000 | 950,000 |
| Yugoslavia | 21,339 | 18,941 | 24,674 | 26,974 | 27,538 | 35,328 |
| Cameroun | 31,358 | 41,647 | 43,246 | 43,010 | 51,423 | 52,077 |
| Mexico | — | — | — | — | — | 5,400 |
| United States | 1,397,819 | 1,744,743 | 1,798,659 | 1,699,742 | 1,891,029 | 2,064,757 |
| Brazil | 11,698 | 17,812 | 17,888 | 19,713 | 20,141 | (b) 29,600 |
| China (b) | 26,600 | 69,300 | 78,700 | 98,000 | 98,000 | 98,000 |
| Formosa | 8,442 | 7,367 | 8,131 | 8,874 | 10,835 | 11,740 |
| Japan | 83,242 | 98,558 | 131,119 | 151,272 | 168,742 | 220,405 |
| TOTAL | 2,800,000 | 3,400,000 | 3,700,000 | 4,000,000 | 4,300,000 | 4,700,000 |
| WORLD'S TOTAL | 3,500,000 | 4,000,000 | 4,500,000 | 4,600,000 | 5,000,000 | 5,400,000 |

In addition secondary metal recovered in certain countries was as follows (long tons):

| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|----------------------|---------|---------|---------|---------|---------|---------|
| United Kingdom .. | 109,746 | 121,373 | 129,812 | 131,024 | 141,180 | 161,077 |
| France | 40,000 | 44,000 | 43,000 | 43,000 | 46,000 | 49,000 |
| Germany (Federal) .. | 100,154 | 111,276 | 131,580 | 133,311 | 140,486 | 153,929 |
| Italy | 9,926 | 23,903 | 43,151 | 44,000 | 55,000 | 64,000 |
| United States | 258,531 | 321,363 | 294,152 | 303,791 | 412,282 | 451,421 |
| Japan | 23,100 | 36,000 | 48,700 | 68,400 | 70,400 | 89,400 |

(a) Estimated.

(b) United States Bureau of Mines' estimate.

EXPORTS OF ALUMINIUM, ETC.*

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-----------|---------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Alumina and hydrate .. | 38,243 | 33,424 | 26,349 | 23,829 | 15,825 | 19,458 |
| Unwrought (a) .. | 2,124 | 3,664 | 3,925 | 5,408 | 5,379 | 7,444 |
| Scrap (a) .. | 55 | 134 | 94 | 2,800 | 4,232 | 2,305 |
| Semi-manufactures (a) | 35,357 | 49,507 | 49,267 | 53,165 | 59,178 | 54,999 |
| of which—Foil .. | 6,035 | 7,418 | 7,157 | 6,096 | 6,473 | 6,617 |
| Powder .. | 529 | 954 | 983 | 510 | 466 | 289 |
| Aluminium sulphates .. | 34,841 | 30,263 | 38,457 | 33,486 | 27,807 | 24,352 |
| Ghana— | | | | | | |
| Bauxite .. | 207,120 | 147,833 | 224,472 | 196,072 | 286,798 | 207,423 |
| Sierra Leone— | | | | | | |
| Bauxite .. | — | — | 4 | — | — | 19,635 |
| Canada— | | | | | | |
| Alumina .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 16,853 | 3,458 | 2,361 |
| Unwrought (a) .. | 432,534 | 451,198 | 492,995 | 434,857 | 514,470 | 567,131 |
| Scrap .. | 11,262 | 14,444 | 24,616 | 26,285 | 27,005 | 38,880 |
| Semi-manufactures (a) | 14,331 | 22,594 | 27,012 | 20,639 | 20,630 | 24,187 |
| of which—Foil .. | 153 | 132 | 117 | 131 | 413 | 1,080 |
| Jamaica— | | | | | | |
| Bauxite (b) .. | 4,799,037 | 4,196,793 | 4,147,555 | 4,974,802 | 5,986,678 | 5,161,568 |
| Alumina .. | 373,108 | 399,210 | 665,361 | 703,483 | 627,645 | 725,548 |
| British Guiana— | | | | | | |
| Bauxite, dried .. | 1,168,637 | 1,242,381 | 1,787,963 | 1,235,556 | (d) 1,471,102 | (d) 974,170 |
| do. calcined .. | 195,649 | 272,305 | 306,958 | 370,761 | 366,277 | (d) 358,366 |
| Alumina .. | — | — | — | 120,161 | 214,639 | (d) 221,993 |
| Hong Kong— | | | | | | |
| Unwrought (a) .. | 24 | 5,054 | 10,380 | 4,722 | 1,571 | 681 |
| Scrap .. | 229 | 334 | 542 | 797 | 638 | 790 |
| Semi-manufactures (a) | 1,006 | 1,105 | 1,231 | 2,048 | 1,955 | 1,924 |
| of which—Foil .. | 180 | 184 | 88 | 62 | 112 | 101 |
| Aluminium sulphate .. | <i>n.a.</i> | 3 | 4 | — | 10 | 18 |
| India— | | | | | | |
| Bauxite .. | 20,549 | 23,189 | 74,446 | 97,725 | 245,186 | 133,035 |
| Unwrought (a) .. | — | — | — | — | — | (c) 7,204 |
| Semi-manufactures (a) | 14 | 11 | (c) 19 | (c) 19 | (c) 15 | (c) 76 |
| Aluminium sulphate .. | 129 | 135 | (c) 449 | (c) 62 | (c) 1,649 | (c) 5,819 |
| Malaya— | | | | | | |
| Bauxite .. | 246,605 | 363,809 | 447,996 | 284,357 | 314,858 | 450,463 |
| Unwrought (a) .. | 10 | 16 | 4 | 17 | — | 25 |
| Semi-manufactures (a) | 160 | 286 | 275 | 241 | 457 | 343 |
| of which—Foil .. | 14 | 80 | 34 | 35 | 276 | 143 |
| Aluminium sulphates .. | 242 | 341 | 347 | 126 | 129 | 70 |
| Sarawak— | | | | | | |
| Bauxite .. | 92,840 | 202,925 | 260,120 | 256,442 | 198,698 | 172,181 |
| Australia— | | | | | | |
| Bauxite .. | — | — | 29,778 | 30,489 | 6,470 | 143,339 |
| Unwrought (a) .. | — | 78 | 20 | 7 | 40 | 5,323 |
| Scrap (a) .. | 123 | 587 | 659 | 564 | 355 | 250 |
| Semi-manufactures (a) | 135 | 162 | 282 | 345 | 248 | 253 |

*In these tables the description "unwrought" aluminium corresponds to item 684.1 of the Standard International Trade Classification (revised) and comprises ingots, blocks, unwrought bars, etc. "Semi-manufactures" corresponds to S.I.T.C. (revised) 684.2 and includes foil and powder as well as wrought bars, rods, wire, sheets, tubes, pipes, etc.

(a) Including alloys.

(c) Years ended March 31 following that stated.

(b) Estimated dry equivalent; shipments contain 8–14% free moisture.

(d) Provisional.

EXPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|---------|-----------|---------|-----------|
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Bauxite | 8,516 | 6,498 | 5,584 | 7,671 | 4,969 | 6,747 |
| Unwrought (a) | 31,695 | 37,642 | 21,399 | 27,858 | 41,144 | 34,829 |
| Scrap | 4,681 | 4,027 | 4,011 | 3,537 | 4,299 | 4,137 |
| Semi-manufactures (a) | 6,300 | 11,712 | 9,383 | 14,323 | 15,734 | 19,204 |
| of which—Foil | n.a. | 2,339 | 3,825 | 2,488 | 2,768 | 2,831 |
| Powder | n.a. | 573 | 584 | 828 | 962 | 868 |
| Belgium-Luxemburg— | | | | | | |
| Alumina and hydrate .. | 1 | 15 | 109 | 8 | 2 | 1 |
| Unwrought | 738 | 590 | 252 | 105 | 158 | 113 |
| do. alloys | 289 | 325 | 674 | 496 | 637 | 700 |
| Scrap | 2,586 | 1,489 | 1,788 | 1,998 | 2,700 | 5,040 |
| Semi-manufactures (a) | 25,908 | 33,740 | 43,081 | 51,317 | 57,674 | 69,050 |
| Aluminium sulphates .. | 16,407 | 16,583 | 17,504 | 12,329 | 12,509 | 13,962 |
| Denmark— | | | | | | |
| Refined cryolite | 20,655 | 21,320 | 23,197 | 24,578 | 25,008 | 24,861 |
| Unwrought | 224 | 68 | 30 | 10 | 5 | 130 |
| do. alloys | 800 | 1,027 | 1,355 | 1,398 | 1,427 | 1,884 |
| Scrap | 298 | 613 | 703 | 851 | 697 | 454 |
| Semi-manufactures (a) | 529 | 860 | 1,327 | 790 | 705 | 729 |
| of which—Foil | 123 | 280 | 233 | 193 | 205 | 178 |
| Finland— | | | | | | |
| Unwrought | 549 | 801 | 478 | 75 | 101 | 76 |
| Semi-manufactures | n.a. | n.a. | 241 | 571 | 593 | 1,041 |
| of which—Foil | n.a. | n.a. | 237 | 456 | 555 | 982 |
| France— | | | | | | |
| Bauxite | 303,794 | 271,288 | 312,097 | 252,264 | 262,418 | 202,649 |
| Cryolite | 79 | 118 | 79 | 2 | 117 | 87 |
| Alumina | 172,215 | 184,685 | 139,413 | 136,148 | 165,097 | 168,100 |
| do. hydrate | 7,677 | 17,388 | 12,579 | 15,802 | 13,243 | 12,905 |
| Unwrought | 39,359 | 32,758 | 56,428 | 104,775 | 84,254 | 82,513 |
| do. alloys | 9,630 | 18,037 | 14,208 | 17,076 | 19,274 | 40,209 |
| Scrap (a) | 1,531 | 2,328 | 1,513 | 2,262 | 7,202 | 12,174 |
| Semi-manufactures (a) | 11,283 | 16,911 | 25,858 | 26,296 | 28,715 | 32,713 |
| of which—Foil | 2,125 | 3,951 | 6,858 | 5,439 | 7,179 | 8,106 |
| Powder | 186 | 300 | 495 | 183 | 90 | 166 |
| Aluminium sulphates .. | 6,283 | 6,905 | 9,436 | 6,828 | 7,824 | 10,992 |
| Germany (Federal)— | | | | | | |
| Bauxite and cryolite .. | 165 | 668 | 406 | 458 | 622 | 732 |
| Alumina | 84,749 | 90,357 | 66,398 | 72,706 | 65,059 | 70,378 |
| do. hydrate | 18,631 | 25,109 | 24,776 | 26,897 | 28,146 | 28,834 |
| Unwrought | 3,646 | 1,093 | 1,713 | 2,407 | 2,015 | 9,523 |
| do. alloys | 605 | 659 | 982 | 1,359 | 3,914 | 4,437 |
| Scrap (a) | 23 | 196 | 215 | 512 | 1,451 | 1,428 |
| Semi-manufactures (a) | 24,674 | 31,486 | 37,336 | 41,094 | 46,332 | 52,259 |
| of which—Foil | 9,669 | 12,959 | 15,946 | 15,857 | 16,773 | 19,853 |
| Powder | 1,562 | 1,311 | 1,579 | 1,445 | 1,397 | 1,391 |
| Greece— | | | | | | |
| Bauxite | 823,243 | 841,198 | 891,359 | 1,033,511 | 886,665 | 1,100,000 |
| Hungary— | | | | | | |
| Bauxite | 529,977 | 458,915 | 490,959 | 689,509 | 707,661 | 656,409 |
| Alumina | 85,376 | 112,201 | 119,241 | 142,666 | 124,401 | 132,300 |
| Unwrought | 17,067 | 8,272 | 9,693 | 8,582 | 6,427 | 10,373 |
| Semi-manufactures | 5,458 | 4,719 | 4,217 | 5,289 | 5,449 | 5,007 |
| Italy— | | | | | | |
| Bauxite | — | — | — | — | n.a. | 915 |
| Alumina | 53,098 | 41,973 | 42,844 | 29,028 | 27,982 | 20,165 |
| do. hydrate | 637 | 89 | 90 | 46 | 2,715 | 2,647 |
| Unwrought | 8,872 | 9,284 | 894 | 17 | } 131 | 248 |
| do. alloys | 187 | 379 | 323 | 70 | | |
| Semi-manufactures (a) | 5,362 | 6,234 | 5,407 | 6,633 | 7,152 | 8,224 |
| of which—Foil | 445 | 537 | 979 | 849 | 739 | 902 |
| Aluminium sulphates .. | 4,470 | 2,219 | 8,733 | 10,530 | 10,388 | 8,869 |

(a) Including alloys.

EXPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|---------|---------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Netherlands— | | | | | | |
| Bauxite | 23 | 289 | 45 | 224 | 635 | 830 |
| Unwrought (a) .. . | 2,207 | 1,726 | 647 | 2,393 | 772 | 267 |
| Scrap (a) | 4,123 | 1,611 | 1,847 | 2,167 | 4,777 | 7,279 |
| Semi-manufactures (a) | 6,690 | 7,961 | 9,018 | 10,074 | 10,605 | 11,723 |
| <i>of which—Foil..</i> .. . | 2,033 | 2,462 | 3,186 | 3,232 | 2,992 | 3,430 |
| <i>Powder</i> | 234 | 300 | 147 | 81 | 2 | 3 |
| Aluminium sulphates .. . | 20 | 4 | 16 | 24 | 9 | 6 |
| Norway— | | | | | | |
| Alumina | — | 1 | 2 | 2 | 24 | — |
| Unwrought | 108,085 | 125,786 | 125,853 | 138,658 | 160,002 | 195,514 |
| do. alloys | | | | | | |
| Scrap | | | | | | |
| Semi-manufactures (a) | | | | | | |
| <i>of which—Foil..</i> .. . | 124 | 158 | 420 | 291 | 423 | 636 |
| <i>Powder</i> | 4,108 | 4,412 | 5,103 | 4,354 | 4,446 | 4,044 |
| <i>Powder</i> | 48 | 83 | 95 | 45 | 151 | 147 |
| <i>Powder</i> | <i>n.a.</i> | 13 | 7 | 27 | 37 | 129 |
| Roumania— | | | | | | |
| Bauxite | 36,400 | 80,700 | 86,700 | 32,500 | 14,800 | 7,874 |
| Spain— | | | | | | |
| Unwrought | — | 180 | 10,887 | 3,934 | 10,439 | 10,130 |
| Semi-manufactures (a) | — | 327 | 2,229 | 4,202 | 13,943 | 5,308 |
| Sweden— | | | | | | |
| Unwrought (a) | 3,042 | 1,815 | 76 | 82 | 241 | 501 |
| Scrap | 2,524 | 1,685 | 904 | 686 | 822 | 802 |
| Semi-manufactures (a) | 3,004 | 5,778 | 6,401 | 5,919 | 7,382 | 9,959 |
| <i>of which—Powder</i> .. . | <i>n.a.</i> | 166 | 378 | 228 | 344 | 404 |
| Aluminium sulphates .. . | 9,598 | 9,794 | 9,617 | 9,181 | 9,499 | 11,463 |
| Switzerland— | | | | | | |
| Unwrought and scrap .. . | 8,522 | 10,924 | 7,342 | 5,983 | 8,428 | 17,891 |
| do. alloys | 3,856 | 3,760 | | | | |
| Semi-manufactures (a) | 3,776 | 4,812 | 16,840 | 14,872 | 15,040 | 16,842 |
| U.S.S.R.— | | | | | | |
| Cryolite | 100 | 100 | 3,100 | 3,100 | 2,800 | 2,953 |
| Unwrought | 113,100 | 76,200 | 67,000 | 84,600 | 113,900 | 120,172 |
| Semi-manufactures .. . | 6,693 | 10,629 | 13,287 | 8,956 | 21,062 | 25,294 |
| Yugoslavia— | | | | | | |
| Bauxite | 583,019 | 592,019 | 790,398 | 915,107 | 899,523 | 981,512 |
| Alumina and hydrate .. . | 3,592 | 23,450 | 19,317 | 14,000 | 13,959 | 13,058 |
| Unwrought | 5,384 | — | — | — | — | 930 |
| Scrap | 1,274 | 1,191 | 59 | 1,176 | 1,887 | 2,209 |
| Semi-manufactures .. . | 5,925 | 9,862 | 14,229 | 11,745 | 12,456 | 13,966 |
| Algeria— | | | | | | |
| Scrap (a) | 781 | 867 | 1,053 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cameroun— | | | | | | |
| Unwrought | 21,938 | 38,586 | 41,408 | 45,416 | 50,125 | 51,459 |
| Guinea— | | | | | | |
| Bauxite | 259,454 | 275,693 | 693,703 | 346,024 | <i>n.a.</i> | <i>n.a.</i> |
| Alumina | — | — | 168,669 | 384,663 | 450,425 | 479,000 |
| Morocco— | | | | | | |
| Scrap (a) | 1,238 | 1,363 | 971 | 1,038 | 670 | 469 |
| Mozambique— | | | | | | |
| Bauxite | 2,916 | 6,138 | 4,389 | 4,082 | 6,118 | 6,493 |
| Dominican Republic— | | | | | | |
| Bauxite | — | 481,266 | 774,716 | 855,561 | (c) 873,600 | (c) 885,800 |
| Greenland— | | | | | | |
| Cryolite | 40,323 | 41,377 | 41,785 | 41,115 | 40,296 | 66,076 |
| Haiti— | | | | | | |
| Bauxite (b) | 370,629 | 338,151 | 395,000 | 335,000 | (c) 505,800 | (c) 958,300 |

(a) Including alloys.

(b) Including shipments from stockpile built up during development period.

(c) United States imports.

EXPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States— | | | | | | |
| Alumina, etc. | 11,868 | 17,403 | 29,317 | 150,683 | 258,561 | 203,196 |
| Cryolite (b) | 147 | 157 | 202 | 149 | 990 | 3,320 |
| Unwrought (a) | 47,064 | 108,308 | 254,446 | 115,054 | 134,997 | 147,625 |
| Scrap (a) | 16,880 | 28,718 | 70,994 | 73,219 | 58,513 | 63,429 |
| Semi-manufactures | 14,156 | 14,858 | 21,192 | 31,126 | 49,993 | 62,354 |
| <i>of which—Foil</i> | 264 | 506 | 1,177 | 1,515 | 2,220 | 1,636 |
| <i>Powder (Al content)</i> | 296 | 371 | 302 | 266 | 427 | 438 |
| Aluminium sulphates | 8,807 | 12,935 | 10,970 | 12,691 | 15,871 | 15,693 |
| Argentina— | | | | | | |
| Unwrought | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,729 |
| Aluminium sulphates | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 13 |
| Brazil— | | | | | | |
| Bauxite | 3,445 | 2,803 | 2,018 | 1,673 | 1,968 | 2,264 |
| Surinam— | | | | | | |
| Bauxite | 2,820,000 | 3,338,000 | 3,577,000 | 3,350,000 | 3,202,900 | 3,427,146 |
| Formosa— | | | | | | |
| Unwrought (a) | 1,775 | 2,045 | 60 | 2,403 | 2,585 | 3,377 |
| Semi-manufactures (a) | 11 | 608 | 921 | 1,251 | 1,483 | 2,326 |
| Indonesia— | | | | | | |
| Bauxite | 385,544 | 243,087 | 342,454 | 414,083 | 389,111 | <i>n.a.</i> |
| Israel— | | | | | | |
| Scrap | <i>n.a.</i> | <i>n.a.</i> | — | 35 | 258 | <i>n.a.</i> |
| Japan— | | | | | | |
| Cryolite | 101 | 22 | — | — | 2 | — |
| Alumina | 50,527 | 94,529 | 77,854 | 102,222 | 94,900 | 99,856 |
| do. hydrate | 695 | 281 | 1,443 | 2,318 | 5,998 | 4,209 |
| Unwrought | 4,340 | 169 | 6 | 14 | 5,406 | 13,889 |
| Semi-manufactures (a) | 6,621 | 7,801 | 9,000 | 10,457 | 12,419 | 17,929 |
| <i>of which—Foil</i> | 831 | 1,077 | 1,663 | 2,265 | 3,365 | 2,495 |
| Aluminium sulphates | 3,997 | 14,117 | 9,567 | 12,640 | 12,340 | 17,749 |

(a) Including alloys.

(b) Including artificial.

IMPORTS OF ALUMINIUM, ETC.*

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|------------|------------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bauxite | 350,742 | 327,188 | 375,316 | 395,014 | 425,667 | 331,195 |
| Cryolite | 3,622 | 3,458 | 3,578 | 3,855 | 1,930 | 3,110 |
| Alumina | 239 | 6,080 | 7,048 | 4,672 | 5,001 | 4,884 |
| Unwrought | 186,311 | 227,864 | 257,801 | 195,549 | 197,670 | 203,978 |
| do. alloys | 24,011 | 22,282 | 52,733 | 40,336 | 52,885 | 62,814 |
| Scrap (a) | 1,594 | 6,698 | 15,695 | 5,712 | 8,437 | 8,992 |
| Semi-manufactures (a) | 3,448 | 6,451 | 13,504 | 21,084 | 21,744 | 26,142 |
| of which—Foil .. | 1,176 | 1,578 | 1,848 | 1,777 | 2,263 | 2,341 |
| Malta— | | | | | | |
| Semi-manufactures .. | (£12,082) | (£12,469) | (£21,140) | n.a. | (£23,325) | (£49,060) |
| Ghana— | | | | | | |
| Unwrought (a) | 793 | 2,510 | 1,849 | 2,604 | 924 | 191 |
| Semi-manufactures (a) | | | | 2,081 | 3,303 | 7,207 |
| Kenya— | | | | | | |
| Unwrought (a) | 1,053 | 832 | 1,634 | 1,209 | 1,235 | 1,743 |
| Semi-manufactures (a) | 881 | 1,009 | 1,267 | 773 | 621 | 864 |
| of which—Foil .. | 152 | 174 | 211 | 183 | 194 | 174 |
| Mauritius— | | | | | | |
| Semi-manufactures (a) | 200 | 196 | 201 | 136 | 227 | 285 |
| Nigeria— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 1,882 | 2,681 | 3,877 | 4,779 | 5,242 | 5,896 |
| Rhodesia and Nyasaland— | | | | | | |
| Semi-manufactures (a) | 676 | 695 | 1,198 | 1,113 | 1,241 | 1,127 |
| of which—Foil .. | 76 | 90 | 137 | 213 | 296 | 216 |
| Sierra Leone— | | | | | | |
| Semi-manufactures (a) | 108 | 42 | 56 | 316 | 89 | 123 |
| Tanganyika— | | | | | | |
| Semi-manufactures (a) | 452 | 370 | 285 | 162 | 156 | 186 |
| Uganda— | | | | | | |
| Semi-manufactures (a) | 548 | 473 | 686 | 299 | 192 | 88 |
| of which—Foil .. | 44 | 44 | 77 | 87 | 94 | 55 |
| Zanzibar— | | | | | | |
| Semi-manufactures (a) | 12 | 18 | 5 | 8 | 7 | 4 |
| Barbados— | | | | | | |
| Semi-manufactures (a) | 34 | 61 | 12 | 33 | 74 | 48 |
| Jamaica— | | | | | | |
| Semi-manufactures (a) | 618 | 983 | 1,145 | 1,384 | 1,111 | 1,212 |
| Canada— | | | | | | |
| Bauxite and alumina— | | | | | | |
| For refining | 1,934,371 | 1,849,998 | 2,468,174 | 1,976,385 | 1,796,491 | 1,803,036 |
| For other purposes .. | 134,615 | 165,625 | 195,100 | 158,715 | 197,865 | 164,806 |
| Cryolite | 6,103 | 5,369 | 7,446 | 3,601 | 4,562 | 4,336 |
| Unwrought | 10,050 | 761 | 447 | 567 | 3,441 | 1,731 |
| Scrap | 220 | 552 | 895 | 1,384 | 1,131 | 1,331 |
| Semi-manufactures (a) | | | | | | |
| (excluding Foil) .. | 7,789 | 7,449 | 6,579 | 8,543 | 16,743 | 28,258 |
| of which—Powder .. | 136 | 146 | 134 | 60 | 109 | 147 |
| Foil | (£364,828) | (£335,584) | (£448,458) | (£441,451) | (£438,712) | (£474,136) |
| Aluminium sulphates .. | 6,355 | 7,484 | 8,877 | 4,318 | 2,934 | 3,072 |
| Trinidad and Tobago— | | | | | | |
| Semi-manufactures (a) | 922 | 761 | 944 | 1,163 | 936 | n.a. |
| Aluminium sulphates .. | 303 | 336 | 298 | 487 | 997 | n.a. |
| British Guiana— | | | | | | |
| Semi-manufactures (a) | 168 | 222 | 342 | 264 | 253 | n.a. |
| Aluminium sulphates .. | 424 | 480 | 510 | 337 | 380 | n.a. |
| Aden— | | | | | | |
| Semi-manufactures (a) | 172 | 149 | 290 | 245 | 233 | n.a. |

*See footnote on p.13 concerning the descriptions "unwrought" aluminium and "semi-manufactures" used in these tables.

(a) Including alloys.

IMPORTS OF ALUMINIUM, ETC. (cont.)

Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|--------|---------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES—(cont.) | | | | | | |
| Ceylon— | | | | | | |
| Semi-manufactures (a) | 1,918 | 1,667 | 2,317 | 2,515 | 2,882 | 2,984 |
| of which—Foil. . . | 406 | 411 | 354 | 220 | 170 | 125 |
| Cyprus— | | | | | | |
| Semi-manufactures (a) | 84 | 115 | 130 | 247 | 180 | 268 |
| Hong Kong— | | | | | | |
| Bauxite | 315 | 412 | 623 | 745 | 315 | 300 |
| Unwrought (a) | 2,572 | 10,081 | 16,420 | 9,941 | 6,175 | 6,325 |
| Scrap | 56 | 70 | 39 | 14 | 11 | 42 |
| Semi-manufactures (a) | 1,300 | 1,393 | 2,529 | 2,020 | 2,406 | 3,314 |
| of which—Foil. | 242 | 406 | 643 | 478 | 836 | 824 |
| Aluminium sulphate . . . | n.a. | 675 | 270 | 603 | 762 | 1,094 |
| India— | | | | | | |
| Cryolite | 1,649 | 917 | (b) 1,454 | (b) 3,918 | (b) 2,636 | (b) 2,390 |
| Alumina | 59 | 9,945 | (b) 12,188 | (b) 9,264 | (b) 19,672 | (b) 3,487 |
| Unwrought | 7,049 | 6,743 | (b) 10,283 | (b) 7,941 | (b) 14,936 | (b) 3,875 |
| do. alloys | 66 | 63 | (b) 13 | (b) 21 | (b) 3 | (b) — |
| Scrap | 126 | — | (b) 20 | (b) 64 | (b) — | (b) — |
| Semi-manufactures (a) | 12,049 | 12,205 | (b) 14,709 | (b) 17,194 | (b) 22,555 | (b) 20,412 |
| of which—Foil. | 849 | 1,625 | (b) 2,638 | (b) 2,004 | (b) 957 | (b) 426 |
| Powder | 70 | 171 | (b) 77 | (b) 73 | (b) 149 | (b) 151 |
| Aluminium sulphate . . . | 293 | 38 | (b) 1 | (b) 1 | (b) 1 | (b) 4 |
| Malaya— | | | | | | |
| Unwrought (a) | 1 | 10 | 9 | 2 | 171 | 234 |
| Semi-manufactures (a) | 1,668 | 2,567 | 3,641 | 3,963 | 5,626 | 7,443 |
| of which—Foil. | 204 | 414 | 391 | 585 | 1,061 | 996 |
| Aluminium sulphates . . . | 4,432 | 4,268 | 6,778 | 8,431 | 6,461 | 7,361 |
| Pakistan— | | | | | | |
| Unwrought (a) | 1,551 | 12,416 | 4,625 | 5,853 | n.a. | — |
| Semi-manufactures (a) | 757 | 840 | 926 | 5,446 | n.a. | 7,462 |
| Aluminium sulphates . . . | 6,556 | 1,205 | 1,430 | 3,762 | 1,041 | 67 |
| Sabah— | | | | | | |
| Semi-manufactures (a) | 121 | 53 | 77 | 63 | 75 | n.a. |
| Sarawak— | | | | | | |
| Semi-manufactures (a) | 73 | 91 | 153 | 130 | 95 | 124 |
| Aluminium sulphates . . . | 72 | 82 | 149 | 192 | 195 | 131 |
| Australia— | | | | | | |
| Bauxite | 69,473 | 66,746 | 96,200 | 51,799 | 69,904 | 14,113 |
| Cryolite | 1,597 | 858 | 1,123 | 1,141 | 3,678 | 5,078 |
| Alumina and hydrate (c) | 746 | 356 | 384 | 692 | 259 | 49,237 |
| Unwrought (a) | 14,813 | 19,268 | 26,432 | 16,141 | 31,389 | 12,115 |
| Scrap (a) | 102 | 24 | 231 | 282 | 1,074 | 3,108 |
| Semi-manufactures (a) | 5,816 | 6,247 | 10,932 | 4,714 | 5,427 | 3,313 |
| of which—Foil. | 2,409 | 2,788 | 3,909 | 2,002 | 2,101 | 1,212 |
| Powder | 486 | 670 | 678 | 396 | 250 | 205 |
| New Zealand— | | | | | | |
| Unwrought | 820 | 801 | 666 | 2,086 | 5,024 | 5,611 |
| Semi-manufactures (a) | 4,385 | 3,991 | 5,076 | 4,078 | 2,548 | 2,889 |
| of which—Foil. | 769 | 535 | 573 | 798 | 344 | n.a. |
| Irish Republic— | | | | | | |
| Unwrought (a) | 2,392 | r 3,777 | r 3,328 | 3,604 | 4,897 | 5,373 |
| Semi-manufactures (a) | 1,581 | r 2,463 | r 2,420 | 2,463 | 3,069 | 3,268 |
| of which—Foil. | 636 | 636 | 460 | 416 | 483 | 644 |
| Aluminium sulphates . . . | 3,966 | 3,619 | r 3,487 | 3,524 | 3,588 | 3,276 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Bauxite | 6,076 | 123 | 10,390 | 18,176 | 12,951 | 13,072 |
| Cryolite | 203 | 266 | 328 | 344 | 334 | 483 |
| Alumina | 99,207 | 131,001 | 115,281 | 155,118 | 135,829 | 149,223 |
| do. hydrate | 3,306 | 3,314 | 3,779 | 3,862 | 4,393 | 4,565 |

(a) Including alloys.

(c) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

IMPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|---------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Austria— <i>(cont.)</i> | | | | | | |
| Unwrought (a) | 258 | 389 | 274 | 138 | 804 | 655 |
| Semi-manufactures (a) | 414 | 1,261 | 1,537 | 1,467 | 1,886 | 2,722 |
| Aluminium sulphates | 118 | 1,583 | 1,614 | 1,652 | 1,658 | 1,868 |
| Belgium-Luxemburg— | | | | | | |
| Bauxite | 1,520 | 16,574 | 7,201 | 4,991 | 5,425 | 3,200 |
| Alumina | 463 | 263 | 587 | 1,150 | 1,022 | 881 |
| do. hydrate | 8,645 | 9,302 | 9,012 | 7,899 | 8,377 | 9,344 |
| Unwrought | 38,465 | 43,313 | 57,265 | 56,511 | 52,470 | 67,242 |
| do. alloys | 2,939 | 5,296 | 6,106 | 12,030 | 14,754 | 20,408 |
| Scrap | 2,446 | 1,294 | 1,355 | 1,972 | 1,775 | 2,315 |
| Semi-manufactures (a) | 5,868 | 7,827 | 9,699 | 12,843 | 16,071 | 16,355 |
| of which—Foil | 2,258 | 2,984 | 3,316 | 3,601 | 3,523 | 3,343 |
| Powder | 454 | 489 | 452 | 332 | 572 | 266 |
| Aluminium sulphates | 172 | 974 | 644 | 1,333 | 544 | 137 |
| Denmark— | | | | | | |
| Bauxite | 576 | 205 | 400 | 600 | 500 | 500 |
| Crude cryolite | (b) 28,000 | 28,977 | 33,372 | 32,769 | 32,188 | 49,473 |
| Unwrought | 4,252 | 6,299 | 6,026 | 5,113 | 6,070 | 5,209 |
| do. alloys | 45 | 93 | 1,259 | 979 | 481 | 469 |
| Scrap | 731 | 802 | 421 | 713 | 377 | 1,259 |
| Semi-manufactures (a) | 4,802 | 7,068 | 8,569 | 8,196 | 9,992 | 11,382 |
| of which—Foil | 1,071 | 1,547 | 2,076 | 2,149 | 2,209 | 2,124 |
| Powder | 58 | 85 | 123 | 120 | 150 | 176 |
| Aluminium sulphates | 3,993 | 4,082 | 5,034 | 4,118 | 4,721 | 4,773 |
| Finland— | | | | | | |
| Alumina | 180 | 73 | 1,577 | 74 | 86 | 36 |
| do. hydrate | 4,661 | 7,182 | 3,953 | 7,699 | 10,232 | 8,433 |
| Unwrought (a) | 5,987 | 9,538 | 12,827 | 5,496 | 6,706 | 3,995 |
| Semi-manufactures (a) | 419 | 548 | 416 | 10,965 | 11,276 | 10,821 |
| of which—Foil | 229 | 392 | 458 | 750 | 558 | 588 |
| Powder | 21,961 | 21,486 | 30,270 | 310 | 146 | 103 |
| Aluminium sulphates | 21,961 | 21,486 | 30,270 | 14,995 | 12,973 | 11,239 |
| France— | | | | | | |
| Bauxite | 38,625 | 44,251 | 59,687 | 118,821 | 100,230 | 140,248 |
| Cryolite | 2,540 | 1,437 | 1,934 | 2,178 | 1,402 | 1,320 |
| Alumina | 265 | 173 | 43,726 | 133,818 | 191,842 | 124,720 |
| do. hydrate | 22 | 35 | 28 | 33 | 81 | 71 |
| Unwrought | 28,654 | 32,805 | 53,287 | 41,834 | 49,820 | 51,915 |
| Scrap (a) | 96 | 31 | 179 | 513 | 1,307 | 2,260 |
| Semi-manufactures (a) | 2,234 | 2,001 | 3,155 | 4,051 | 7,641 | 12,215 |
| of which—Foil | 718 | 839 | 1,653 | 2,028 | 3,780 | 5,336 |
| Powder | 54 | 29 | 60 | 61 | 160 | 207 |
| Aluminium sulphates | 2 | 2 | — | 3 | 2 | 20 |
| Germany (Federal)— | | | | | | |
| Bauxite | 1,055,234 | 897,596 | 1,322,085 | 1,538,597 | 1,369,442 | 1,484,200 |
| Cryolite | 1,586 | 1,378 | 2,155 | 2,265 | 3,315 | 2,935 |
| Alumina | 403 | 92 | 340 | 27,303 | 34,071 | 48,880 |
| do. hydrate | 51 | 25 | 662 | 1,179 | 942 | 1,389 |
| Unwrought | 58,620 | 74,097 | 163,191 | 124,725 | 105,058 | 104,211 |
| do. alloys | 8,005 | 14,547 | 14,959 | 11,800 | 11,068 | 14,554 |
| Scrap | 28,320 | 27,941 | 38,854 | 45,188 | 41,274 | 43,240 |
| Semi-manufactures (a) | 2,065 | 2,978 | 8,307 | 11,614 | 12,423 | 18,150 |
| of which—Foil | 135 | 351 | 438 | 732 | 1,918 | 3,049 |
| Powder | 508 | 259 | 202 | 307 | 341 | 269 |
| Germany (East)— | | | | | | |
| Bauxite | 226,323 | 251,203 | 264,150 | 258,707 | 281,425 | 322,072 |
| Alumina | 18,141 | 14,674 | 25,508 | 22,795 | 16,732 | 18,023 |
| Greece— | | | | | | |
| Unwrought | 1,829 | 2,497 | 4,335 | 5,380 | 5,868 | 5,639 |
| Semi-manufactures (a) | 540 | 553 | 679 | 644 | 978 | 1,099 |
| of which—Foil | 436 | 434 | 530 | 509 | 736 | 905 |
| Aluminium sulphates | 426 | 431 | 229 | 504 | 249 | 79 |

(a) Including alloys.

(b) Estimated.

IMPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|---------|---------|------------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Hungary— | | | | | | |
| Cryolite | 1,969 | 2,314 | 2,426 | 2,948 | 3,156 | 519 |
| Unwrought | 1,890 | 2,578 | 492 | — | 568 | 2,418 |
| Iceland— | | | | | | |
| Semi-manufactures .. | 218 | 199 | 352 | 279 | 459 | n.a. |
| Italy— | | | | | | |
| Bauxite | 180,758 | 232,518 | 275,678 | 257,809 | 289,082 | 344,083 |
| Cryolite | 394 | 266 | 364 | 541 | 455 | 1,063 |
| Alumina | 148 | 780 | 389 | 681 | 4,444 | 8,643 |
| do. hydrate | 83 | 137 | 343 | 405 | 447 | 377 |
| Unwrought | 4,633 | 13,649 | 29,384 | 21,382 | 43,326 | 53,257 |
| do. alloys | 962 | 2,130 | 4,143 | 3,919 | | |
| Scrap | 8,512 | 14,732 | 36,361 | 29,470 | 46,698 | 52,152 |
| Semi-manufactures (a) | 2,012 | 3,101 | 6,159 | 6,564 | 10,256 | 16,000 |
| of which—Foil | 1,395 | 2,344 | 2,893 | 2,856 | 3,098 | 4,577 |
| Powder | 8 | 23 | 119 | 128 | 131 | 157 |
| Aluminium sulphates .. | 243 | 483 | 511 | 154 | 963 | 783 |
| Netherlands— | | | | | | |
| Bauxite | 7,938 | 7,701 | 3,493 | 4,839 | 1,674 | 10,204 |
| Cryolite | 120 | 170 | 211 | 206 | 268 | 380 |
| Alumina | 5,447 | 7,209 | 875 | 745 | 806 | 784 |
| do. hydrate | | | 6,366 | 6,849 | 7,035 | 6,902 |
| Unwrought (a) | 8,933 | 14,026 | 14,449 | 13,518 | 14,526 | 19,501 |
| Scrap (a) | 989 | 1,322 | 2,265 | 2,795 | 2,044 | 2,146 |
| Semi-manufactures (a) | 10,633 | 13,660 | 17,632 | 17,545 | 17,475 | 17,218 |
| of which—Foil | 2,029 | 2,713 | 3,513 | 3,865 | 4,019 | 4,093 |
| Powder | 127 | 138 | 122 | 179 | 127 | 98 |
| Aluminium sulphates .. | 12,290 | 11,269 | 9,691 | 9,113 | 8,664 | 10,684 |
| Norway— | | | | | | |
| Bauxite | 36,083 | 35,439 | 28,115 | 29,502 | 37,797 | 24,480 |
| Cryolite | 6,099 | 3,310 | 4,041 | 2,763 | 1,862 | 3,239 |
| Alumina | 193,623 | 305,289 | 322,889 | 297,377 | 405,297 | 437,524 |
| Unwrought | 1,557 | 32 | 354 | 1,952 | 782 | 1,236 |
| do. alloys | 155 | 156 | 187 | 418 | 572 | 221 |
| Scrap | n.a. | 565 | 635 | 402 | 507 | 158 |
| Semi-manufactures (a) | 2,013 | 3,691 | 6,138 | 6,238 | 7,760 | 8,707 |
| of which—Foil | 139 | 211 | 232 | 254 | 443 | 407 |
| Powder | n.a. | 209 | 225 | 185 | 229 | 192 |
| Aluminium sulphates .. | 9,570 | 10,155 | 10,519 | 12,103 | 10,868 | 11,633 |
| Poland— | | | | | | |
| Bauxite | 18,100 | 23,800 | 34,900 | 59,200 | (c) 41,000 | 59,151 |
| Alumina | 39,428 | 40,990 | 53,037 | 86,000 | 107,000 | 87,496 |
| Unwrought | 6,426 | 9,939 | 13,633 | 5,873 | n.a. | n.a. |
| Portugal— | | | | | | |
| Cryolite | 15 | 28 | 27 | 17 | 22 | 39 |
| Unwrought (a) | 554 | 379 | 577 | 1,877 | 1,433 | 1,062 |
| Semi-manufactures (a) | 3,046 | 3,323 | 3,914 | 3,685 | 3,638 | 4,880 |
| of which—Powder | 76 | 80 | 96 | 88 | 74 | 76 |
| Aluminium sulphates .. | 2,153 | 2,588 | 3,046 | 2,880 | 2,752 | 2,771 |
| Spain— | | | | | | |
| Bauxite | 17,544 | 8,942 | 23,203 | 39,587 | 46,088 | 64,668 |
| Alumina and hydrate .. | 40,614 | 36,244 | 62,132 | 82,635 | 89,678 | 90,532 |
| Unwrought and scrap .. | 10,921 | 6,380 | 1,718 | 4,198 | 8,307 | 10,483 |
| Semi-manufactures (a) | 419 | 204 | 409 | 1,116 | 1,849 | 3,620 |
| of which—Powder | 15 | 11 | 6 | 14 | 21 | 24 |
| Sweden— | | | | | | |
| Bauxite | 3,144 | 12,939 | 5,476 | 25,281 | 23,850 | 13,572 |
| Cryolite | (b) 775 | 409 | 673 | 758 | 924 | 493 |
| Alumina and hydrate .. | 18,529 | 30,065 | 33,171 | 24,028 | 39,875 | 38,497 |
| Unwrought | 20,634 | 18,315 | 21,846 | 19,754 | 25,580 | 29,536 |
| do. alloys | n.a. | 2,864 | 5,824 | 3,889 | 4,752 | 6,580 |
| Scrap | 5 | 44 | 85 | 176 | 309 | 318 |

(a) Including alloys.

(b) Including artificial.

(c) Exports to Poland from Hungary.

IMPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sweden <i>(cont.)</i> — | | | | | | |
| Semi-manufactures (a) | 6,759 | 11,085 | 15,245 | 13,127 | 13,893 | 14,621 |
| of which—Foil .. | 1,050 | 2,337 | 2,598 | 2,237 | 2,105 | 2,059 |
| Powder .. | <i>n.a.</i> | 415 | 594 | 382 | 342 | 268 |
| Aluminium sulphates .. | 309 | 1,183 | 2,816 | 4,339 | 5,315 | 4,571 |
| Switzerland— | | | | | | |
| Bauxite | <i>n.a.</i> | <i>n.a.</i> | 951 | 2,677 | 1,348 | 1,440 |
| Cryolite | <i>n.a.</i> | <i>n.a.</i> | 1,012 | 1,043 | 1,217 | 825 |
| Alumina | 59,575 | 55,000 | 85,888 | 91,066 | 105,424 | 122,805 |
| Unwrought and scrap (a) | 7,019 | 16,399 | 16,142 | 10,336 | 10,937 | 4,489 |
| Semi-manufactures (a) | 1,515 | 3,483 | 4,955 | 6,946 | 7,622 | 8,708 |
| Aluminium sulphates .. | <i>n.a.</i> | <i>n.a.</i> | 3,927 | 4,152 | 4,166 | 3,862 |
| U.S.S.R.— | | | | | | |
| Bauxite (b) | 443,000 | 447,200 | 422,000 | 447,800 | 303,400 | 434,300 |
| Semi-manufactures .. | 1,968 | 2,953 | 4,133 | 4,133 | 3,740 | 6,299 |
| Yugoslavia— | | | | | | |
| Bauxite | — | 200 | 973 | 1,891 | 2,681 | 3,029 |
| Cryolite | 951 | 758 | 420 | 344 | 749 | 30 |
| Alumina and hydrate .. | 20 | 4 | 4 | 8 | 349 | 582 |
| Unwrought | — | 5,784 | 15,536 | 10,082 | 10,522 | 6,629 |
| Semi-manufactures (a) | 254 | 262 | 326 | 563 | 581 | 1,036 |
| of which—Foil .. | 117 | 47 | 113 | 181 | 369 | 778 |
| Algeria— | | | | | | |
| Bauxite | 1,575 | 2,315 | 2,165 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Unwrought (a) | 595 | 303 | 520 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures (a) | 1,269 | 2,001 | 2,464 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| of which—Foil .. | 582 | 974 | 1,366 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Powder | 40 | 174 | 120 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Aluminium sulphates .. | 815 | 745 | 887 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Angola— | | | | | | |
| Semi-manufactures .. | 102 | 74 | 43 | 398 | 323 | 430 |
| Aluminium sulphates .. | 207 | 69 | 121 | 924 | 403 | 381 |
| Cameroun— | | | | | | |
| Alumina | 70,576 | 80,039 | 73,618 | 102,753 | 83,344 | 123,021 |
| Congo Republic— | | | | | | |
| Cryolite | 50 | 3 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Alumina and hydrate .. | 148 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures .. | 1,761 | 1,633 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| of which—Foil .. | 69 | 60 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Aluminium sulphates .. | 1,612 | 1,459 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt— | | | | | | |
| Unwrought and scrap .. | 647 | 1,463 | 439 | 1,216 | 2,106 | <i>n.a.</i> |
| Semi-manufactures .. | 1,427 | 1,466 | 2,121 | 1,522 | 1,339 | <i>n.a.</i> |
| of which—Foil .. | 462 | 637 | 726 | 467 | 602 | <i>n.a.</i> |
| Aluminium sulphates .. | 17,758 | 12,506 | <i>n.a.</i> | <i>n.a.</i> | 21,591 | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Aluminium sulphates .. | 300 | 184 | 182 | 198 | 255 | 320 |
| Morocco— | | | | | | |
| Bauxite | — | — | 2,436 | — | 3,185 | 2,513 |
| Semi-manufactures (a) | 1,174 | 1,021 | 1,853 | 1,634 | 1,691 | 1,749 |
| of which—Foil .. | 397 | 234 | 440 | 312 | 280 | 456 |
| Powder | 113 | 78 | 67 | 55 | 57 | 75 |
| Aluminium sulphates .. | 1,209 | 1,484 | 1,932 | 1,617 | 1,772 | 1,443 |
| Mozambique— | | | | | | |
| Semi-manufactures (a) | 84 | 95 | 134 | 201 | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Unwrought | 6,761 | 7,301 | 11,104 | 10,199 | 13,802 | <i>n.a.</i> |
| Semi-manufactures (a) | 1,606 | 1,234 | 2,649 | r 1,762 | 2,670 | <i>n.a.</i> |
| of which—Foil .. | 111 | 74 | 490 | r 520 | 506 | <i>n.a.</i> |
| Powder | 43 | 62 | 81 | 59 | 51 | <i>n.a.</i> |
| Aluminium sulphates .. | 3,367 | 3,496 | 3,163 | 3,618 | 2,990 | <i>n.a.</i> |

(a) Including alloys.

(b) Imports from Greece.

IMPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|-----------|------------|-----------|
| OTHER COUNTRIES | | | | | | |
| (cont.) | | | | | | |
| Sudan— | | | | | | |
| Semi-manufactures (a) | 297 | 208 | 483 | 185 | 460 | 653 |
| Aluminium sulphates .. | n.a. | n.a. | n.a. | n.a. | n.a. | 970 |
| Tunisia— | | | | | | |
| Unwrought and scrap (a) | 39 | 194 | 133 | 105 | 3 | n.a. |
| Aluminium sulphates .. | 316 | 324 | n.a. | n.a. | n.a. | n.a. |
| Costa Rica— | | | | | | |
| Semi-manufactures (a) | 280 | 256 | 298 | 332 | 395 | 510 |
| Cuba— | | | | | | |
| Semi-manufactures (a) | 2,189 | 1,887 | n.a. | n.a. | n.a. | n.a. |
| Aluminium sulphates .. | 541 | 535 | n.a. | n.a. | n.a. | n.a. |
| Guatemala— | | | | | | |
| Aluminium sulphates .. | 999 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Honduras— | | | | | | |
| Semi-manufactures .. | n.a. | n.a. | n.a. | 89 | 107 | 150 |
| Mexico— | | | | | | |
| Bauxite, calcined .. | 3,695 | 3,534 | 5,892 | 8,808 | 7,247 | 5,860 |
| Alumina and hydrate .. | 3,517 | 4,125 | 6,274 | 3,609 | 3,820 | 23,384 |
| Unwrought .. | 12,208 | 9,381 | 11,026 | 10,152 | 15,663 | 8,928 |
| Semi-manufactures .. | 586 | 639 | 601 | 574 | 1,999 | 14,414 |
| Aluminium sulphates .. | 830 | 705 | 695 | 706 | 579 | 1,077 |
| United States— | | | | | | |
| Bauxite, crude dried .. | 7,915,000 | 8,149,000 | 8,739,000 | 9,206,000 | 10,575,000 | 9,170,000 |
| do. calcined .. | 29,515 | 108,657 | 118,653 | 70,360 | 120,150 | 87,951 |
| Cryolite .. | 21,595 | 19,734 | 15,598 | 12,334 | 11,136 | 24,031 |
| Alumina and hydrate .. | 47,943 | 115,506 | 79,048 | 168,948 | 157,670 | 170,128 |
| Unwrought (a) .. | 227,966 | 214,264 | 138,131 | 177,879 | 277,638 | 371,132 |
| Scrap .. | 8,859 | 9,749 | 4,502 | 5,359 | 5,800 | 8,309 |
| Semi-manufactures .. | 27,426 | 49,248 | 37,060 | 48,448 | 57,364 | 41,125 |
| of which—Foil (b) .. | 2,474 | 4,044 | 4,312 | 4,421 | 4,518 | 4,301 |
| Aluminium sulphates .. | 3,289 | 5,083 | 4,855 | 4,396 | 5,077 | 3,698 |
| Argentina— | | | | | | |
| Bauxite .. | 26,574 | 15,953 | 29,492 | 39,530 | 26,051 | 4,225 |
| Ingots and bars .. | 12,927 | 9,155 | 11,887 | 28,776 | 15,252 | 14,798 |
| Brazil— | | | | | | |
| Cryolite .. | 944 | 685 | 1,053 | 1,018 | 590 | 555 |
| Alumina .. | 15 | 2,821 | 51 | 30 | 4,404 | 562 |
| do. hydrate .. | 671 | 604 | 862 | 714 | 808 | 497 |
| Unwrought (a) .. | 13,984 | 8,785 | 14,580 | 18,052 | 19,199 | 25,408 |
| Semi-manufactures (a) | 692 | 689 | 259 | 237 | 278 | 549 |
| of which—Foil .. | 116 | 10 | 25 | 29 | 76 | 92 |
| Powder .. | 100 | 19 | 42 | 24 | 27 | 32 |
| Aluminium sulphates .. | 46 | 1 | — | 50 | 2 | 1 |
| Chile— | | | | | | |
| Unwrought .. | 1,205 | 881 | 1,762 | 1,386 | 1,253 | n.a. |
| Bars, sheets and alloys .. | 79 | 133 | 166 | 290 | 435 | n.a. |
| Aluminium sulphates .. | 1 | 74 | 8 | — | — | n.a. |
| Colombia— | | | | | | |
| Bauxite .. | 1,771 | 3,025 | 4,635 | 4,453 | 5,986 | 7,087 |
| Alumina and hydrates .. | 44 | 439 | 681 | 423 | 271 | 99 |
| Unwrought (a) .. | 2,210 | 2,952 | 2,965 | 3,318 | 5,575 | 2,371 |
| Semi-manufactures (a) | 1,437 | 1,255 | 1,543 | 1,214 | 1,109 | 918 |
| Aluminium sulphates .. | 4,788 | 398 | 170 | 514 | 1,214 | 310 |
| Ecuador— | | | | | | |
| Semi-manufactures .. | 245 | 213 | n.a. | n.a. | 249 | n.a. |
| Aluminium sulphates .. | 672 | 809 | n.a. | 371 | 1,185 | n.a. |
| Peru— | | | | | | |
| Unwrought (a) .. | 152 | 206 | 462 | 557 | 563 | 627 |
| Semi-manufactures (a) | 841 | 960 | 1,373 | 2,021 | 1,664 | 1,841 |
| Aluminium sulphates .. | 4,182 | 3,016 | 3,297 | 3,743 | 3,218 | 3,104 |

(a) Including alloys.

(b) Excluding leaves 5½ in. by 5½ in. recorded by number only.

IMPORTS OF ALUMINIUM, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Uruguay— | | | | | | |
| Unwrought | 1,342 | 1,425 | 2,065 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Aluminium sulphates .. | 2,943 | 3,202 | 3,258 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela— | | | | | | |
| Unwrought | 433 | 615 | 730 | 726 | 1,019 | 855 |
| Semi-manufactures .. | <i>n.a.</i> | <i>n.a.</i> | 7,813 | 9,885 | 7,586 | 6,768 |
| Aluminium sulphates .. | 3,598 | 4,993 | 4,041 | 10,202 | 7,134 | 7,096 |
| Alumina and hydrate .. | <i>n.a.</i> | 18 | 111 | 153 | 186 | 231 |
| Burma— | | | | | | |
| Unwrought | 171 | 173 | 241 | 377 | 456 | 376 |
| Semi-manufactures (a) | 1,761 | 1,462 | 1,321 | 2,278 | 2,611 | 2,719 |
| Formosa— | | | | | | |
| Bauxite | 40,636 | 32,051 | 24,416 | 56,273 | 56,282 | 52,176 |
| Foil | 3 | 2 | 7 | 9 | 7 | 13 |
| Indonesia— | | | | | | |
| Semi-manufactures (a) | 3,018 | 3,519 | 2,734 | 5,908 | <i>n.a.</i> | <i>n.a.</i> |
| Aluminium sulphates .. | 7,199 | 5,271 | 8,065 | 8,686 | <i>n.a.</i> | <i>n.a.</i> |
| Iran (b)— | | | | | | |
| Unwrought (a) | 763 | 784 | 1,531 | 1,823 | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures .. | 925 | 957 | 948 | 980 | <i>n.a.</i> | <i>n.a.</i> |
| Iraq— | | | | | | |
| Unwrought (a) | 399 | 853 | 534 | 491 | 583 | <i>n.a.</i> |
| Semi-manufactures (a) | 1,129 | 1,561 | 1,751 | 1,646 | 1,187 | <i>n.a.</i> |
| Aluminium sulphates .. | 1,473 | 913 | 3,168 | 2,837 | 4,817 | <i>n.a.</i> |
| Israel— | | | | | | |
| Unwrought and semi-manufactures .. | 2,724 | 2,651 | 3,343 | 5,655 | 6,717 | 5,689 |
| of which—Foil | 95 | 10 | 17 | 22 | 50 | 50 |
| Aluminium sulphates .. | 617 | 571 | 3 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Bauxite | 509,054 | 816,669 | 1,077,343 | 1,138,283 | 1,081,336 | 1,398,974 |
| Cryolite | 492 | 1,578 | 3,076 | 5,202 | 3,736 | 6,310 |
| Unwrought | 400 | 14,589 | 22,604 | 31,877 | 17,128 | 16,434 |
| do. alloys | 69 | 708 | 193 | 191 | 361 | 6,438 |
| Scrap | 3,404 | 9,784 | 13,424 | 16,840 | 11,371 | 11,786 |
| do. alloys | 1,621 | 2,724 | 5,011 | 14,508 | 5,572 | 6,448 |
| Semi-manufactures (a) | 238 | 270 | 320 | 587 | 626 | 824 |
| Jordan— | | | | | | |
| Semi-manufactures .. | 243 | 251 | 233 | 203 | 261 | 295 |
| of which—Foil | 28 | 26 | 53 | 35 | 61 | 68 |
| Korea (South)— | | | | | | |
| Unwrought and semi-manufactures .. | <i>n.a.</i> | 3,217 | 3,416 | 3,416 | 11,618 | 7,532 |
| Aluminium sulphate .. | 861 | 2,230 | 482 | 233 | <i>n.a.</i> | <i>n.a.</i> |
| Lebanon— | | | | | | |
| Unwrought | 182 | 220 | 385 | 850 | 818 | <i>n.a.</i> |
| Semi-manufactures .. | 160 | 234 | 572 | 588 | 759 | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Unwrought | } 2,005 | } 2,293 | } 5,611 | 1,892 | 1,856 | 4,685 |
| Semi-manufactures (a) | | | | 1,307 | 704 | 688 |
| of which—Foil | | | | 141 | 151 | 498 | 157 | 292 | 315 |
| Aluminium sulphates .. | 4,112 | 5,919 | 3,192 | <i>n.a.</i> | <i>n.a.</i> | 8,713 |
| Syria— | | | | | | |
| Unwrought | 243 | 79 | <i>n.a.</i> | 121 | <i>n.a.</i> | 404 |
| Thailand— | | | | | | |
| Unwrought (a) | 78 | 219 | 327 | 562 | 1,170 | 1,625 |
| Semi-manufactures (a) | 1,738 | 2,104 | 2,725 | 2,736 | 2,987 | 3,127 |
| of which—Foil | 285 | 145 | 502 | 421 | 666 | 567 |
| Aluminium sulphates .. | 1,280 | 1,073 | 1,118 | 1,080 | 685 | 550 |

(a) Including alloys.

(b) Years ending March 20 following that stated.

IMPORTS OF ALUMINIUM, ETC. (cont.)

Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------|-------|-------|-------|-------|-------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Turkey— | | | | | | |
| Unwrought (a) .. | 175 | 679 | 254 | 489 | 1,260 | 1,197 |
| Semi-manufactures (a) .. | 379 | 1,199 | 1,417 | 2,483 | 2,865 | 2,600 |
| <i>of which—Foil..</i> .. | 174 | 336 | 818 | 752 | 1,193 | 1,113 |
| Aluminium sulphates .. | 1,396 | 2,484 | 2,197 | 2,330 | 3,207 | 4,930 |

(a) Including alloys.

ANTIMONY
PRODUCTION OF ANTIMONY ORE
(Metal content)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Southern Rhodesia | 101 | 77 | 75 | 51 | 46 | 49 |
| Canada (a) | — | — | — | — | — | — |
| Pakistan | n.a. | 106 | 62 | 13 | 76 | (f) 76 |
| Australia (b) | 692 | 628 | 154 | 117 | 66 | 74 |
| OTHER COUNTRIES | | | | | | |
| Austria | 616 | 762 | 915 | 871 | 983 | 853 |
| Czechoslovakia (h) | 1,600 | 1,600 | 1,600 | 1,600 | 1,600 | 1,600 |
| France | 37 | — | — | — | 6 | 148 |
| Italy | 167 | 206 | r 213 | 247 | 330 | 237 |
| Portugal | 6 | 6 | — | — | — | 6 |
| Spain | 200 | 157 | 217 | 170 | 157 | 83 |
| U.S.S.R. (h) | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 7,000 |
| Yugoslavia (c) | 1,639 | 2,245 | 2,372 | 2,424 | 2,648 | 2,619 |
| Algeria | 1,184 | 1,480 | 791 | 643 | 133 | — |
| Morocco | 181 | 225 | 500 | 364 | 401 | 664 |
| South Africa | 7,122 | 12,087 | 12,106 | 10,539 | 10,425 | 10,983 |
| Guatemala (e) | 42 | (e) 87 | (e) 106 | 30 | 39 | (e) 28 |
| Mexico | 2,704 | 3,234 | 4,164 | 3,552 | 4,694 | 4,750 |
| United States (d) | 629 | 605 | 567 | 615 | 563 | 576 |
| Argentina | 10 | 4 | — | — | — | — |
| Bolivia (j) | 5,194 | 5,415 | 5,243 | 6,634 | 7,078 | 7,443 |
| Peru (i) | 861 | 708 | 804 | 777 | 513 | 729 |
| Burma | 7 | 152 | 94 | 67 | 30 | n.a. |
| China (f) r | 14,500 | r 14,500 | r 14,500 | r 14,500 | 14,500 | 14,500 |
| Japan | 266 | 303 | 266 | 192 | 169 | 188 |
| Thailand | — | 10 | — | 38 | 44 | 612 |
| Turkey (g) | 1,506 | (g) 1,232 | 1,357 | 1,220 | 1,752 | 1,478 |
| TOTAL* | 45,000 | 52,000 | r 52,000 | r 51,000 | 52,000 | 55,000 |

*Excluding any antimony ore produced in Hungary, Afghanistan and Iran.

(a) The following figures represent the antimony content of antimonial lead and of flue dust and slags (long tons): 1958—383; 1959—740; 1960—737; 1961—594; 1962—862; 1963—681.

(b) In addition the antimony content of antimonial slag obtained as a by-product of lead refining was as follows (long tons): 1958—664; 1959—652; 1960—632; 1961—563; 1962—808; 1963—933.

(c) Metal.

(d) Secondary metal was recovered as follows (long tons): 1958—17,424; 1959—17,896; 1960—17,950; 1961—17,380; 1962—17,287; 1963—18,574.

(e) Imports into the United States.

(f) United States Bureau of Mines' estimate.

(g) Exports.

(h) Estimate. Source "Minerais et Métaux".

(i) Metal plus content of ore.

(j) Content of ore exported plus exports of metal.

EXPORTS OF ANTIMONY, ETC.

Long ton

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------------|-------------|-----------------|-----------------|-----------------|-----------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Regulus and refined .. | 824 | 719 | 1,600 | 1,171 | 827 | 1,454 |
| Rhodesia & Nyasaland— | | | | | | |
| Ore | 137 | 257 | 272 | 222 | 179 | 213 |
| Canada— | | | | | | |
| Antimonial lead .. | 281 | 499 | 501 | 534 | 706 | <i>n.a.</i> |
| (<i>Sb content</i>) | | | | | | |
| Hong Kong— | | | | | | |
| Ore | 751 | — | — | — | — | — |
| Australia (<i>a</i>)— | | | | | | |
| Regulus | 133 | — | 12 | — | — | — |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 937 | 878 | 1,029 | 1,780 | 1,118 | 806 |
| Sulphide | <i>n.a.</i> | 100 | 288 | 110 | 244 | 317 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Oxide | 751 | 707 | 687 | 966 | 1,251 | 1,137 |
| France— | | | | | | |
| Ore | — | 394 | 5 | — | — | 98 |
| Crude and regulus .. | 160 | 115 | 280 | 135 | 53 | 262 |
| Germany (Federal)— | | | | | | |
| Ore | — | 1 | 53 | — | — | — |
| Regulus, scrap, etc. .. | 149 | 229 | 400 | 402 | 1,014 | 769 |
| Oxide | 272 | 368 | 289 | 91 | 136 | 87 |
| Italy— | | | | | | |
| Regulus and scrap .. | 65 | — | 1 | — | 2 | — |
| Netherlands— | | | | | | |
| Regulus | 15 | 40 | (<i>b</i>) 54 | (<i>b</i>) 34 | (<i>b</i>) 69 | (<i>b</i>) 57 |
| Oxide | 7 | 14 | 43 | 31 | 48 | 19 |
| Sweden— | | | | | | |
| Ore | 53 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Regulus | 14 | 5 | 22 | 7 | 10 | 39 |
| U.S.S.R.— | | | | | | |
| Regulus | 1,100 | 2,300 | 2,500 | 3,400 | 3,800 | 3,248 |
| Yugoslavia— | | | | | | |
| Regulus | 1,574 | 1,896 | 1,970 | 2,039 | 2,245 | 2,324 |
| Algeria— | | | | | | |
| Ore | 5,468 | 5,272 | 3,552 | 2,360 | 559 | — |
| Morocco— | | | | | | |
| Ore | — | 734 | 546 | 1,129 | 998 | 1,327 |
| South Africa— | | | | | | |
| Ore | 14,519 | 19,447 | 20,451 | 16,292 | 18,059 | 19,167 |
| Mexico— | | | | | | |
| Ore and concentrates .. | 5,625 | 6,441 | 9,098 | 9,343 | 11,226 | 11,720 |
| Regulus and refined .. | 313 | 586 | 538 | 128 | 270 | 316 |
| United States— | | | | | | |
| Ore | 42 | 147 | 756 | 6 | 8 | 129 |
| Metal and alloys .. | 35 | 8 | 53 | 30 | 31 | 14 |
| Bolivia— | | | | | | |
| Ore (<i>Sb content</i>) .. | 5,159 | 5,412 | 5,238 | 6,602 | 7,035 | 7,443 |
| Regulus | 35 | 3 | 5 | 32 | 43 | — |
| Peru— | | | | | | |
| Ore and metal (<i>Sb content</i>) .. | 571 | 734 | 948 | 901 | 864 | 840 |
| Burma— | | | | | | |
| Ore | — | 10 | — | 151 | 71 | 21 |
| Japan— | | | | | | |
| Regulus | 3 | 2 | — | 3 | <i>n.a.</i> | <i>n.a.</i> |
| Sulphide | 18 | 18 | 6 | 14 | <i>n.a.</i> | <i>n.a.</i> |

 (*a*) Years ended June 30 of that stated.

 (*b*) Including scrap.

EXPORTS OF ANTIMONY, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|-------|-------|-------|-------|-------|-------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Thailand— | | | | | | |
| Ore | — | — | — | 52 | 72 | 852 |
| Turkey— | | | | | | |
| Ore | 2,509 | 2,056 | 2,241 | 2,475 | 2,707 | 3,722 |

IMPORTS OF ANTIMONY, ETC.

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------|---------|---------|---------|---------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates (b) | 11,274 | 11,063 | 15,623 | 11,733 | 12,085 | 11,995 |
| Rhodesia & Nyasaland— | | | | | | |
| Refined and regulus .. | 27 | 47 | 50 | 183 | 60 | 110 |
| Canada— | | | | | | |
| Regulus | 361 | 523 | 377 | 372 | 570 | 463 |
| Oxide | 144 | 228 | 195 | 160 | 280 | 290 |
| Hong Kong— | | | | | | |
| Ore | 897 | — | — | — | — | — |
| India— | | | | | | |
| Ore | 935 | r 1,291 | 1,195 | 1,042 | 1,376 | 1,690 |
| Metal | 34 | 81 | 23 | 1 | — | 15 |
| Oxide | 43 | 73 | (d) 90 | (d) 96 | (d) 54 | (d) 39 |
| Sulphide | 3 | 10 | (d) 4 | (d) 1 | (d) 2 | (d) 2 |
| Australia (c)— | | | | | | |
| Concentrates | 103 | 36 | 105 | 271 | 34 | 44 |
| Regulus | n.a. | n.a. | n.a. | 238 | 156 | 393 |
| New Zealand— | | | | | | |
| Refined and regulus .. | 172 | 90 | 82 | 152 | n.a. | n.a. |
| Oxide | 30 | 28 | 14 | 21 | n.a. | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Regulus | 153 | 141 | 206 | 151 | 128 | 263 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Regulus | 146 | 187 | (a) 272 | (a) 202 | (a) 353 | (a) 238 |
| Oxide | 89 | 124 | 176 | 138 | 143 | 213 |
| Denmark— | | | | | | |
| Regulus | 324 | 400 | 228 | 313 | 379 | 313 |
| France— | | | | | | |
| Ore | 8,752 | 5,490 | 6,120 | 4,303 | 2,957 | 853 |
| Crude and regulus (a) .. | 1 | 156 | 465 | 896 | 2,141 | 2,743 |
| Sulphide | 2 | 1 | 2 | — | 12 | 6 |
| Germany (Federal)— | | | | | | |
| Ore | 1,305 | 2,142 | 2,027 | 2,175 | 1,623 | 2,131 |
| Regulus, scrap, etc. .. | 1,938 | 2,976 | 4,262 | 3,535 | 3,545 | 4,707 |
| Oxide | 159 | 218 | 211 | 211 | 246 | 402 |
| Greece— | | | | | | |
| Regulus | 73 | 64 | 124 | 39 | 53 | 53 |
| Italy— | | | | | | |
| Ore | 352 | 157 | 965 | 1,002 | n.a. | n.a. |
| Regulus and scrap .. | 248 | 250 | 497 | 376 | 387 | 620 |
| Oxide | 192 | 127 | 345 | 248 | — | 283 |
| Sulphide | 15 | 14 | 11 | n.a. | n.a. | n.a. |
| Netherlands— | | | | | | |
| Regulus | 236 | 393 | (a) 417 | (a) 437 | (a) 336 | (a) 380 |
| Oxide | 461 | 592 | 777 | 501 | 564 | 560 |
| Norway— | | | | | | |
| Regulus | 49 | 72 | 64 | 109 | 115 | 90 |
| Poland— | | | | | | |
| Regulus | 1,673 | 1,256 | 1,280 | 2,414 | n.a. | n.a. |
| Portugal— | | | | | | |
| Crude and alloys .. | 55 | 57 | n.a. | n.a. | n.a. | n.a. |
| Oxide | 1 | 9 | n.a. | n.a. | n.a. | n.a. |
| Sulphide | — | 1 | 2 | 1 | n.a. | — |

(a) Including scrap.

(b) Including crude.

(c) Years ended June 30 of that stated.

(d) Years ended March 31 following that stated.

IMPORTS OF ANTIMONY, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Sweden— | | | | | | |
| Ore | 31 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Regulus | 224 | 258 | 373 | 340 | 386 | 439 |
| Switzerland— | | | | | | |
| Regulus | 342 | 132 | <i>n.a.</i> | <i>n.a.</i> | 537 | 311 |
| U.S.S.R.— | | | | | | |
| Regulus | 3,400 | — | — | — | — | — |
| Algeria— | | | | | | |
| Regulus | 11 | 12 | 12 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Morocco— | | | | | | |
| Regulus | 20 | 15 | 25 | 22 | 30 | 19 |
| South Africa— | | | | | | |
| Refined and regulus .. | 152 | 90 | 113 | 156 | <i>n.a.</i> | <i>n.a.</i> |
| Mexico— | | | | | | |
| Oxide | 19 | 10 | 25 | 24 | 21 | 20 |
| United States— | | | | | | |
| Ore (<i>Sb content</i>) | 3,060 | 5,773 | 5,764 | 5,994 | 7,681 | 8,736 |
| Crude | 122 | 158 | 21 | 11 | 15 | 20 |
| Regulus | 3,823 | 3,948 | 4,885 | 4,386 | 4,214 | 5,086 |
| Oxide | 1,459 | 1,835 | 2,114 | 1,786 | 2,598 | 1,865 |
| Argentina— | | | | | | |
| Ore | 1,369 | 652 | 296 | 611 | 553 | 370 |
| Brazil— | | | | | | |
| Ore | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 53 | 79 |
| Regulus | 167 | 227 | 45 | 108 | 631 | 580 |
| Oxide | 27 | 39 | 42 | 33 | 62 | 36 |
| Sulphide | 92 | 116 | 186 | 101 | 93 | 139 |
| Chile— | | | | | | |
| Regulus | 15 | 44 | 99 | 38 | 8 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Metal | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 26 | 40 | 66 |
| Peru— | | | | | | |
| Sulphides | — | — | 1 | — | 1 | — |
| Uruguay— | | | | | | |
| Regulus | 13 | 32 | 21 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela— | | | | | | |
| Regulus | 17 | 35 | 16 | 8 | 6 | 17 |
| Indonesia— | | | | | | |
| Regulus | 79 | 156 | 77 | 164 | <i>n.a.</i> | <i>n.a.</i> |
| Israel— | | | | | | |
| Regulus | 42 | 25 | 35 | — | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Ore and concentrates .. | 2,278 | 4,934 | 5,283 | 6,369 | 4,947 | 6,098 |
| Regulus | 6 | 83 | 9 | — | — | 158 |
| Sulphide | 181 | — | — | 91 | 149 | 270 |

ARSENIC
PRODUCTION OF ARSENIC

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|--------|--------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Southern Rhodesia— | | | | | | |
| White arsenic | 610 | 471 | 182 | — | 1,078 | 540 |
| Canada— | | | | | | |
| White arsenic (a) .. | 1,037 | 705 | 770 | 187 | 72 | 84 |
| OTHER COUNTRIES | | | | | | |
| Belgium (b)— | | | | | | |
| White arsenic | 485 | 2,823 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| France— | | | | | | |
| White arsenic | 7,459 | 7,894 | 8,400 | 9,300 | 6,676 | 11,900 |
| Germany (Federal) (b)— | | | | | | |
| White arsenic, etc. .. | 183 | 161 | 98 | 137 | 67 | 55 |
| Greece— | | | | | | |
| White arsenic | 12 | 10 | (c) 10 | (c) 3 | — | — |
| Italy— | | | | | | |
| Mispickel (<i>As content</i>) .. | 499 | 411 | 515 | 583 | 265 | — |
| White arsenic | 614 | 1,119 | 584 | 874 | 125 | — |
| Portugal— | | | | | | |
| Arsenic oxide (d) | 969 | 599 | 723 | 295 | 566 | 555 |
| Spain— | | | | | | |
| Arsenic oxide (e) | 189 | 286 | 412 | 316 | 213 | <i>n.a.</i> |
| Sweden— | | | | | | |
| White arsenic | 9,119 | 11,000 | 11,564 | 10,851 | 5,662 | 14,615 |
| Mexico— | | | | | | |
| Ores (<i>As₂O₃ content</i>) .. | 3,047 | 10,300 | 11,939 | 12,087 | 10,731 | 9,336 |
| United States— | | | | | | |
| White arsenic | 10,275 | 4,633 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Brazil— | | | | | | |
| White arsenic | 261 | 328 | 208 | 57 | 147 | (c) 150 |
| Peru— | | | | | | |
| White arsenic | 329 | 468 | 387 | 346 | 511 | (c) 490 |
| Japan— | | | | | | |
| White arsenic | 1,276 | 1,058 | 1,113 | 935 | 903 | 807 |

Arsenic has also been produced in the United Kingdom, Austria, Czechoslovakia, East Germany, Hungary, U.S.S.R., Argentina, Iran, China and Korea.

(a) Refined white arsenic produced plus the content of crude arsenic exported but excluding arsenic contained in gold ores exported.

(b) Exports.

(c) United States Bureau of Mines' estimate.

(d) Content of pyrites mined 1958—1959. Actual production 1960 onwards.

(e) Content of ore.

EXPORTS OF ARSENIC, ETC.

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|----------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Arsenical compounds: | | | | | | (a) |
| inorganic | 3,123 | 2,546 | 5,996 | 6,774 | 8,166 | |
| | £215,985 | £184,585 | £410,574 | £444,901 | £539,894 | £440,827 |
| organic | £111,106 | £116,280 | £119,161 | £146,394 | £113,763 | £59,739 |
| Canada— | | | | | | |
| White arsenic, etc. (b) | 760 | 505 | 471 | 109 | — | 2 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Sulphide | 128 | 49 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| White arsenic | 485 | 2,823 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Arsenates and arsenites | 7 | 33 | 225 | 312 | 313 | 291 |
| France— | | | | | | |
| White arsenic | 5,660 | 8,444 | 7,778 | 10,799 | 9,690 | 9,411 |
| Arsenates | 115 | 71 | 131 | 161 | 117 | 98 |
| Germany (Federal)— | | | | | | |
| White arsenic, etc. | 183 | 161 | 98 | 137 | 67 | 55 |
| Arsenates | 376 | 782 | 386 | 182 | 194 | 102 |
| Italy— | | | | | | |
| White arsenic | 9 | 3 | 50 | 2 | 20 | 15 |
| Arsenates and arsenites | 7 | 27 | 17 | 12 | 3 | 25 |
| Netherlands— | | | | | | |
| White arsenic | 10 | 1 | — | — | 21 | 13 |
| Arsenates and arsenites | — | 15 | 18 | 9 | 21 | 32 |
| Poland— | | | | | | |
| Metallic arsenic | 36 | 19 | 51 | 38 | <i>n.a.</i> | <i>n.a.</i> |
| Portugal— | | | | | | |
| White arsenic | 1,046 | 383 | 34 | 77 | 1,075 | 702 |
| Sweden— | | | | | | |
| White arsenic | 14,939 | 11,417 | 13,494 | 10,229 | 7,719 | 13,000 |
| Metallic arsenic | <i>n.a.</i> | 92 | 244 | 182 | 226 | 298 |
| Mexico— | | | | | | |
| White arsenic, pure | 1,689 | 5,346 | 6,454 | 6,072 | 6,376 | 8,515 |
| do. crude | 793 | 6,338 | 2,955 | 7,060 | 1,962 | 125 |
| United States— | | | | | | |
| Arsenate of lead | 937 | 625 | 843 | 415 | 635 | 358 |
| Arsenate of lime | 569 | 55 | 129 | 299 | 421 | 83 |
| Japan— | | | | | | |
| White arsenic | 53 | 10 | 16 | 12 | 15 | 2 |
| Turkey— | | | | | | |
| Ore | — | 3 | — | — | — | — |

(a) Quantity not available; value shown relates to arsenites and arsenates only.

(b) Including arsenic contained in gold ores exported.

IMPORTS OF ARSENIC, ETC.

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| White arsenic | 6,873 | 4,602 | 9,815 | 8,587 | 6,570 | 8,806 |
| Arsenates and arsenites | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | (£1,062) |
| Canada— | | | | | | |
| Arsenate of lead | 58 | 38 | 29 | 26 | 19 | 28 |
| Arsenate of lime | 38 | 39 | 30 | 80 | 84 | 59 |
| India— | | | | | | |
| Arsenic and its oxides .. | 90 | 297 | (b) 406 | (b) 602 | (b) 384 | (b) 239 |
| Pakistan— | | | | | | |
| Arsenic and its oxides .. | 14 | 5 | 60 | 44 | 32 | 24 |
| Australia (a)— | | | | | | |
| White arsenic | 1,877 | 2,595 | 2,618 | 2,183 | 1,695 | 1,906 |
| Arsenate of lead | 1 | — | — | — | — | — |
| New Zealand— | | | | | | |
| White arsenic, etc. | 165 | 71 | 71 | 9 | 141 | <i>n.a.</i> |
| Arsenate of lead | 30 | 18 | 9 | 11 | 31 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| White arsenic, etc. | <i>n.a.</i> | 38 | 30 | 32 | 32 | 33 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| White arsenic | 273 | 108 | 73 | 3 | 5 | 12 |
| Denmark— | | | | | | |
| White arsenic | <i>n.a.</i> | 28 | 28 | 29 | 15 | 30 |
| Arsenates and arsenites | 1 | 2 | 2 | 50 | 99 | 115 |
| France— | | | | | | |
| Sulphide | 3 | 8 | 4 | 8 | — | — |
| Metallic arsenic | 17 | 9 | 9 | 21 | 15 | 17 |
| White arsenic | 16 | 8 | 30 | 30 | 79 | 62 |
| Germany (Federal)— | | | | | | |
| Metallic arsenic | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 23 | 27 | 28 |
| White arsenic, etc. | 2,645 | 3,358 | 4,248 | 2,789 | 2,194 | 1,796 |
| Sulphide | 19 | 10 | 9 | 8 | 1 | — |
| Italy— | | | | | | |
| White arsenic | 288 | 211 | 418 | 449 | 1,134 | 1,600 |
| Metallic arsenic | 2 | 6 | 8 | 16 | 10 | 19 |
| Arsenates and arsonites | 3 | 19 | 23 | 3 | 47 | 27 |
| Netherlands— | | | | | | |
| White arsenic | 677 | 543 | 529 | 638 | 608 | 969 |
| Arsenates and arsenites | 28 | 23 | 85 | 32 | 15 | 26 |
| Norway— | | | | | | |
| White arsenic | <i>n.a.</i> | 50 | 63 | 51 | 47 | 63 |
| Portugal— | | | | | | |
| Metallic arsenic | 1 | 1 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| White arsenic | 16 | 12 | 9 | 8 | 5 | 1 |
| Arsenate of soda | 3 | 5 | — | — | <i>n.a.</i> | 1 |
| Switzerland— | | | | | | |
| White arsenic, etc. | <i>n.a.</i> | <i>n.a.</i> | 149 | 245 | 99 | 90 |
| Yugoslavia— | | | | | | |
| Metallic arsenic | 8 | 3 | 5 | 3 | — | — |
| Algeria— | | | | | | |
| White arsenic | 3 | 22 | 11 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphide | 1 | 1 | 2 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Arsenates | 41 | 17 | 17 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Congo Republic— | | | | | | |
| White arsenic | — | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Arsenates and arsenites | 142 | 139 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Arsenates | 12 | 9 | 12 | 16 | 9 | 9 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 of year following that stated.

IMPORTS OF ARSENIC, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|--------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Tunisia— | | | | | | |
| Arsenates and arsenites | — | 1 | — | 1 | 2 | <i>n.a.</i> |
| Mexico— | | | | | | |
| White arsenic | 48 | 95 | 6 | 100 | 1 | — |
| United States— | | | | | | |
| Metallic arsenic | 28 | 38 | 65 | 59 | 102 | 151 |
| White arsenic | 8,504 | 17,309 | 11,450 | 17,396 | 14,069 | 12,999 |
| Sulphide | 56 | 19 | 14 | 25 | 30 | 16 |
| Arsenates of lime and soda | (a) 77 | (a) 68 | 96 | (a) 94 | (a) 114 | (a) 122 |
| Argentina— | | | | | | |
| White arsenic | 894 | 768 | 423 | 720 | 780 | 397 |
| Brazil— | | | | | | |
| Metallic arsenic | — | — | — | — | 3 | 5 |
| White arsenic | 730 | 701 | 846 | 675 | 784 | 743 |
| Arsenates | 10 | 30 | 30 | 28 | — | 7 |
| Chile— | | | | | | |
| White arsenic | 22 | 74 | 19 | 64 | 52 | <i>n.a.</i> |
| Arsenates | 6 | 33 | 71 | — | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| White arsenic | 5 | 44 | 104 | 34 | 70 | 126 |
| Uruguay— | | | | | | |
| White arsenic | 172 | 299 | 296 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Arsenate of lead | 8 | 9 | 66 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Formosa— | | | | | | |
| White arsenic | <i>n.a.</i> | <i>n.a.</i> | 87 | 88 | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| White arsenic | — | 1,524 | 1,124 | 2,445 | 1,500 | 2,633 |
| Sulphide | 21 | 38 | 25 | 23 | 34 | 35 |
| Turkey— | | | | | | |
| Arsenic compounds | — | 32 | 50 | 74 | 15 | 10 |

(a) Arsenate of soda only.

ASBESTOS
PRODUCTION OF ASBESTOS

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Bechuanaland Protectorate | 2,014 | 1,259 | 1,145 | 1,718 | 2,156 | 2,114 |
| Kenya— | | | | | | |
| Anthophyllite | 107 | 39 | 104 | 135 | 189 | 70 |
| Southern Rhodesia | 113,496 | 106,874 | 119,611 | 144,295 | 126,961 | 127,014 |
| Swaziland | 22,554 | 22,149 | 28,595 | 27,493 | 29,311 | 29,778 |
| Canada (a)— | | | | | | |
| Chrysotile | 826,188 | 937,883 | 998,621 | 1,047,942 | 1,085,548 | 1,135,736 |
| Crude | 540 | 386 | 295 | 146 | 183 | n.a. |
| Fibre | 305,859 | 360,731 | 431,413 | 489,491 | 488,792 | n.a. |
| Shorts and Waste | 519,789 | 576,766 | 566,913 | 558,305 | 596,573 | n.a. |
| Cyprus | 14,727 | 12,878 | 20,818 | 14,471 | 19,992 | 17,823 |
| India | 1,162 | 1,344 | 1,684 | r 1,445 | 1,665 | 2,669 |
| Australia— | | | | | | |
| Chrysotile | 2,013 | 1,279 | 1,019 | 865 | 826 | 847 |
| Crocidolite | 11,887 | 14,680 | 12,921 | 14,087 | 15,617 | 11,094 |
| New Zealand | 405 | 572 | 284 | 333 | 408 | 392 |
| Total | 995,000 | 1,099,000 | 1,185,000 | 1,253,000 | 1,283,000 | 1,328,000 |
| OTHER COUNTRIES | | | | | | |
| Austria | — | — | 59 | 504 | 449 | 570 |
| Bulgaria | 1,000 | 1,000 | 1,100 | 1,100 | (c) 1,000 | (c) 1,000 |
| Finland | 7,082 | 8,553 | 9,405 | 9,231 | 9,704 | 9,108 |
| France | 18,520 | 20,857 | 25,178 | 27,451 | 25,029 | 24,000 |
| Italy | 37,946 | 46,670 | 50,313 | 55,760 | 54,673 | 56,623 |
| Portugal | 88 | 35 | 129 | 19 | — | 26 |
| Spain | — | 17 | 4 | 10 | — | — |
| U.S.S.R. (c) | 490,000 | 540,000 | 590,000 | 790,000 | 980,000 | 1,100,000 |
| Yugoslavia | 5,322 | 4,239 | 5,330 | 5,990 | 6,608 | 8,102 |
| Egypt | 433 | 448 | 443 | 227 | 541 | 171 |
| Eritrea | 25 | (c) 27 | n.a. | n.a. | n.a. | n.a. |
| Mozambique | 177 | 66 | 20 | 145 | 331 | — |
| South Africa— | | | | | | |
| Amosite | 62,297 | 64,036 | 61,277 | 61,816 | 66,860 | 69,302 |
| Blue | 69,812 | 72,444 | 69,421 | 83,750 | 103,866 | 88,545 |
| Chrysotile | 24,467 | 26,184 | 26,313 | 28,327 | 26,779 | 25,829 |
| Tremolite | 248 | 198 | 12 | 66 | 86 | 25 |
| United States (d) | 39,267 | 40,588 | 40,378 | 47,155 | 47,491 | 59,470 |
| Argentina | 255 | 286 | — | — | — | — |
| Bolivia (b) | — | 149 | 167 | 103 | n.a. | n.a. |
| Brazil | 3,407 | 11,004 | 13,027 | (c) 16,700 | (c) 16,740 | n.a. |
| Venezuela | 8,173 | 4,547 | 3,870 | 581 | — | — |
| China (c) | 58,000 | 80,000 | 80,000 | r 90,000 | 90,000 | 100,000 |
| Formosa | 42 | 134 | 433 | 39 | 468 | 539 |
| Iran (e) | 13 | — | — | n.a. | n.a. | n.a. |
| Japan— | | | | | | |
| Chrysotile | 9,989 | 12,173 | 15,216 | 16,785 | 13,756 | 16,309 |
| Korea (South) | 20 | 79 | 621 | 304 | 1,190 | 1,893 |
| Philippine Republic | — | 50 | 32 | 74 | 926 | 376 |
| Turkey | 749 | 367 | 213 | 443 | 633 | 364 |
| Total* | 800,000 | 900,000 | 1,000,000 | 1,200,000 | 1,400,000 | 1,600,000 |
| WORLD'S TOTAL* .. | 1,800,000 | 2,000,000 | 2,200,000 | 2,500,000 | 2,700,000 | 2,900,000 |

*Excluding asbestos known to have been produced in Czechoslovakia, Roumania and North Korea.

(a) Sales and shipments.

(d) Sold or used by producers.

(b) Exports.

(e) Years ended March 20 following that stated.

(c) United States Bureau of Mines' estimate.

EXPORTS OF ASBESTOS

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unmanufactured .. | 5,199 | 6,178 | 7,749 | 7,014 | 7,060 | 8,126 |
| Packing, etc. .. | 13,436 | 11,522 | 12,654 | 11,741 | 10,608 | 10,468 |
| Cement products .. | 69,858 | 63,384 | 59,634 | 52,979 | 39,448 | 44,041 |
| Yarn and cloth .. | 2,708 | 2,564 | 3,131 | 3,369 | 3,062 | 3,544 |
| Other manufactures .. | 12,574 | 12,767 | 13,624 | 17,348 | 16,013 | 12,018 |
| Kenya— | | | | | | |
| Unmanufactured .. | 65 | 9 | 29 | 31 | 18 | — |
| Rhodesia & Nyasaland— | | | | | | |
| Unmanufactured .. | 84,804 | 92,199 | 114,221 | 119,211 | 129,834 | 109,926 |
| Cement products .. | (£4,875) | (£2,023) | (£1,599) | (£1,153) | (£1,568) | (£180) |
| Canada— | | | | | | |
| Crude .. | 431 | 371 | 215 | 157 | 162 | 174 |
| Fibre .. | 284,179 | 358,556 | 408,976 | 470,825 | 475,018 | 495,910 |
| Shorts and waste .. | 489,167 | 546,360 | 544,821 | 526,232 | 564,704 | 581,081 |
| Manufactured .. | (£284,603) | (£263,977) | (£366,963) | (£345,378) | (£391,752) | (£492,693) |
| Cyprus— | | | | | | |
| Unmanufactured .. | 13,118 | 14,403 | 15,328 | 15,805 | 13,879 | 15,074 |
| India— | | | | | | |
| Unmanufactured .. | 139 | 32 | 26 | 34 | 12 | 6 |
| Manufactured .. | 50 | 159 | (a) 599 | (a) 614 | (a) 766 | (a) 119 |
| Malaya— | | | | | | |
| Cement products .. | 8,241 | 5,831 | 5,933 | 7,116 | 2,918 | 4,490 |
| Other manufactures .. | 108 | 69 | 24 | 78 | 86 | 30 |
| Hong Kong— | | | | | | |
| Unmanufactured .. | 550 | — | — | — | — | — |
| Manufactured .. | (£13,711) | 60 | 95 | 57 | 30 | 16 |
| Cement products .. | n.a. | 341 | 310 | 331 | 254 | 341 |
| Australia— | | | | | | |
| Unmanufactured .. | 9,315 | 11,584 | 7,410 | 7,196 | 8,695 | 2,347 |
| Packing (b) .. | (£7,941) | (£111,546) | (£30,690) | (£13,538) | (£43,083) | (£35,015) |
| New Zealand— | | | | | | |
| Cement products (£N.Z.) | (£3,635) | (£4,314) | (£5,690) | (£6,999) | (£2,959) | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unmanufactured .. | 3 | 28 | 62 | 337 | 229 | 157 |
| Manufactured .. | 490 | (c) 1,187 | (c) 1,567 | (c) 1,717 | (c) 1,455 | (c) 1,641 |
| Cement products .. | 5,332 | (d) 4,735 | (d) 5,541 | (d) 6,082 | (d) 7,693 | (d) 11,203 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unmanufactured .. | 778 | 617 | 292 | 604 | 119 | 391 |
| Manufactured .. | 609 | 612 | (c) 995 | (c) 2,821 | (c) 2,849 | (c) 454 |
| Cement products .. | 113,603 | 161,556 | (d) 220,922 | (d) 218,089 | (d) 214,822 | (d) 212,442 |
| Denmark— | | | | | | |
| Unmanufactured .. | 103 | 62 | 26 | 30 | 93 | 34 |
| Manufactured .. | 272 | (c) 387 | (c) 510 | (c) 520 | (c) 759 | (c) 785 |
| Cement products .. | 6,555 | (d) 4,387 | (d) 5,019 | (d) 6,329 | (d) 7,229 | (d) 9,890 |
| Finland— | | | | | | |
| Unmanufactured .. | 5,985 | 5,273 | 5,463 | 5,580 | 5,635 | 5,991 |
| Manufactured .. | 342 | 443 | 577 | 647 | 719 | 620 |
| France— | | | | | | |
| Unmanufactured .. | 3,005 | 6,169 | 10,619 | 11,210 | 9,905 | 6,076 |
| Manufactured (c) .. | 1,552 | 2,481 | 4,638 | 4,971 | 3,970 | 4,543 |
| Cement products (d) .. | 43,336 | 42,735 | 64,625 | 47,221 | 52,822 | 38,570 |

(a) Years ended March 31 following that stated.

(b) Years ended June 30 of that stated.

(c) Including brake and clutch linings of material other than asbestos.

(d) Including manufactures of other fibro-cements.

EXPORTS OF ASBESTOS (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Unmanufactured .. | 108 | 218 | 222 | 913 | 364 | 294 |
| Manufactured (a) .. | 2,459 | 3,132 | 3,576 | 3,943 | 3,683 | 3,681 |
| Cement products (b) .. | 12,625 | 15,372 | 22,571 | 22,365 | 22,261 | 49,445 |
| Italy— | | | | | | |
| Unmanufactured .. | 6,144 | 9,436 | 7,062 | 9,061 | 7,765 | 6,310 |
| Manufactured (a) .. | 439 | 659 | 915 | 1,061 | 907 | 4,008 |
| Cement products (b) .. | 25,810 | 33,261 | 50,253 | 52,706 | 60,586 | 31,970 |
| Netherlands— | | | | | | |
| Unmanufactured .. | 16 | 34 | 35 | 259 | 57 | 120 |
| Manufactured .. | 1,193 | 1,535 | (a) 1,824 | (a) 8,386 | (a) 2,300 | (a) 2,151 |
| Cement products .. | 4,651 | 4,695 | (b) 20,567 | (b) 10,089 | (b) 6,644 | (b) 8,069 |
| Portugal— | | | | | | |
| Unmanufactured .. | 40 | 56 | 34 | 31 | 92 | 44 |
| Spain— | | | | | | |
| Manufactured .. | 120 | 116 | (a)(b) 158 | (a)(b) 456 | (a)(b) 393 | (a)(b) 310 |
| Sweden— | | | | | | |
| Unmanufactured .. | 4 | 2 | 28 | 51 | 12 | 53 |
| Manufactured .. | 57 | (a) 61 | (a) 122 | (a) 103 | (a) 113 | (a) 93 |
| Cement products .. | n.a. | 6,723 | 13,507 | 18,081 | 15,346 | 17,300 |
| Switzerland— | | | | | | |
| Manufactured (a) .. | n.a. | n.a. | 430 | 452 | 520 | 160 |
| Cement products (b) .. | n.a. | n.a. | 6,652 | 2,351 | 2,319 | 2,939 |
| U.S.S.R.— | | | | | | |
| Unmanufactured .. | 115,600 | 126,600 | 143,800 | 156,100 | 166,400 | 177,256 |
| Yugoslavia— | | | | | | |
| Unmanufactured .. | 5,016 | 6,030 | 5,134 | 4,226 | 5,296 | 5,376 |
| Manufactured .. | n.a. | n.a. | n.a. | 39 | 131 | 255 |
| Cement products .. | 184 | 342 | 5 | — | 107 | 503 |
| Algeria— | | | | | | |
| Cement products (b) .. | 2,191 | 2,705 | 1,410 | n.a. | n.a. | n.a. |
| Egypt— | | | | | | |
| Unmanufactured .. | 22 | 4 | — | 30 | n.a. | n.a. |
| Morocco— | | | | | | |
| Unmanufactured .. | 32 | — | — | — | — | — |
| Cement products .. | 5,168 | 5,888 | 7,348 | 10,389 | 11,261 | 9,095 |
| Mozambique— | | | | | | |
| Unmanufactured .. | 322 | 66 | 79 | 157 | n.a. | n.a. |
| South Africa— | | | | | | |
| Unmanufactured (c) .. | 142,519 | 150,456 | 190,627 | 167,192 | 182,715 | 164,162 |
| Cements products .. | (£76,813) | (£128,006) | (£296,577) | (£207,215) | (£286,208) | n.a. |
| Other manufactures .. | (£9,660) | (£10,198) | (£37,531) | (£26,050) | (£12,340) | n.a. |
| United States— | | | | | | |
| Unmanufactured .. | 2,622 | 3,855 | 4,876 | 3,189 | 2,521 | 8,909 |
| Spun, woven and packing .. | 1,041 | 1,039 | 1,181 | 1,149 | 1,298 | 1,336 |
| Brake linings .. | (£1,641,444) | (£1,663,341) | (£1,597,200) | (£1,497,467) | (£1,653,325) | (£1,745,765) |
| Clutch facings .. | (£388,483) | (£405,393) | (£409,169) | (£410,464) | (£555,751) | (£628,845) |
| Pipe covering and cement .. | 2,727 | 2,156 | 3,115 | 2,345 | 2,580 | 3,661 |
| Other manufactures .. | 12,465 | 9,849 | 8,894 | 10,090 | 8,093 | 12,026 |
| Bolivia— | | | | | | |
| Unmanufactured .. | — | 149 | 167 | 103 | n.a. | n.a. |
| Colombia— | | | | | | |
| Cement products .. | 177 | 168 | 256 | 363 | 553 | 2,291 |
| Peru— | | | | | | |
| Manufactured .. | 22 | 144 | 48 | 11 | 116 | — |
| Venezuela— | | | | | | |
| Unmanufactured .. | 6,826 | 4,272 | 3,603 | 375 | — | — |

(a) Including brake and clutch linings of material other than asbestos.

(b) Including manufactures of other fibro-cements.

(c) Including, if any, produce of Bechuanaland Protectorate and Swaziland.

EXPORTS OF ASBESTOS (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|-------|-------|--------|--------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Japan— | | | | | | |
| Unmanufactured .. | 16 | 53 | 36 | 15 | 24 | 106 |
| Manufactured | 579 | 898 | 1,076 | 1,663 | 2,160 | 3,633 |
| Cement products .. | 529 | 896 | 1,155 | 462 | 371 | 21,812 |
| Lebanon— | | | | | | |
| Cement products .. | 6,324 | 9,997 | 10,364 | 10,432 | <i>n.a.</i> | <i>n.a.</i> |
| Thailand— | | | | | | |
| Cement products .. | 79 | 815 | 1,423 | 1,197 | 1,013 | 3,461 |
| Turkey— | | | | | | |
| Unmanufactured .. | 5 | — | 5 | — | — | — |

IMPORTS OF ASBESTOS

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unmanufactured— | | | | | | |
| Crude and fibre .. | 109,765 | 121,531 | 158,315 | 154,942 | 133,656 | 144,074 |
| Waste | 21,566 | 11,887 | 9,870 | 11,582 | 11,261 | 13,362 |
| Cement products .. | 8,595 | 9,545 | 14,722 | 16,651 | 17,010 | 18,058 |
| Other manufactures .. | 1,028 | 932 | 2,541 | 4,780 | 3,970 | 5,914 |
| Channel Islands— | | | | | | |
| Manufactured | 1,109 | 953 | 1,200 | 2,074 | 1,593 | 1,738 |
| Malta— | | | | | | |
| Manufactured | (£5,806) | (£6,966) | (£20,612) | (£30,034) | (£29,433) | (£8,262) |
| Gambia— | | | | | | |
| Cement sheets and pipes | 727 | 321 | 11 | 28 | 294 | 550 |
| Ghana— | | | | | | |
| Cement sheets, pipes etc. | 11,958 | 18,814 | 20,804 | 21,584 | 15,285 | 22,603 |
| Kenya— | | | | | | |
| Manufactured | 3,130 | 4,461 | 5,260 | 2,187 | 1,376 | 2,119 |
| Mauritius— | | | | | | |
| Manufactured | 721 | 1,270 | 625 | 642 | 1,856 | 346 |
| Nigeria— | | | | | | |
| Cement sheets and pipes | 18,295 | 25,076 | 28,866 | 30,290 | 18,836 | 8,218 |
| Rhodesia & Nyasaland— | | | | | | |
| Cement products .. | (£65,722) | (£83,487) | (£66,013) | (£51,793) | (£89,005) | (£33,430) |
| Sierra Leone— | | | | | | |
| Cement sheets and pipes | 309 | 426 | 1,154 | 1,199 | 621 | 870 |
| Tanganyika— | | | | | | |
| Manufactured | 1,226 | 698 | 1,560 | 1,304 | 967 | 537 |
| Uganda— | | | | | | |
| Unmanufactured .. | 639 | 397 | 817 | 733 | 652 | 376 |
| Manufactured | 1,366 | 1,346 | 506 | 441 | 407 | 715 |
| Zanzibar— | | | | | | |
| Manufactured | 205 | 257 | 147 | 318 | 145 | 81 |
| Canada— | | | | | | |
| Packing | 135 | 172 | 201 | 291 | 194 | 238 |
| Other manufactures .. | (£1,436,101) | (£1,397,962) | (£1,499,746) | (£1,494,336) | (£1,389,038) | (£1,582,563) |
| Barbados— | | | | | | |
| Manufactured | 17 | 11 | 21 | 12 | 27 | 20 |
| Bermuda— | | | | | | |
| Sheets, etc. | (£6,221) | (£14,757) | (£6,345) | (£17,561) | (£14,542) | (£12,261) |
| Grenada— | | | | | | |
| Manufactured | (£440) | (£85) | (£86) | 7 | 2 | 7 |
| Jamaica— | | | | | | |
| Unmanufactured .. | 24 | 38 | 34 | 28 | 21 | 114 |
| Manufactured | 473 | 424 | 854 | 93 | 174 | 348 |
| Cement products | 383 | 548 | 334 | 2,405 | 2,467 | 1,131 |
| St. Vincent— | | | | | | |
| Cement products .. | 1 | 12 | 33 | 42 | 18 | n.a. |
| Trinidad and Tobago— | | | | | | |
| Cement products .. | 485 | 607 | 469 | 394 | 230 | n.a. |
| Other manufactures .. | 417 | 1,084 | 305 | 619 | 602 | n.a. |
| British Guiana— | | | | | | |
| Cement products .. | 636 | 2,409 | 2,671 | 860 | 3,133 | n.a. |
| Other manufactures .. | 727 | 73 | 199 | 907 | 100 | n.a. |
| Ceylon— | | | | | | |
| Unmanufactured .. | 974 | 789 | — | 318 | — | — |
| Cement sheets, etc. .. | 7,375 | 6,605 | 6,036 | 72 | 2,223 | 3,757 |
| Other manufactures .. | 49 | 33 | 377 | 410 | 30 | 28 |
| Cyprus— | | | | | | |
| Sheets and pipes .. | 1,537 | 2,044 | 1,805 | 3,207 | 4,009 | 4,585 |
| Other manufactures .. | (£14,665) | (£28,769) | (£29,168) | (£37,075) | (£29,204) | (£34,516) |
| Hong Kong— | | | | | | |
| Unmanufactured .. | 562 | 5 | 22 | 28 | 16 | 9 |
| Manufactured | (£79,396) | 234 | 373 | 465 | 305 | 311 |
| Cement products .. | n.a. | 24,656 | 29,457 | 34,697 | 27,419 | 34,806 |

IMPORTS OF ASBESTOS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|------------|------------|------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| India— | | | | | | |
| Unmanufactured .. | 18,065 | 22,387 | 21,619 | 19,178 | 22,023 | 36,374 |
| Manufactured .. | 842 | 2,874 | (b) 1,288 | (b) 2,276 | (b) 921 | (b) 1,661 |
| Cement products .. | 2,622 | 2,703 | (b) 1,178 | (b) 1,826 | (b) 1,589 | (b) 2,038 |
| Malaya— | | | | | | |
| Unmanufactured .. | 1,903 | 2,240 | 2,823 | 5,321 | 5,711 | 7,396 |
| Cement products .. | 19,336 | 20,339 | 20,630 | 25,362 | 22,384 | 23,958 |
| Other manufactures .. | 460 | 366 | 483 | 664 | 736 | 638 |
| Pakistan— | | | | | | |
| Cement sheets .. | 493 | 499 | 102 | 397 | 1,656 | 519 |
| Sabah— | | | | | | |
| Manufactured .. | 56 | 5 | 14 | 10 | 33 | <i>n.a.</i> |
| Sarawak— | | | | | | |
| Cement sheets .. | 652 | 505 | 492 | 1,072 | 1,198 | 1,450 |
| Other manufactures .. | 11 | 46 | 17 | 134 | 43 | 4 |
| Australia— | | | | | | |
| Unmanufactured .. | 34,721 | 34,223 | 36,609 | 32,947 | 34,915 | 32,704 |
| Packing, etc. (a) .. | (£581,006) | (£449,316) | (£447,615) | (£555,484) | (£412,965) | (£490,708) |
| New Zealand— | | | | | | |
| Unmanufactured .. | 3,915 | 4,200 | 4,512 | 5,188 | 5,830 | 5,671 |
| Manufactured (£N.Z.) .. | (£270,165) | (£192,237) | (£184,637) | (£256,376) | (£191,024) | } (£487,654) |
| Cement products (£N.Z.) .. | (£209,254) | (£62,139) | (£42,424) | (£104,153) | (£118,568) | |
| Irish Republic— | | | | | | |
| Unmanufactured .. | 1,593 | r 2,024 | r 2,843 | 1,983 | 3,344 | 2,754 |
| Manufactured .. | 2,653 | r 2,694 | r 2,475 | 4,007 | 2,232 | 3,280 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unmanufactured .. | 10,994 | 10,185 | 12,565 | 20,611 | 15,766 | 20,986 |
| Manufactured .. | 205 | (c) 246 | (c) 331 | (c) 266 | (c) 249 | (c) 345 |
| Cement products .. | 264 | (d) 105 | (d) 907 | (d) 3,140 | (d) 3,919 | (d) 5,766 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unmanufactured .. | 32,162 | 45,593 | 53,135 | 55,305 | 54,627 | 48,972 |
| Manufactured .. | 3,720 | 3,450 | (c) 4,301 | (c) 2,924 | (c) 2,950 | (c) 2,414 |
| Cement products .. | 796 | 996 | (d) 1,447 | (d) 2,278 | (d) 7,415 | (d) 9,561 |
| Czechoslovakia— | | | | | | |
| Unmanufactured .. | 17,360 | 23,613 | 26,560 | 31,935 | 27,860 | <i>n.a.</i> |
| Denmark— | | | | | | |
| Unmanufactured .. | 10,409 | 16,564 | 17,164 | 19,265 | 20,781 | 17,142 |
| Manufactured .. | 958 | (c) 1,434 | (c) 1,529 | (c) 1,882 | (c) 1,908 | (c) 1,860 |
| Cement products .. | 146 | (d) 7,595 | (d) 11,639 | (d) 20,927 | (d) 6,856 | (d) 1,055 |
| Finland— | | | | | | |
| Unmanufactured .. | 3,158 | 2,556 | 4,376 | 6,175 | 6,758 | 5,991 |
| Manufactured .. | 375 | 376 | 446 | 711 | 740 | 620 |
| France— | | | | | | |
| Unmanufactured .. | 66,366 | 60,579 | 67,505 | 76,785 | 95,881 | 73,353 |
| Manufactured (c) .. | 1,406 | 2,362 | 1,589 | 1,841 | 1,904 | 2,535 |
| Cement products (d) .. | 752 | 753 | 866 | 8,391 | 7,302 | 18,102 |
| Germany (Federal)— | | | | | | |
| Unmanufactured .. | 79,884 | 100,630 | 130,532 | 121,332 | 126,123 | 141,169 |
| Manufactured (c) .. | 2,187 | 2,286 | 4,484 | 4,447 | 5,426 | 6,834 |
| Cement products (d) .. | 39,887 | 47,259 | 132,622 | 73,246 | 88,023 | 96,652 |
| Greece— | | | | | | |
| Unmanufactured .. | — | — | 47 | 2,031 | 3,333 | 2,771 |
| Manufactured .. | 178 | 179 | (c) 385 | (c) 475 | (c) 546 | (c) 4,807 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

(c) Including brake and clutch linings of material other than asbestos.

(d) Including manufactures of other fibro-cements.

IMPORTS OF ASBESTOS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------|-----------|------------|------------|------------|--------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Hungary— | | | | | | |
| Unmanufactured .. | 7,292 | 6,825 | 9,649 | 10,509 | 10,852 | 14,320 |
| Iceland— | | | | | | |
| Unmanufactured .. | 55 | 38 | 36 | 28 | 24 | n.a. |
| Manufactured .. | 31 | 58 | 35 | 22 | 29 | n.a. |
| Italy— | | | | | | |
| Unmanufactured .. | 19,357 | 14,307 | 29,138 | 43,139 | 40,199 | 38,145 |
| Manufactured (a) .. | 1,996 | 2,474 | 4,041 | 3,294 | 3,700 | 1,745 |
| Cement products (b) .. | 290 | 300 | 588 | 3,149 | 11,407 | 14,452 |
| Netherlands— | | | | | | |
| Unmanufactured .. | 12,478 | 17,433 | 21,381 | 19,413 | 16,700 | 16,381 |
| Manufactured .. | 2,378 | 2,453 | (a) 3,358 | (a) 3,718 | (a) 2,979 | (a) 2,986 |
| Cement products .. | 45,704 | 62,715 | (b) 78,103 | (b) 88,500 | (b) 71,360 | (b) 30,712 |
| Norway— | | | | | | |
| Unmanufactured .. | 4,327 | 5,422 | 6,808 | 5,981 | 5,148 | 3,474 |
| Manufactured .. | 1,024 | (a) 2,630 | (a) 3,547 | (a) 2,998 | (a) 1,722 | (a) 1,350 |
| Cement products .. | 8,506 | (b) 5,929 | (b) 7,932 | (b) 9,041 | (b) 9,481 | (b) 13,534 |
| Poland— | | | | | | |
| Unmanufactured .. | 9,178 | 11,434 | 15,003 | 19,609 | n.a. | 21,028 |
| Portugal— | | | | | | |
| Unmanufactured .. | 1,603 | 1,743 | 2,309 | 2,561 | 2,676 | 1,817 |
| Manufactured .. | 79 | 62 | (a) 272 | (a) 425 | (a) 391 | (a) 367 |
| Spain— | | | | | | |
| Unmanufactured .. | 10,284 | 16,367 | 14,224 | 22,935 | 27,412 | 39,309 |
| Manufactured .. | 83 | 102 | (a)(b) 189 | (a)(b) 540 | (a)(b) 752 | (a)(b) 1,593 |
| Sweden— | | | | | | |
| Unmanufactured .. | 13,122 | 16,179 | 16,836 | 16,749 | 18,555 | 15,377 |
| Manufactured .. | 2,250 | (a) 3,500 | (a) 3,839 | (a) 3,671 | (a) 3,949 | (a) 3,443 |
| Cement products .. | n.a. | 14,333 | 16,786 | 16,100 | 17,902 | 16,676 |
| Switzerland— | | | | | | |
| Unmanufactured .. | n.a. | n.a. | 8,557 | 9,134 | 11,931 | 11,190 |
| Manufactured (a) .. | | | 1,703 | 2,134 | 2,488 | 2,277 |
| Cement products (b) .. | | | 289 | 1,308 | 7,691 | 3,537 |
| Yugoslavia— | | | | | | |
| Unmanufactured .. | 4,619 | 4,407 | 8,589 | 7,601 | 9,181 | 7,975 |
| Manufactured .. | 384 | 647 | 659 | 731 | 691 | 563 |
| Cement products .. | 117 | — | 1 | 39 | 49 | 184 |
| Algeria— | | | | | | |
| Unmanufactured .. | 2,554 | 3,757 | 6,091 | n.a. | n.a. | n.a. |
| Manufactured (a) .. | 306 | 362 | 745 | n.a. | n.a. | n.a. |
| Cement products (b) .. | 13,864 | 14,261 | 9,365 | n.a. | n.a. | n.a. |
| Angola— | | | | | | |
| Unmanufactured .. | 724 | 479 | 806 | 702 | 491 | 575 |
| Manufactured .. | 20 | 15 | 15 | (a) 57 | (a) 85 | (a) 97 |
| Congo Republic— | | | | | | |
| Unmanufactured .. | 1,938 | 1,028 | n.a. | n.a. | n.a. | n.a. |
| Manufactured (a) .. | 126 | 112 | n.a. | n.a. | n.a. | n.a. |
| Cement products (b) .. | 2,061 | 914 | n.a. | n.a. | n.a. | n.a. |
| Egypt— | | | | | | |
| Unmanufactured .. | 4,523 | 3,527 | 6,479 | 4,805 | 9,402 | n.a. |
| Manufactured .. | 762 | 999 | 963 | 791 | 1,807 | n.a. |
| Libya— | | | | | | |
| Manufactured .. | 900 | 1,652 | 613 | 1,337 | 838 | n.a. |
| Malagasy Republic— | | | | | | |
| Manufactured (a) .. | 81 | 125 | 110 | 88 | 99 | 74 |
| Cement products .. | 2,707 | 943 | 558 | 1,484 | 1,949 | 604 |
| Morocco— | | | | | | |
| Unmanufactured .. | 1,670 | 1,016 | 2,634 | 2,077 | 2,178 | 2,316 |
| Manufactured (a) .. | 131 | 141 | 146 | 178 | 138 | 166 |
| Cement products .. | 255 | 203 | 234 | 109 | 83 | 163 |

(a) Including brake and clutch linings of material other than asbestos.

(b) Including manufactures of other fibro-cements.

IMPORTS OF ASBESTOS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|------------------------------------|------------|------------|------------|------------|---------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Mozambique— | | | | | | |
| Unmanufactured .. | 1,264 | 446 | 709 | 865 | n.a. | n.a. |
| Manufactured .. | 22 | 17 | 33 | 44 | n.a. | n.a. |
| South Africa— | | | | | | |
| Packing .. | (£291,185) | (£233,431) | (£243,499) | (£261,999) | n.a. | n.a. |
| Cement products .. | (£3,179) | (£7,770) | (£10,121) | (£8,997) | n.a. | n.a. |
| Other manufactures .. | (£80,468) | (£280,573) | (£135,058) | (£58,605) | n.a. | n.a. |
| Sudan— | | | | | | |
| Manufactured .. | 3,044 | 2,357 | 6,199 | 6,296 | 5,801 | n.a. |
| Tunisia— | | | | | | |
| Manufactured (a) .. | 44 | 45 | 62 | 70 | 72 | n.a. |
| Cement products (b) .. | 1,999 | 3,457 | 6,870 | 5,830 | 8,395 | n.a. |
| Costa Rica— | | | | | | |
| Manufactured .. | 41 | 83 | 58 | 44 | 60 | 68 |
| Guatemala— | | | | | | |
| Unmanufactured .. | 498 | 291 | 222 | 422 | 469 | n.a. |
| Manufactured .. | 79 | 53 | 77 | 74 | 77 | n.a. |
| Honduras— | | | | | | |
| Manufactured .. | 30 | 23 | 46 | 29 | 35 | 35 |
| Mexico— | | | | | | |
| Unmanufactured .. | 10,187 | 8,301 | 13,208 | 15,074 | 11,508 | 19,668 |
| Manufactured .. | 791 | 1,236 | 860 | 803 | 632 | 823 |
| Netherlands Antilles— | | | | | | |
| Manufactured .. | 487 | 562 | 370 | 205 | 313 | 313 |
| Cement sheets .. | 2,532 | 2,839 | 1,947 | 2,557 | 2,976 | 3,028 |
| Nicaragua— | | | | | | |
| Manufactured .. | 58 | 17 | 31 | 24 | 55 | 32 |
| Panama Republic— | | | | | | |
| Cement products .. | 758 | 678 | 275 | 347 | n.a. | n.a. |
| Salvador— | | | | | | |
| Unmanufactured .. | 343 | 460 | 223 | 587 | 406 | 827 |
| Manufactured .. | 117 | 101 | 79 | 115 | 4 | 104 |
| United States— | | | | | | |
| Unmanufactured— | | | | | | |
| Crude .. | 50,819 | 49,513 | 42,958 | 38,757 | 40,743 | 37,832 |
| Mill fibre .. | 120,865 | 135,427 | 133,231 | 128,161 | 13,266 | 12,784 |
| Other .. | 403,612 | 451,709 | 421,575 | 383,574 | 549,587 | 545,687 |
| Manufactured .. | 12,104 | 29,450 | 40,439 | 32,102 | 38,584 | 34,605 |
| Argentina— | | | | | | |
| Unmanufactured and manufactured .. | 9,193 | 8,125 | 11,565 | 12,371 | 11,598 | 9,544 |
| Brazil— | | | | | | |
| Unmanufactured .. | 11,159 | 10,823 | 13,453 | 15,264 | 11,040 | 19,887 |
| Manufactured .. | 692 | 675 | 817 | 605 | 546 | 508 |
| Chile— | | | | | | |
| Manufactured .. | 2,802 | 4,740 | 4,048 | 8,000 | 4,898 | n.a. |
| Colombia— | | | | | | |
| Unmanufactured .. | 5,019 | 6,376 | 6,728 | 10,100 | 10,909 | 12,729 |
| Manufactured .. | 567 | 591 | 543 | 846 | 822 | 1,043 |
| Cement products .. | 29 | — | 361 | 1,106 | 14,882 | — |
| Ecuador— | | | | | | |
| Unmanufactured .. | — | 147 | n.a. | 346 | 384 | 284 |
| Manufactured .. | 346 | 660 | n.a. | 224 | 217 | 1,038 |
| Peru— | | | | | | |
| Unmanufactured .. | 1,971 | 1,711 | 1,784 | 2,374 | 2,377 | 2,570 |
| Manufactured .. | 371 | 245 | 297 | 523 | 1,049 | 445 |
| Surinam— | | | | | | |
| Manufactured .. | 934 | 979 | 1,955 | n.a. | 744 | n.a. |
| Uruguay .. | 1,152 | 1,888 | 1,823 | n.a. | n.a. | n.a. |

(a) Including brake and clutch linings of material other than asbestos.

(b) Including manufactures of other fibro-cements.

IMPORTS OF ASBESTOS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-----------|--------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Venezuela— | | | | | | |
| Unmanufactured .. | 1,689 | 2,492 | 2,241 | 3,872 | 3,398 | 2,584 |
| Manufactured .. | | 710 | 1,945 | 1,409 | 568 | 684 |
| Cement products .. | 2,158 | 3,428 | 2,478 | 546 | 1,694 | 20,644 |
| Burma— | | | | | | |
| Unmanufactured .. | 481 | 194 | 461 | 665 | 493 | 531 |
| Cement products .. | 7,785 | 446 | 516 | 12 | 4 | 560 |
| Formosa— | | | | | | |
| Unmanufactured .. | 400 | 417 | 1,030 | 820 | 1,400 | 876 |
| Manufactured .. | 204 | 262 | 254 | 158 | 211 | 249 |
| Indonesia— | | | | | | |
| Unmanufactured .. | 224 | 703 | 579 | 2,171 | <i>n.a.</i> | <i>n.a.</i> |
| Manufactured .. | 403 | 186 | 447 | 459 | <i>n.a.</i> | <i>n.a.</i> |
| Cement products .. | 1,822 | 2,626 | 1,541 | 2,296 | <i>n.a.</i> | <i>n.a.</i> |
| Iran (b)— | | | | | | |
| Unmanufactured .. | <i>n.a.</i> | 456 | 1,226 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Manufactured .. | 49 | 87 | 243 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cement products .. | 1,602 | 1,426 | 1,759 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Iraq— | | | | | | |
| Unmanufactured .. | 91 | 269 | 443 | 1,014 | 1,456 | <i>n.a.</i> |
| Manufactured .. | 247 | 124 | 201 | 229 | 277 | <i>n.a.</i> |
| Cement products .. | 1,974 | 853 | 1,673 | 1,782 | 93 | <i>n.a.</i> |
| Israel— | | | | | | |
| Unmanufactured .. | <i>n.a.</i> | (a) 3,152 | 6,510 | 8,533 | 8,031 | 9,156 |
| Japan— | | | | | | |
| Unmanufactured .. | 38,126 | 52,836 | 75,838 | 113,002 | 95,147 | 113,668 |
| Manufactured .. | 397 | 223 | 149 | 336 | 622 | 1,196 |
| Cement products .. | 195 | 325 | 221 | 158 | 5 | 336 |
| Jordan— | | | | | | |
| Manufactured .. | <i>n.a.</i> | 528 | 397 | 305 | 354 | <i>n.a.</i> |
| Lebanon— | | | | | | |
| Unmanufactured .. | 1,712 | 1,357 | 2,222 | 2,097 | 4,027 | <i>n.a.</i> |
| Manufactured .. | 17 | 40 | 63 | 53 | 65 | <i>n.a.</i> |
| Cement products .. | 906 | 325 | 844 | 488 | 290 | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Unmanufactured .. | 332 | 945 | 1,216 | 830 | 931 | 1,332 |
| Manufactured .. | 522 | 933 | 621 | <i>n.a.</i> | 57 | 124 |
| Cement products .. | 48 | — | 350 | 817 | 325 | 298 |
| Syria— | | | | | | |
| Cement sheets .. | 2,582 | 1,774 | 2,151 | 512 | 4,824 | 4,580 |
| Other manufactures .. | 38 | 51 | 51 | 79 | 73 | 22 |
| Thailand— | | | | | | |
| Unmanufactured .. | 3,426 | 2,215 | 6,331 | 3,531 | 5,311 | 7,895 |
| Manufactured .. | 93 | 568 | 211 | 281 | 360 | 997 |
| Cement products .. | 5,418 | 5,005 | 4,928 | 5,892 | 3,922 | 4,031 |
| Turkey— | | | | | | |
| Unmanufactured .. | 960 | 890 | 463 | 734 | 1,492 | 1,234 |
| Manufactured .. | 159 | 701 | 1,313 | 906 | 811 | 3,518 |
| Cement products .. | 981 | 104 | 250 | 192 | 146 | 119 |

(a) April to December only.

(b) Years ended March 20 following that stated.

BARIUM MINERALS

PRODUCTION OF BARIUM MINERALS*

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|-------------------|-------------------|-------------------|-------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Barytes and witherite, unground | 45,610 | 38,283 | 40,591 | 44,825 | 33,784 | 23,111 |
| do. ground | 13,442 | 22,796 | 19,615 | 37,029 | 41,889 | 33,369 |
| Canada | 174,749 | 213,363 | 137,761 | 170,896 | 202,321 | 158,106 |
| Southern Rhodesia | 30 | 213 | — | — | — | 1,744 |
| Swaziland | 428 | 411 | 179 | 405 | 61 | 83 |
| India | 15,657 | 13,338 | 13,371 | 15,469 | 32,146 | 36,723 |
| Pakistan | 305 | 508 | 633 | r 477 | 2,825 | (c) 2,900 |
| Australia | 6,802 | 6,214 | 11,417 | 19,217 | 12,534 | 8,220 |
| Irish Republic | 7,800 | 6,014 | 10,450 | 4,160 | — | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria | 4,194 | 3,632 | 4,312 | 2,425 | 1,064 | 2,018 |
| France | 119,584 | 85,053 | 104,340 | 84,828 | 82,652 | 59,000 |
| Germany (Federal) | r 427,534 | r 434,652 | r 490,299 | r 463,350 | 457,349 | 449,492 |
| Greece | 151,455 | 127,691 | 100,181 | 73,815 | 63,000 | 71,665 |
| Italy | 109,800 | 119,406 | 141,004 | 139,285 | 119,990 | 104,915 |
| Poland | (c) 11,000 | (c) 11,000 | (c) 11,000 | 36,751 | 44,501 | (c) 45,000 |
| Portugal | 1,207 | 3,357 | 3,848 | 2,040 | 1,330 | 1,632 |
| Spain | 28,043 | 25,166 | 25,532 | 31,204 | 38,098 | (c) 35,000 |
| U.S.S.R. (c) | 120,000 | 120,000 | 125,000 | r 150,000 | 180,000 | 200,000 |
| Yugoslavia (a) | 76,082 | 113,010 | 101,794 | 81,734 | 86,570 | 74,944 |
| Algeria | 60,635 | 21,463 | 54,968 | 30,253 | (d) 30,000 | n.a. |
| Egypt | 2,037 | 1,801 | r 2,589 | (c) 2,600 | 1,211 | (c) 1,200 |
| Morocco | 42,018 | 36,227 | 82,986 | 80,885 | 88,375 | 93,061 |
| South Africa | 2,429 | 2,103 | 1,677 | 1,752 | 1,672 | 2,414 |
| Cuba (a) | 10,653 | — | — | — | — | — |
| Mexico | (a) 194,063 | (a) 177,303 | 266,481 | 244,780 | 313,113 | 252,540 |
| United States | 434,185 | 774,287 | 688,677 | 653,019 | 791,932 | 717,059 |
| Argentina | 16,711 | 17,716 | 24,096 | 28,104 | 12,338 | (c) 12,300 |
| Brazil | 61,277 | 50,009 | 39,130 | 61,459 | 53,787 | 33,572 |
| Chile | (c) 790 | (c) 790 | r 1,286 | 1,385 | 970 | 1,003 |
| Colombia | 13,000 | 10,000 | 7,200 | 10,064 | 8,000 | 10,500 |
| Peru | 105,306 | 94,247 | 107,869 | 109,409 | 112,742 | 122,857 |
| Uruguay | — | 34 | — | 100 | n.a. | n.a. |
| Burma | 810 | 1,000 | 1,600 | 2,007 | 3,984 | (c) 4,000 |
| China (c) | 50,000 | 50,000 | 60,000 | 80,000 | 80,000 | 90,000 |
| Iran (b) | 1,004 | 1,700 | 13,000 | 18,700 | 14,763 | (c) 15,000 |
| Japan | 14,741 | 19,045 | 22,486 | 28,788 | 37,514 | 36,928 |
| Korea (South) | — | — | 200 | 700 | 905 | 2,714 |
| Korea (North)(c) | n.a. | 14,500 | 40,000 | 55,000 | 60,000 | 65,000 |
| Philippine Republic | 57 | 166 | 5,534 | 1,883 | 409 | 900 |
| Turkey | 5,389 | 2,700 | r 1,476 | — | 1,870 | 966 |
| TOTAL† | r2,300,000 | r2,600,000 | r2,800,000 | r2,800,000 | 3,000,000 | 2,800,000 |

*Barytes unless otherwise stated.

†Excluding barytes known to have been produced in Bulgaria, Czechoslovakia, Germany (East) and Norway.

(a) Exports.

(b) Years ended March 20 of year following that stated.

(c) United States Bureau of Mines' estimate.

(d) Estimated.

EXPORTS OF BARIUM MINERALS, ETC.*

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Barium compounds, excluding blanc fixe .. | 2,419 | 4,295 | 4,393 | 4,160 | 4,935 | <i>n.a.</i> |
| Canada— | | | | | | |
| Barytes | 154,412 | 197,965 | 120,511 | 153,300 | 206,163 | 142,761 |
| India— | | | | | | |
| Unground barytes .. | 23,120 | 13,008 | 24,412 | 7,219 | 5,419 | 9,048 |
| Australia— | | | | | | |
| Ground barytes .. | 2,494 | 1,108 | 7,650 | 5,902 | 1,663 | 2,600 |
| Irish Republic— | | | | | | |
| Unground barytes .. | 9,812 | 8,425 | 9,675 | 8,420 | 830 | 10,228 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Barytes | 2 | — | 25 | 30 | — | 20 |
| Belgium-Luxemburg | | | | | | |
| E. U.— | | | | | | |
| Barytes and witherite .. | 223 | 1 | 33 | 438 | 23 | 22 |
| Barytes, ground .. | 24 | 3 | | | | |
| Sulphate | 339 | 745 | 2,423 | 1,088 | 471 | 328 |
| Carbonate | 12 | — | 118 | 126 | — | — |
| Chloride | 1 | 4 | 6 | 36 | 20 | 26 |
| France— | | | | | | |
| Barytes | 29,371 | 18,857 | 21,788 | 21,875 | 18,063 | 10,704 |
| Witherite | 30 | — | — | — | — | 2 |
| Chloride | 4,153 | 5,613 | 5,783 | 6,345 | 6,666 | 7,639 |
| Carbonate | 1,244 | 1,673 | 2,232 | 1,907 | 4,206 | 3,230 |
| Sulphate | 626 | 150 | 410 | 739 | 645 | 651 |
| Sulphide | 11 | 7 | 63 | 21 | 11 | 3 |
| Germany (Federal)— | | | | | | |
| Barytes and witherite .. | 121,184 | 117,937 | 134,083 | 121,937 | 98,221 | 102,355 |
| Carbonate | 7,528 | 11,722 | 14,782 | 14,360 | 12,139 | 12,533 |
| Chloride | 3,635 | 4,797 | 3,627 | 4,128 | 3,050 | 3,590 |
| Sulphate | <i>n.a.</i> | 15,167 | 15,858 | 16,609 | 18,402 | 18,533 |
| Greece— | | | | | | |
| Barytes | 97,448 | 110,515 | 108,094 | 59,671 | 60,829 | 76,511 |
| Italy— | | | | | | |
| Barytes | 41,613 | 34,536 | 33,095 | 38,012 | 45,944 | 22,025 |
| Witherite | 500 | 63 | 3 | 20 | 90 | 30 |
| Carbonate | 103 | 41 | 816 | 1,965 | 1,697 | 735 |
| Chloride | 194 | 487 | 1,014 | 1,464 | 1,422 | 1,243 |
| Sulphate | 11 | 181 | 344 | 361 | 571 | 138 |
| Sulphide | 31 | 69 | 103 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Netherlands— | | | | | | |
| Barytes | 1 | 102 | 87 | 19 | 8 | 10 |
| Sulphate | 1,919 | 1,920 | 2,141 | 2,199 | 1,489 | 2,394 |
| Sulphide | 3,181 | 3,222 | 3,408 | 3,275 | 3,495 | — |
| Portugal— | | | | | | |
| Barytes | <i>n.a.</i> | <i>n.a.</i> | 1,580 | 601 | 5 | 4 |
| Spain— | | | | | | |
| Barytes | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 34,983 | 39,461 | 27,293 |
| Sweden— | | | | | | |
| Barytes and witherite .. | 38 | — | 3 | 5 | — | 6 |
| Yugoslavia— | | | | | | |
| Unground barytes .. | 64,987 | 100,358 | 89,127 | 70,489 | 70,861 | 59,735 |
| Ground barytes .. | 11,095 | 12,652 | 12,667 | 11,245 | 15,709 | 15,209 |
| Algeria— | | | | | | |
| Barytes | 11,802 | 3,167 | 3,101 | 814 | 974 | <i>n.a.</i> |
| Sulphate | 428 | 98 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

*For Lithopone, see "Zinc".

EXPORTS OF BARIUM MINERALS, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Morocco— | | | | | | |
| Barytes | 20,450 | 24,355 | 55,401 | 73,522 | 66,010 | 80,813 |
| Cuba— | | | | | | |
| Barytes | 10,653 | — | — | — | — | — |
| Mexico— | | | | | | |
| Barytes | 194,063 | 177,303 | 156,083 | 124,655 | 216,270 | 144,371 |
| Argentina— | | | | | | |
| Barytes | n.a. | 1,545 | 866 | 827 | 626 | 25 |
| Brazil— | | | | | | |
| Barytes | 59,606 | 46,308 | 47,047 | 41,723 | 50,196 | 26,684 |
| Peru— | | | | | | |
| Barytes | 77,561 | 105,586 | 102,810 | 100,330 | 83,341 | 15,249 |
| Japan— | | | | | | |
| Barytes | — | — | — | 325 | n.a. | n.a. |
| Chloride | — | 1 | 5 | — | 9 | 16 |
| Sulphate | 95 | 62 | 41 | 77 | 49 | 74 |
| Korea (South)— | | | | | | |
| Barytes | 251 | 1,008 | 366 | 936 | 294 | 1,661 |

IMPORTS OF BARIUM MINERALS, ETC.*

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|--------|--------|----------|---------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unground barytes .. | 32,111 | 19,054 | 27,640 | 22,809 | 19,073 | 20,689 |
| Ground barytes .. | 17,822 | 17,769 | 18,071 | 15,232 | 8,369 | 7,330 |
| Barium compounds, excluding blanc fixe .. | 2,507 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Canada— | | | | | | |
| Barytes | 1,234 | 1,484 | 1,804 | 1,687 | 2,158 | 3,420 |
| Blanc fixe .. . | 400 | 905 | 1,076 | 1,021 | 1,032 | 894 |
| Trinidad and Tobago— | | | | | | |
| Barytes | 36,207 | 33,647 | 27,218 | 30,380 | 42,230 | n.a. |
| India— | | | | | | |
| Barytes | 66 | 18 | (a) 5 | (a) 7 | (a) 8 | (a) 3 |
| Carbonate | 206 | 488 | (a) 646 | (a) 160 | (a) 1,064 | (a) 1,254 |
| Chloride | 357 | 483 | (a) 204 | (a) 273 | (a) 787 | (a) 526 |
| Sulphate | 67 | 105 | (a) 150 | (a) 66 | (a) 58 | (a) 132 |
| Pakistan— | | | | | | |
| Barytes | 7,645 | 1,748 | 3,744 | 392 | 82 | 9 |
| Australia (b)— | | | | | | |
| Barytes ground .. | 137 | 503 | 151 | 160 | — | — |
| Carbonate | 170 | 186 | 283 | 204 | 371 | 539 |
| Chloride | 146 | 171 | 160 | 162 | 220 | 248 |
| Sulphate incl. blanc fixe .. | 490 | 421 | 520 | 530 | 261 | 330 |
| Other compounds .. | 86 | 92 | 126 | 130 | — | — |
| New Zealand— | | | | | | |
| Barytes | 2,135 | 1,199 | 3,990 | 5,233 | 1,116 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Barytes | 5,627 | 7,259 | 9,006 | 8,665 | 8,424 | 8,242 |
| Carbonate | 346 | 384 | 503 | 627 | 447 | 628 |
| Chloride | 79 | 89 | 252 | 315 | 291 | 281 |
| Sulphate | n.a. | 334 | 395 | 287 | 273 | 225 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Barytes and witherite .. | 20,698 | 14,432 | } 34,015 | 32,199 | 29,276 | 26,783 |
| Barytes, ground .. | 6,205 | 6,298 | | | | |
| Sulphate | 1,452 | 1,477 | 1,983 | 1,881 | 1,732 | 1,453 |
| Carbonate | 1,575 | 1,955 | 2,099 | 573 | 1,446 | 837 |
| Chloride | 1,782 | 1,887 | 2,019 | 2,275 | 1,471 | 1,541 |
| Sulphide | 3,168 | 3,178 | 3,379 | 3,300 | 3,442 | 3,398 |
| Denmark— | | | | | | |
| Barytes | 922 | 685 | 841 | 737 | 615 | 726 |
| Carbonate | 332 | 306 | 453 | 318 | 302 | 467 |
| Chloride | 211 | 172 | 157 | 231 | 140 | 169 |
| Sulphate | 1,094 | 539 | 435 | 306 | 298 | 381 |
| Finland— | | | | | | |
| Barytes | 345 | 351 | } 349 | 402 | 455 | 451 |
| Witherite | — | — | | | | |
| Chloride | 130 | 73 | 180 | 136 | 305 | 89 |
| Carbonate | 51 | 110 | 96 | 141 | 186 | 463 |
| Sulphate | 379 | 471 | 694 | 733 | 880 | 1,043 |
| France— | | | | | | |
| Barytes | 43,592 | 62,608 | 54,605 | 53,501 | 50,912 | 65,384 |
| Witherite | — | — | 89 | 154 | 3 | 5 |
| Chloride | — | — | 11 | 19 | — | 3 |
| Carbonate | 12 | — | — | 31 | 2 | 9 |
| Sulphate | 574 | 611 | 720 | 696 | 714 | 824 |

*For Lithopone, see "Zinc".

(a) Years ended March 31 following that stated.

(b) Years ended June 30 of that stated.

IMPORTS OF BARIUM MINERALS, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Barytes and witherite .. | 27,175 | 7,945 | 14,644 | 9,804 | 1,094 | 5,761 |
| Carbonate | — | 763 | 1,543 | 1,709 | 246 | 497 |
| Chloride | 2 | 372 | 158 | 523 | 867 | 745 |
| Sulphate | <i>n.a.</i> | 351 | 531 | 331 | 78 | 153 |
| Greece— | | | | | | |
| Sulphate | 150 | 115 | 256 | 206 | 230 | 329 |
| Iceland— | | | | | | |
| Sulphate | 2 | 9 | 12 | 17 | 21 | <i>n.a.</i> |
| Italy— | | | | | | |
| Barytes | 27 | 14 | 196 | 10,919 | 19,099 | 21,224 |
| Witherite | — | 1,937 | 2,574 | 1 | 24 | 31 |
| Carbonate | 253 | 159 | 262 | 29 | 79 | 167 |
| Chloride | 88 | 52 | 56 | — | — | 13 |
| Sulphate | 677 | 522 | 518 | 605 | 848 | 990 |
| Sulphide | — | 1 | — | <i>n.a.</i> | <i>n.a.</i> | — |
| Netherlands— | | | | | | |
| Barytes and witherite .. | 25,166 | 19,113 | 36,322 | 37,501 | 22,296 | 14,088 |
| Barytes, ground | 3,567 | 4,083 | | | | |
| Carbonate | 3,028 | 3,667 | 7,188 | 6,811 | 6,411 | 6,595 |
| Chloride | 261 | 314 | 354 | 236 | 216 | 335 |
| Sulphate | 611 | 854 | 1,326 | 961 | 1,032 | 1,079 |
| Norway— | | | | | | |
| Barytes | <i>n.a.</i> | 537 | 593 | 580 | 354 | 616 |
| Carbonate | | 357 | 362 | 461 | 336 | 337 |
| Chloride | | 200 | 174 | 169 | 186 | 166 |
| Sulphate | | 241 | 185 | 196 | 122 | 158 |
| Poland— | | | | | | |
| Barytes | 6,109 | 6,174 | 6,635 | 9,307 | <i>n.a.</i> | 8,760 |
| Portugal— | | | | | | |
| Barytes | 224 | 174 | 59 | 100 | 87 | 65 |
| Chloride | 16 | 26 | 95 | 28 | 96 | 5 |
| Sulphate | 17 | 25 | 182 | 145 | 191 | 184 |
| Sweden— | | | | | | |
| Barytes and witherite .. | 2,835 | 1,989 | 2,861 | 2,038 | 1,643 | 1,274 |
| Carbonate | 758 | 1,214 | 1,762 | 2,238 | 2,226 | 1,743 |
| Chloride | | 251 | 513 | 395 | 237 | 248 |
| Sulphate | | 1,919 | 2,520 | 1,505 | 1,822 | 2,234 |
| Switzerland— | | | | | | |
| Barytes | <i>n.a.</i> | <i>n.a.</i> | 1,931 | 2,932 | 2,470 | 1,920 |
| Sulphate | <i>n.a.</i> | <i>n.a.</i> | 1,754 | 1,954 | 1,814 | 1,788 |
| U.S.S.R.— | | | | | | |
| Barytes | 23,400 | 32,300 | 59,500 | 70,000 | 79,500 | 104,500 |
| Algeria— | | | | | | |
| Barytes | 6,238 | 4,230 | 12,261 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 10 | 1 | 18 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Carbonate | 14 | 4 | 2 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Congo Republic— | | | | | | |
| Barytes and witherite .. | 1 | 45 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Chloride | 2 | 92 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 233 | 608 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Barytes and witherite .. | 291 | 25 | 49 | — | <i>n.a.</i> | — |
| Morocco— | | | | | | |
| Barytes | 278 | 10 | 8 | 12 | 11 | 12 |
| South Africa— | | | | | | |
| Barytes | 662 | 540 | 798 | 1,200 | <i>n.a.</i> | <i>n.a.</i> |
| Barium compounds | 239 | 297 | 381 | 400 | <i>n.a.</i> | <i>n.a.</i> |
| Tunisia— | | | | | | |
| Barytes | 624 | 1,084 | 374 | 809 | 2,163 | <i>n.a.</i> |
| Sulphate | 4 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cuba— | | | | | | |
| Sulphate | 178 | 245 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

IMPORTS OF BARIUM MINERALS, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Mexico— | | | | | | |
| Barytes | 644 | 896 | 368 | 355 | 660 | 548 |
| Carbonate | 305 | 331 | 445 | 426 | 286 | 483 |
| Chloride | 88 | 323 | 310 | 298 | 451 | 420 |
| United States— | | | | | | |
| Unground barytes .. | 470,144 | 571,070 | 572,930 | 543,000 | 657,793 | 516,159 |
| Ground barytes .. | 902 | 1,467 | 41 | 6,221 | 124 | 264 |
| Witherite | 2,181 | 2,279 | 1,244 | 1,610 | 1,341 | 2,138 |
| Carbonate | 288 | 1,692 | 1,256 | 1,063 | 1,340 | 533 |
| Chloride | 1,229 | 1,348 | 897 | 909 | 1,027 | 745 |
| Sulphate | 1,405 | 1,569 | 1,454 | 1,230 | 1,539 | 948 |
| Argentina— | | | | | | |
| Sulphate | 299 | 41 | 109 | 203 | 336 | 16 |
| Barium compounds .. | 64 | 176 | 255 | 290 | 106 | 150 |
| Brazil— | | | | | | |
| Barytes | 33 | 9 | 20 | 33 | 27 | 35 |
| Carbonate | 293 | 665 | 1,026 | 528 | 1,385 | 866 |
| Chloride | 192 | 364 | 363 | 896 | 602 | 982 |
| Sulphate | 177 | 379 | 457 | 585 | 560 | 588 |
| Chile— | | | | | | |
| Barytes | 28 | 26 | 19 | 720 | 1,142 | <i>n.a.</i> |
| Carbonate | 10 | 8 | 132 | 249 | 176 | <i>n.a.</i> |
| Chloride | 1 | 5 | — | — | 20 | <i>n.a.</i> |
| Sulphate | 2 | 6 | 4 | 6 | 232 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Barytes | 1,614 | 1,620 | 440 | — | — | — |
| Witherite | 2 | — | — | 1 | 1 | — |
| Carbonate | 35 | 55 | 227 | 358 | 219 | 106 |
| Chloride | 2 | 15 | 57 | 4 | 67 | 55 |
| Sulphate | 2,225 | 2,685 | 451 | 7 | 9 | 17 |
| Ecuador— | | | | | | |
| Sulphate | 499 | 359 | <i>n.a.</i> | 662 | 10 | <i>n.a.</i> |
| Peru— | | | | | | |
| Carbonate | 73 | 71 | 223 | 200 | 200 | 131 |
| Chloride | 28 | 83 | 105 | 67 | 96 | 90 |
| Sulphate | 38 | 38 | 334 | 70 | 15 | 44 |
| Uruguay— | | | | | | |
| Sulphate | 159 | 139 | 189 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela— | | | | | | |
| Barytes | 67,303 | 56,941 | 17,910 | 3,596 | 3,500 | 53 |
| Carbonate | 21 | 56 | 45 | 48 | 33 | 25 |
| Chloride | 317 | 505 | 361 | 618 | 229 | 453 |
| Sulphate | 45 | 50 | 34 | 46 | 56 | 87 |
| Formosa— | | | | | | |
| Carbonate | <i>n.a.</i> | <i>n.a.</i> | 24 | 30 | 49 | 54 |
| Chloride | <i>n.a.</i> | <i>n.a.</i> | 25 | 26 | 37 | 42 |
| Iraq— | | | | | | |
| Barytes | 12,149 | 22,207 | 5,410 | 342 | 218 | <i>n.a.</i> |
| Israel— | | | | | | |
| Barytes | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 120 | 200 | <i>n.a.</i> |
| Japan— | | | | | | |
| Barytes | 2,540 | 10,714 | 18,212 | 8,863 | 5,797 | 5,811 |
| Lebanon— | | | | | | |
| Barytes and witherite .. | <i>n.a.</i> | <i>n.a.</i> | 103 | 3 | 52 | <i>n.a.</i> |
| Turkey— | | | | | | |
| Barytes | — | 319 | 971 | 63 | 6 | 10 |
| Carbonate | 13 | 27 | 43 | 102 | 98 | 61 |
| Chloride | 3 | 126 | 102 | 8 | 160 | 1 |
| Sulphate | 15 | 76 | 19 | 342 | 973 | 741 |

BENTONITE
(see also Fuller's Earth)
PRODUCTION OF BENTONITE

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-----------|-----------|-----------|------------|------------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Cyprus (a) | 894 | 1,009 | 219 | — | — | 536 |
| India | 5,817 | n.a. | n.a. | (b) 11,000 | (b) 14,000 | 25,120 |
| Pakistan | n.a. | n.a. | 579 | 967 | 393 | n.a. |
| Australia— | | | | | | |
| Bentonite | 37 | 133 | 382 | 587 | 485 | 1,197 |
| Bentonitic clay | 116 | 152 | 190 | 307 | 299 | 333 |
| New Zealand | 1,801 | 2,149 | 2,165 | 1,661 | 1,488 | 1,660 |
| OTHER COUNTRIES | | | | | | |
| Austria | 3,750 | 3,090 | 3,227 | 3,528 | 3,178 | 2,744 |
| Greece | 17,000 | 20,000 | 24,000 | 25,000 | 29,518 | n.a. |
| Hungary | 44,010 | 51,016 | 69,826 | 73,602 | 82,780 | n.a. |
| Italy | 49,905 | 94,395 | r 156,461 | 154,864 | 109,567 | 140,668 |
| Spain | 4,708 | 6,481 | 4,761 | 7,222 | 11,975 | n.a. |
| Yugoslavia | n.a. | 7,675 | n.a. | 17,711 | (b) 20,000 | n.a. |
| Morocco | n.a. | 22,025 | n.a. | n.a. | n.a. | n.a. |
| Mozambique | — | — | 36 | n.a. | n.a. | n.a. |
| South Africa | — | 2,609 | 3,421 | 4,042 | 5,555 | (d) 7,691 |
| United States (c) | 1,153,048 | 1,225,255 | 1,132,857 | 1,167,135 | 1,289,406 | 1,414,746 |
| Argentina | 25,716 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Peru | n.a. | n.a. | 236 | 395 | 261 | n.a. |
| Turkey | 600 | n.a. | n.a. | n.a. | n.a. | (b) 2,000 |

Bentonite is also produced in Canada, France, Germany, Algeria and Japan.

(a) Exports of bentonitic clay.

(c) Sold or used by producers.

(b) Estimated.

(d) Sales.

EXPORTS OF BENTONITE

Long tons

| Exporting Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|--------|--------|--------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Cyprus (a) | 894 | 1,009 | 219 | — | — | 536 |
| India | 271 | 455 | 56 | 289 | 214 | 22 |
| OTHER COUNTRIES | | | | | | |
| Austria | 421 | 2 | 74 | 32 | 86 | 36 |
| France | 2,370 | 3,673 | 3,790 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Germany (Federal) .. | 1,637 | 891 | 189 | 1,127 | 702 | 206 |
| Greece | 15,255 | 15,531 | 22,568 | 13,210 | <i>n.a.</i> | <i>n.a.</i> |
| Italy | 8,747 | 11,548 | 10,560 | 19,053 | 27,788 | 29,586 |
| Yugoslavia | 10,125 | 6,878 | 11,595 | 9,405 | 8,570 | 12,846 |
| Algeria | 36,150 | 26,014 | 27,650 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Morocco | 8,179 | 12,263 | 11,898 | 7,948 | 7,095 | 6,253 |
| United States | 40,000 | 42,192 | 51,867 | 39,119 | 53,853 | <i>n.a.</i> |
| Argentina | 940 | 2,735 | 2,153 | 4,595 | 6,779 | 5,214 |

(a) Bentonitic clay.

IMPORTS OF BENTONITE

Long tons

| Importing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| India | 24 | 45 | 147 | 75 | 141 | 159 |
| Australia (a) | 4,952 | 6,330 | 7,270 | 6,895 | 9,205 | 10,765 |
| OTHER COUNTRIES | | | | | | |
| Austria | 3,764 | 2,837 | 3,407 | 4,669 | 5,971 | 9,976 |
| France | 31,493 | 31,407 | 22,694 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Germany (Federal) .. | 1,782 | 1,934 | 3,053 | 3,828 | 3,550 | 3,859 |
| Italy | 5,109 | 6,196 | 4,784 | 3,919 | 4,275 | 3,955 |
| Poland | 3,403 | 4,353 | 5,675 | 6,536 | <i>n.a.</i> | 8,344 |
| Portugal | 814 | 652 | <i>n.a.</i> | 1,050 | 1,348 | 1,322 |
| Sweden | <i>n.a.</i> | 7,190 | 9,640 | 9,649 | 2,053 | 2,107 |
| Algeria | 5,461 | 7,841 | 6,063 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Morocco | 357 | 100 | 13 | 37 | 45 | 12 |
| United States | 49 | 828 | 197 | 652 | 247 | <i>n.a.</i> |
| Brazil | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 3,603 | 7,091 | 6,116 |
| Colombia | <i>n.a.</i> | 1,254 | 2,803 | 2,301 | 2,337 | 2,599 |
| Ecuador | 189 | 213 | <i>n.a.</i> | 178 | 117 | <i>n.a.</i> |
| Venezuela | 8,651 | 7,159 | 3,114 | 3,722 | 4,092 | 2,784 |

(a) Including bentonitic clay.

BERYL
PRODUCTION OF BERYL

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|--------------|--------------|--------------|----------------|--------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya | 4 | 2 | 1 | 1 | — | — |
| Northern Rhodesia | 11 | 2 | 2 | — | — | — |
| Southern Rhodesia | 296 | 393 | 481 | 354 | 498 | 221 |
| Swaziland | — | 2 | 5 | 6 | — | 2 |
| Uganda | 77 | 209 | 419 | 1,015 | 996 | 374 |
| India (a) | 536 | — | 893 | 790 | 134 | — |
| Australia | 247 | 317 | 190 | 306 | 223 | 110 |
| OTHER COUNTRIES | | | | | | |
| Norway (a) | 3 | 4 | — | — | — | — |
| Portugal | 46 | 36 | 29 | 34 | 17 | 2 |
| Sweden | 25 | (a) 37 | — | — | (a) — | (a) — |
| Congo Republic | 949 | 250 | 332 | 164 | 272 | n.a. |
| Malagasy Republic | 161 | 423 | 626 | 746 | 663 | 405 |
| Mozambique | 1,036 | 1,392 | 1,425 | 943 | 560 | 548 |
| Rwanda and Burundi | 45 | 166 | 277 | 468 | 351 | n.a. |
| South Africa | 412 | 181 | 291 | 171 | 321 | 379 |
| South West Africa | 220 | 152 | 231 | 225 | 142 | 54 |
| United States (b) | 460 | 379 | 454 | 1,002 | 873 | 671 |
| Argentina | 884 | 576 | 659 | 419 | 220 | 186 |
| Brazil | 1,173 | 865 | 1,669 | r 1,111 | 987 | 467 |
| Afghanistan | — | — | 10 | — | — | — |
| Korea (South) | — | — | — | 5 | — | — |
| TOTAL* | 6,600 | 5,400 | 8,000 | r 7,800 | 6,300 | 4,000 |

*Excluding beryl known to have been produced in the U.S.S.R.

(a) Imports into the United States.

(b) Shipments from mine. Including lower grade beryllium ore as follows: 1958—37 long tons; 1959—87 long tons; 1960—237 long tons; 1961—719 long tons; 1962—679 long tons; 1963—670 long tons.

EXPORTS OF BERYL

Long tons

| Exporting Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------|-------|-------|-------|---------|---------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia & Nyasaland .. | 288 | 272 | 533 | 381 | 451 | 268 |
| Uganda | 74 | 171 | 382 | 871 | 1,064 | 341 |
| India (a) | 536 | — | 893 | 790 | 134 | — |
| Australia | 146 | — | 148 | 167 | 218 | 129 |
| OTHER COUNTRIES | | | | | | |
| Italy | — | 67 | 179 | 37 | — | — |
| Portugal | 52 | 79 | 29 | — | — | n.a. |
| Congo Republic | 1,257 | 446 | 412 | (a) 196 | (a) 433 | (a) 455 |
| Malagasy Republic | 112 | 232 | 607 | 827 | 713 | 223 |
| Morocco | 10 | — | — | — | — | — |
| Mozambique | 1,001 | 1,496 | 1,402 | 957 | 560 | 548 |
| South Africa | 382 | 95 | 217 | 64 | 312 | 266 |
| South West Africa | 259 | 99 | 89 | 91 | 115 | 36 |
| Argentina | 527 | 2,978 | 1,033 | 1,329 | 890 | 739 |
| Brazil | 1,401 | 2,613 | 3,417 | 3,128 | 2,963 | 1,937 |

(a) Imports into the United States.

IMPORTS OF BERYL*

Long tons

| Importing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|------------------------|-------|-------|-------|-------|-------|-------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) .. | 295 | 255 | 18 | 26 | 5 | n.a. |
| OTHER COUNTRIES | | | | | | |
| France | 1,080 | 545 | 861 | 776 | 601 | 120 |
| Italy | 10 | — | 779 | 925 | — | — |
| United States | 4,106 | 7,177 | 7,985 | 7,603 | 7,636 | 5,574 |

*Imports of Beryl are not recorded separately in the trade returns of most countries.

(a) Not separately recorded in official trade returns. Figures represent exports to the United Kingdom from certain producing countries and are not necessarily complete.

BISMUTH
PRODUCTION OF BISMUTH ORE, ETC.*

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | |
|--|------|---------|-------|-------|-------|---------|-----|
| COMMONWEALTH COUNTRIES | | | | | | | |
| Uganda— | | | | | | | |
| Ore (<i>Bi content</i>) .. | 7 | 7 | 2 | 1 | — | — | |
| Canada— | | | | | | | |
| Metal plus content of bullion and concentrates exported .. | 184 | 149 | 189 | 213 | 190 | 170 | |
| Australia— | | | | | | | |
| Concentrates (<i>Bi content</i>) | 1 | — | — | — | — | — | |
| OTHER COUNTRIES | | | | | | | |
| France— | | | | | | | |
| Mispickel (<i>Bi content</i>) .. | 50 | 45 | 50 | 52 | 62 | (a) 70 | |
| Spain— | | | | | | | |
| Ore (<i>Bi content</i>) .. | 50 | 27 | 15 | 9 | 2 | n.a. | |
| Sweden— | | | | | | | |
| Metal (c) | 49 | 29 | 35 | 35 | 69 | 69 | |
| Yugoslavia— | | | | | | | |
| Metal | 76 | 89 | 103 | 97 | 89 | 87 | |
| Mozambique— | | | | | | | |
| Ore (<i>Bi content</i>) .. | 1 | 10 | 14 | 22 | 8 | 14 | |
| South Africa— | | | | | | | |
| Ore (<i>Bi content</i>) .. | 1 | — | — | — | — | 1 | |
| South West Africa— | | | | | | | |
| Ore | 1 | 1 | — | 1 | — | 8 | |
| Mexico— | | | | | | | |
| Ore (<i>Bi content</i>) .. | 187 | 235 | 268 | 1,047 | 350 | 420 | |
| Argentina— | | | | | | | |
| Concentrates (<i>Bi content</i>) .. (c) | 26 | (c) 18 | (c) 7 | (c) 4 | 3 | (c) 3 | |
| Bolivia (b)— | | | | | | | |
| Ore, etc. (<i>Bi content</i>) .. | 109 | 218 | 180 | 208 | 291 | 276 | |
| Peru— | | | | | | | |
| Concentrates (<i>Bi content</i>) | 9 | (d) 107 | (d) 4 | (d) 1 | (d) 3 | (d) 4 | |
| Lead bars (<i>Bi content</i>) .. | 131 | | | 27 | 78 | 51 | 83 |
| Metal | 240 | | | 375 | 382 | 430 | 468 |
| Japan— | | | | | | | |
| Ore (<i>Bi content</i>) .. | — | — | 311 | n.a. | 1,184 | 226 | |
| Korea (South)— | | | | | | | |
| Ore (<i>Bi content</i>) .. | 89 | 101 | 142 | 149 | 158 | (c) 160 | |

*Bismuth ore has also been produced in Germany, Roumania, Burma and China and the metal recovered as a by-product in the United Kingdom, U.S.S.R., United States and Japan.

(a) Estimated.

(b) Exports.

(c) United States Bureau of Mines' estimate.

(d) Recoverable.

EXPORTS OF BISMUTH, ETC.

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|------------------|-------------|-------------|--------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bismuth | 323 | 407 | 380 | 382 | 509 | 603 |
| Bismuth salts | 170 | 173 | 199 | 214 | 142 | <i>n.a.</i> |
| Uganda— | | | | | | |
| Ore (<i>Bi content</i>) | (8 <i>cwt.</i>) | 6 | 4 | — | <i>n.a.</i> | <i>n.a.</i> |
| Canada— | | | | | | |
| Bismuth | 157 | 134 | 128 | 174 | 171 | 178 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bismuth | 27 | 63 | (a) 51 | (a) 51 | (a) 64 | (a) 120 |
| France— | | | | | | |
| Bismuth (a) | 34 | 58 | 54 | 64 | 44 | 46 |
| Germany (Federal)— | | | | | | |
| Bismuth | 158 | 205 | 152 | 136 | 137 | 114 |
| Netherlands— | | | | | | |
| Bismuth (a) | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 148 | 149 | 178 |
| Bismuth salts | 15 | 21 | 16 | 21 | 67 | 79 |
| Spain— | | | | | | |
| Bismuth | 35 | 25 | — | — | — | — |
| Yugoslavia— | | | | | | |
| Bismuth | 67 | 67 | 78 | 70 | 64 | 57 |
| South Africa— | | | | | | |
| Ore | 4 | 70 | 3 | 1 | — | — |
| Mexico— | | | | | | |
| Bismuth, refined | 139 | 95 | 90 | 91 | 122 | } 404 |
| do. impure bars | 134 | 198 | 198 | 1,323 | 295 | |
| United States— | | | | | | |
| Matte, residues, etc. | 16 | 89 | — | 67 | 104 | 2 |
| Metal and alloys | 141 | 80 | 70 | 75 | 53 | 14 |
| Argentina— | | | | | | |
| Ore | 15 | 48 | — | — | — | — |
| Bolivia— | | | | | | |
| Ore, etc. (<i>Bi content</i>) | 109 | 218 | 180 | 208 | 291 | 276 |
| Peru— | | | | | | |
| Bars, etc. (<i>Bi content</i>) | 346 | 277 | 339 | 326 | 731 | 495 |
| Japan— | | | | | | |
| Bismuth | — | — | 10 | 48 | 87 | 159 |
| Korea (South)— | | | | | | |
| Bismuth, unwrought | 100 | 73 | 57 | 56 | — | <i>n.a.</i> |

(a) Including scrap.

IMPORTS OF BISMUTH, ETC.

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|----------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bismuth | 407 | 455 | 471 | 216 | 528 | 422 |
| Unwrought alloys | 128 | 123 | 124 | 340 | 348 | 278 |
| Canada— | | | | | | |
| Bismuth | 6 | 6 | 3 | 8 | 25 | 3 |
| Bismuth salts | (£7,524) | 5 | 4 | 6 | 5 | 3 |
| India— | | | | | | |
| Bismuth and alloys | 42 | 49 | (a) 38 | (a) 60 | (a) 44 | (a) 41 |
| Australia (b)— | | | | | | |
| Bismuth | 16 | 17 | 16 | 17 | 12 | 16 |
| Bismuth salts | 6 | 12 | 10 | 12 | 7 | 8 |
| New Zealand— | | | | | | |
| Bismuth and its salts | 3 | 4 | 2 | 1 | <i>n.a.</i> | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bismuth | 4 | 22 | (c) 26 | (c) 40 | (c) 98 | (c) 1,181 |
| Bismuth salts | 63 | 62 | 77 | 66 | 74 | 81 |
| Denmark— | | | | | | |
| Bismuth salts | 11 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| France— | | | | | | |
| Bismuth (c) | 311 | 445 | 515 | 508 | 556 | 654 |
| Germany (Federal)— | | | | | | |
| Bismuth (c) | 237 | 249 | 212 | 232 | 276 | 250 |
| Italy— | | | | | | |
| Bismuth | 17 | 27 | 38 | 35 | 44 | 43 |
| Bismuth salts | 4 | 2 | 11 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Netherlands— | | | | | | |
| Bismuth salts | 54 | 67 | 84 | 60 | 86 | 79 |
| Poland— | | | | | | |
| Bismuth | 37 | 89 | 44 | 20 | <i>n.a.</i> | 71 |
| Spain— | | | | | | |
| Bismuth | — | 1 | 13 | 23 | 17 | 8 |
| Bismuth salts | — | 1 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Morocco— | | | | | | |
| Bismuth salts | 8 | 7 | 14 | 15 | 13 | 10 |
| Mexico— | | | | | | |
| Bismuth salts | 6 | 5 | 8 | 8 | 5 | 8 |
| United States— | | | | | | |
| Bismuth | 336 | 193 | 515 | 341 | 358 | 502 |
| Argentina— | | | | | | |
| Bismuth and its salts | 1 | 1 | 2 | 5 | 1 | 3 |
| Brazil— | | | | | | |
| Bismuth | 1 | 2 | 3 | 5 | 7 | 11 |
| Bismuth salts | 8 | 9 | 23 | 18 | 4 | 13 |
| Chile— | | | | | | |
| Bismuth | 2 | 1 | 1 | 2 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Bismuth salts | 5 | 5 | 8 | 4 | 5 | 8 |
| Peru— | | | | | | |
| Bismuth salts | 1 | 1 | — | 1 | 1 | 1 |
| Japan— | | | | | | |
| Bismuth | — | — | 8 | 2 | 2 | 3 |
| Turkey— | | | | | | |
| Bismuth salts | 1 | 8 | 3 | 4 | 5 | 5 |

(a) Years ended March 31 following that stated.

(c) Including scrap.

(b) Years ended June 30 of that stated.

BORATES
PRODUCTION OF CRUDE BORATES

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|---------|---------|-------------|---------|---------|-------------|
| Italy— Boric acid | 3,405 | 2,450 | 2,615 | 1,745 | 1,358 | 506 |
| United States (a)— Borates | 471,615 | 553,523 | 571,956 | 538,047 | 577,333 | 625,163 |
| Argentina— Borates | 10,480 | 10,479 | <i>n.a.</i> | 6,728 | 14,271 | <i>n.a.</i> |
| Chile— Boron minerals .. | 8,296 | 5,665 | 2,873 | 157 | 3,754 | 5,870 |
| Turkey— Borates | 68,306 | 78,985 | 68,736 | 63,999 | 112,141 | 86,697 |

Borates are known to have been produced in the U.S.S.R., Germany, Iran and Tibet.

(a) Sold or used by producers.

EXPORTS OF BORATES

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Borax | 802 | 1,149 | 935 | 656 | 667 | 620 |
| Other borates and perborates | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 6,289 |
| Hong Kong— | | | | | | |
| Borax, refined | 36 | 95 | 21 | 28 | 2 | 13 |
| India— | | | | | | |
| Borax | 1 | 1 | (a) — | (a) — | (a) — | (a) — |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Boric acid | 1 | 4 | — | — | — | — |
| Perborates | <i>n.a.</i> | 2,587 | <i>n.a.</i> | 2,077 | 1,710 | 2,020 |
| Belgium-Luxembourg E.U.— | | | | | | |
| Borax | 199 | 14 | 33 | 102 | 5 | 28 |
| Boric acid | 5 | 4 | 8 | 10 | 7 | — |
| Borates and perborates | 20 | 666 | 1,370 | 2,881 | 4,062 | 3,375 |
| France— | | | | | | |
| Boron minerals | <i>n.a.</i> | <i>n.a.</i> | 99 | 64 | 122 | 348 |
| Borax, refined | 591 | 1,241 | 3,878 | 3,094 | 3,273 | 6,300 |
| Boric acid | 115 | 178 | 658 | 3,056 | 5,496 | 10,865 |
| Borates and perborates | 392 | 969 | 911 | 955 | 4,466 | 5,669 |
| Germany (Federal)— | | | | | | |
| Borax | 129 | 354 | 161 | 79 | 210 | 106 |
| Boric acid | 156 | 173 | 107 | 111 | 62 | 60 |
| Borates and perborates | 9,171 | 9,132 | 8,522 | 8,432 | 8,590 | 8,807 |
| Italy— | | | | | | |
| Boric acid crude | — | 3 | — | } 3,578 | 3,957 | 4,365 |
| do. refined | 1,451 | 677 | 1,731 | | | |
| Borax, refined | 4,093 | 2,080 | 1,150 | 905 | 1,537 | 2,489 |
| Perborates | 575 | 355 | 974 | 1,232 | 702 | 343 |
| Netherlands— | | | | | | |
| Borax, refined | 359 | 425 | 202 | 167 | 421 | 257 |
| Boric acid | 36 | 17 | 21 | 22 | 31 | 44 |
| Perborates | <i>n.a.</i> | <i>n.a.</i> | — | — | — | 41 |
| Sweden— | | | | | | |
| Perborate of sodium | 79 | 157 | 47 | 16 | 71 | 30 |
| Switzerland— | | | | | | |
| Borates and perborates | <i>n.a.</i> | <i>n.a.</i> | 2,830 | 2,242 | 1,941 | 1,639 |
| United States— | | | | | | |
| Borax, borates and boric acid | 210,343 | 226,494 | 268,398 | 240,421 | 260,950 | 302,600 |
| Argentina— | | | | | | |
| Borates of calcium and sodium | 3,030 | 2,006 | 981 | 2,239 | 3,516 | 5,324 |
| Japan— | | | | | | |
| Borax | 2 | 2 | 5 | 4 | (b) 14 | 19 |
| Boric acid | 3 | 53 | 21 | 5 | 8 | 10 |
| Turkey— | | | | | | |
| Borates | 50,452 | 60,525 | 60,552 | 63,305 | 87,081 | 90,094 |

(a) Years ended March 31 following that stated.

(b) Including other borates and perborates.

IMPORTS OF BORATES

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-----------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Boron minerals | 14,889 | 21,967 | 23,712 | 21,438 | 21,591 | 25,870 |
| Borax | 23,708 | 25,616 | 28,699 | 22,412 | 21,497 | 21,389 |
| Boric acid | 3,472 | 3,645 | 6,799 | 3,773 | 3,475 | <i>n.a.</i> |
| Rhodesia & Nyasaland— | | | | | | |
| Borax | 121 | 117 | 134 | 117 | 139 | 113 |
| Boric acid | 3 | 12 | 12 | 13 | 12 | 12 |
| Canada— | | | | | | |
| Borax | 9,077 | 8,999 | 8,942 | 10,465 | 11,631 | 13,023 |
| Boric acid | 1,457 | 2,017 | 2,082 | 2,018 | 2,378 | 1,352 |
| Hong Kong— | | | | | | |
| Borax, refined | 3,149 | 3,753 | 3,147 | 3,191 | 3,780 | 3,369 |
| Boric acid | <i>n.a.</i> | 89 | 97 | 160 | 97 | 122 |
| India— | | | | | | |
| Borax | 4,881 | 5,731 | 5,898 | 6,217 | 4,807 | 5,995 |
| Boric acid | 303 | 717 | (b) 1,042 | (b) 1,046 | (b) 638 | (b) 1,041 |
| Pakistan— | | | | | | |
| Borax | 7 | 651 | 644 | 404 | 287 | 340 |
| Australia (a)— | | | | | | |
| Boron minerals | <i>n.a.</i> | <i>n.a.</i> | 783 | 1,093 | 1,833 | 1,912 |
| Boron salts | 2,519 | 3,495 | 3,940 | 4,311 | 3,417 | 3,988 |
| Boric acid | 1,049 | 1,080 | 1,427 | 1,046 | 1,009 | 1,168 |
| New Zealand— | | | | | | |
| Borax, crude | 894 | 752 | 700 | 1,088 | <i>n.a.</i> | <i>n.a.</i> |
| Boric acid | 230 | 247 | 301 | 388 | 477 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Borax | 933 | 779 | 914 | 1,001 | 1,109 | 1,305 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Boron minerals | 3,552 | 4,259 | 3,047 | 4,103 | 4,112 | 3,634 |
| Borates | — | 3 | 2 | 1 | 3 | 24 |
| Boric acid | 6 | 2 | 1 | 6 | 2 | 5 |
| Perborates | <i>n.a.</i> | 4 | 6 | 5 | 5 | 153 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Borax | 1,719 | 3,464 | 3,878 | 4,413 | 5,186 | 6,488 |
| Boric acid | 257 | 297 | 1,039 | 1,038 | 373 | 551 |
| Borates and perborates | 4,136 | 2,662 | 2,623 | 2,514 | 2,001 | 1,966 |
| Denmark— | | | | | | |
| Boron minerals | 437 | 723 | 706 | 569 | 903 | 799 |
| Borax | 87 | 96 | 110 | 118 | 156 | 131 |
| Boric acid | 91 | 92 | 78 | 98 | 99 | 104 |
| Borates and perborates | 1,428 | 1,785 | 1,931 | 2,073 | 2,660 | 2,250 |
| Finland— | | | | | | |
| Boron minerals | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1 | 1,024 | 784 |
| Borax | 773 | 1,243 | 1,026 | 779 | 753 | 918 |
| Boric acid | 111 | 81 | 172 | 137 | 192 | 118 |
| Borates and perborates | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,340 | 1,483 | 1,649 |
| France— | | | | | | |
| Boron minerals | 21,492 | 20,096 | 25,721 | 25,584 | 32,028 | 39,115 |
| Borax refined | 11,574 | 10,472 | 13,400 | 13,990 | 17,586 | 21,424 |
| Boric acid | 2,767 | 745 | 1,521 | 1,589 | 1,432 | 419 |
| Borates and perborates | 502 | 568 | 559 | 560 | 548 | 727 |
| Germany (Federal)— | | | | | | |
| Boron minerals | 32,318 | 26,810 | 39,874 | 37,736 | 32,262 | 43,920 |
| Boric acid | 4,356 | 5,399 | 7,363 | 6,275 | 7,406 | 6,737 |
| Borax | 9,434 | 11,704 | 13,228 | 12,580 | 13,266 | 15,359 |
| Borates and perborates | 1 | 74 | 42 | 214 | 213 | 148 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated

IMPORTS OF BORATES (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Greece— | | | | | | |
| Boron minerals | <i>n.a.</i> | <i>n.a.</i> | 201 | 198 | 103 | 306 |
| Borax | 8 | 54 | 21 | — | 16 | 32 |
| Boric acid | 5 | 22 | 12 | 29 | 23 | 19 |
| Italy— | | | | | | |
| Boron minerals | 11,925 | 18,961 | 28,291 | 36,631 | 57,289 | 49,383 |
| Borax | 2,742 | 2,650 | 3,603 | 3,430 | 4,138 | 6,123 |
| Boric acid | — | — | — | 6 | 163 | 180 |
| Borates | 2 | 5 | 1 | 378 | 43 | 74 |
| Perborates | — | 99 | — | 168 | 301 | 1,221 |
| Netherlands— | | | | | | |
| Boron minerals | 2,851 | 2,756 | 3,259 | 2,078 | 3,770 | 3,445 |
| Borax | 5,554 | 8,897 | 8,065 | 10,674 | 10,166 | 11,164 |
| Boric acid | 850 | 1,160 | 934 | 1,572 | 1,431 | 1,974 |
| Perborates | 887 | 1,147 | 2,213 | 3,390 | 4,310 | 3,703 |
| Norway— | | | | | | |
| Borax | 1,481 | 1,265 | 1,552 | 2,241 | 1,348 | 1,758 |
| Boric acid | 1,824 | 48 | 629 | 823 | 629 | 291 |
| Perborate of sodium | <i>n.a.</i> | 1,425 | 1,285 | 1,573 | 2,053 | 1,709 |
| Portugal— | | | | | | |
| Boric acid | 212 | 75 | 123 | 83 | 86 | 100 |
| Borax | 1,090 | 821 | 1,056 | 776 | 1,014 | 1,103 |
| Spain— | | | | | | |
| Boric acid | 20 | — | 5 | — | — | 6 |
| Borates | — | — | 6 | 9 | 177 | 6,644 |
| Sweden— | | | | | | |
| Borax | 2,499 | 2,696 | 2,134 | 2,879 | 3,731 | 3,367 |
| Boric acid | 199 | 344 | 281 | 349 | 258 | 427 |
| Perborate of sodium | 3,586 | 1,027 | A 2,416 | 3,049 | 3,407 | 2,970 |
| Switzerland— | | | | | | |
| Borax | 3,770 | 2,595 | (a) 373 | (a) 86 | (a) 135 | (a) 155 |
| Boric acid | | | 365 | 253 | 471 | 456 |
| Borates | <i>n.a.</i> | <i>n.a.</i> | 4,039 | 4,010 | 4,569 | 4,350 |
| Perborates | | | 118 | 298 | 478 | 468 |
| U.S.S.R.— | | | | | | |
| Borax | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 14,200 | 6,300 | 7,283 |
| Yugoslavia— | | | | | | |
| Boric acid | 1,088 | 94 | 179 | 339 | 361 | 366 |
| Algeria— | | | | | | |
| Borax | 166 | 83 | 96 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Boric acid | 13 | 11 | 7 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Perborates | 33 | 28 | 23 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Angola— | | | | | | |
| Borax | 20 | 23 | 17 | 38 | 11 | 39 |
| Congo Republic— | | | | | | |
| Boric acid | 5 | 9 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Borax | 54 | 30 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Perborates | 209 | 131 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt— | | | | | | |
| Borax | 484 | 313 | 274 | 610 | 227 | <i>n.a.</i> |
| Boric acid | 73 | 140 | 169 | 213 | 1 | <i>n.a.</i> |
| Morocco— | | | | | | |
| Borates | 113 | 108 | 95 | 88 | 276 | 414 |
| Perborates | 22 | 12 | 27 | 26 | 10 | 35 |
| Mozambique— | | | | | | |
| Borax | 4 | 8 | 7 | 7 | <i>n.a.</i> | <i>n.a.</i> |
| Boric acid | 1 | — | 3 | 1 | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Borax | 1,188 | 1,320 | 1,194 | 1,983 | <i>n.a.</i> | <i>n.a.</i> |
| Boric acid | 177 | 172 | 293 | 181 | <i>n.a.</i> | <i>n.a.</i> |
| Tunisia— | | | | | | |
| Borax etc. | 2 | 29 | 43 | 42 | 36 | <i>n.a.</i> |

(a) Crude borax only.

IMPORTS OF BORATES (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------|--------|--------|--------|--------|--------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Cuba— | | | | | | |
| Borax | 340 | 316 | n.a. | n.a. | n.a. | n.a. |
| Boric acid | 95 | 127 | n.a. | n.a. | n.a. | n.a. |
| Mexico— | | | | | | |
| Borax | 3,595 | 4,209 | 4,638 | 4,141 | 4,134 | 5,937 |
| Boric acid | 432 | 535 | 744 | 737 | 814 | 822 |
| Brazil— | | | | | | |
| Boron minerals | 1,410 | 1,110 | 694 | 1,077 | 1,082 | — |
| Boric acid | 575 | 686 | 386 | 586 | 873 | 967 |
| Borax | 2,462 | 3,848 | 3,440 | 4,479 | 6,212 | 7,944 |
| Borates | 15 | 11 | 4 | 2 | 1 | 1 |
| Colombia— | | | | | | |
| Borax | 249 | 217 | 370 | 375 | 616 | 961 |
| Boric acid | 137 | 148 | 189 | 225 | 210 | 322 |
| Perborate of sodium .. | 46 | 82 | 108 | 63 | 99 | 104 |
| Ecuador— | | | | | | |
| Borax | 8 | 32 | n.a. | 25 | 4 | n.a. |
| Boric acid | 10 | 8 | n.a. | 13 | 9 | n.a. |
| Peru— | | | | | | |
| Borax | 355 | 438 | 435 | 324 | 356 | 331 |
| Boric acid | 77 | 110 | 113 | 104 | 51 | 123 |
| Uruguay— | | | | | | |
| Borates | 165 | 408 | 407 | n.a. | n.a. | n.a. |
| Venezuela— | | | | | | |
| Borax | 168 | 211 | 196 | 262 | 382 | 584 |
| Boric acid | 67 | 105 | 74 | 207 | 102 | 87 |
| Formosa— | | | | | | |
| Borax | n.a. | n.a. | 1,019 | 559 | 981 | 1,100 |
| Boric acid | 88 | 34 | 66 | 76 | 92 | 69 |
| Iran (a)— | | | | | | |
| Borax | 221 | 163 | — | n.a. | n.a. | n.a. |
| Boric acid | n.a. | 11 | 5 | n.a. | n.a. | n.a. |
| Israel— | | | | | | |
| Borates | n.a. | n.a. | n.a. | n.a. | 661 | n.a. |
| Perborate of sodium .. | n.a. | n.a. | 148 | 73 | 88 | n.a. |
| Japan— | | | | | | |
| Borax | 10,545 | 13,249 | 14,739 | 17,164 | 20,154 | 24,482 |
| Boric acid | 2,455 | 4,715 | 4,943 | 5,032 | 5,775 | 6,028 |
| Korea (South)— | | | | | | |
| Borax | 139 | 189 | 367 | 296 | n.a. | n.a. |
| Lebanon— | | | | | | |
| Borates | 59 | 148 | 256 | 344 | 445 | n.a. |
| Perborates | | | | | | |
| Philippine Republic— | | | | | | |
| Boric acid | 87 | 93 | 49 | 36 | 34 | 105 |
| Syria— | | | | | | |
| Borax | 94 | 50 | n.a. | n.a. | n.a. | n.a. |
| Boric acid | 4 | 2 | n.a. | n.a. | n.a. | n.a. |
| Thailand— | | | | | | |
| Borax | 702 | 445 | 300 | 565 | 863 | 460 |
| Boric acid | 25 | 22 | 13 | 97 | 80 | 101 |
| Turkey— | | | | | | |
| Borax | 88 | 251 | 278 | 235 | 348 | 537 |
| Boric acid | 12 | 3 | 31 | 48 | 1 | 8 |

(a) Years ended March 20 following that stated.

BROMINE
PRODUCTION OF BROMINE

Lb. avdp.

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------|-------------|-------------|-------------|--------------|-------------|-------------|
| France (a) | 3,549,000 | 3,770,000 | 4,430,000 | 4,039,000 | <i>n.a.</i> | <i>n.a.</i> |
| Italy | 1,211,892 | 1,574,308 | 2,816,689 | 3,334,202 | <i>n.a.</i> | <i>n.a.</i> |
| United States (a) (b) .. | 176,397,000 | 195,483,000 | 175,010,000 | 180,798,000 | 190,747,000 | 203,333,000 |
| Israel | 1,687,000 | 4,000,000 | 5,292,000 | (c)9,700,000 | <i>n.a.</i> | <i>n.a.</i> |
| Japan | 3,296,000 | 3,474,000 | 4,301,000 | 6,120,000 | 6,360,000 | <i>n.a.</i> |

Bromine is also produced in the United Kingdom (from sea water), Germany (Federal) and Spain.

(a) Sales.

(b) Including bromine content of compounds.

(c) Year ended 31st March, 1962.

EXPORTS OF BROMINE, ETC.

Lb. avdp.

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bromides | 376,000 (£46,654) | 481,000 (£58,170) | 698,000 (£81,238) | 647,700 (£79,347) | <i>n.a.</i> <i>n.a.</i> | (a) (£138,775) |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bromine | 4,400 | — | — | — | — | — |
| Bromides, etc. | 4,600 | 1,500 | 17,800 | 700 | 200 | — |
| France— | | | | | | |
| Bromine | 347,200 | 901,000 | 1,303,200 | 901,200 | 842,000 | 1,682,127 |
| Bromides | 1,455,100 | 1,901,500 | 2,289,100 | 1,380,500 | 1,817,000 | 1,732,833 |
| Germany (Federal)— | | | | | | |
| Bromides | 159,200 | 152,100 | 194,900 | 168,900 | <i>n.a.</i> | 130,955 |
| Italy— | | | | | | |
| Bromine | — | — | 59,609 | — | 400 | — |
| Bromides | 3,298 | 3,748 | 452 | 2,400 | 13,000 | 15,873 |
| Netherlands— | | | | | | |
| Bromides, etc. | 798,000 | 1,082,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,027,354 |
| United States— | | | | | | |
| Bromine and compounds (b) .. | 10,071,033 | 9,171,539 | 10,241,178 | 11,120,085 | 8,800,351 | 10,839,960 |
| Israel— | | | | | | |
| Bromine | 1,687,000 | 2,209,000 | 2,601,000 | 2,313,000 | 2,523,000 | 2,193,000 |
| Japan— | | | | | | |
| Bromine | 3,221 | 68 | 534 | 22,300 | <i>n.a.</i> | <i>n.a.</i> |
| Bromine compounds | 44,000 | 33,281 | 31,268 | 27,818 | 208,052 | 277,725 |

(a) Quantity not available; value relates to all bromides and bromates.

(b) Including organic compounds.

IMPORTS OF BROMINE, ETC.

Lb. avdp.

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bromine | 672,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada— | | | | | | |
| Bromine | 17,397 | 66,434 | 70,301 | 62,007 | 35,415 | 39,389 |
| Bromide of soda | 79,806 | 87,918 | 67,353 | 106,103 | 77,906 | 100,077 |
| India— | | | | | | |
| Bromine | 900 | 560 | (b) 162,700 | (b) 302,000 | (b) 456,141 | (b) 397,895 |
| Bromide of potash | 6,400 | 220 | (b) 150 | (b) 1,850 | (b) 1,629 | (b) 22,046 |
| Bromide of soda | 2,100 | — | (b) 4 | (b) 50 | (b) — | (b) 22,046 |
| Australia (a)— | | | | | | |
| Bromine | (£491) | (£412) | — | — | — | — |
| Bromate of potash | 18,185 | 10,710 | 24,842 | 25,877 | 38,276 | 44,406 |
| Bromide of potash | 100,463 | 58,968 | 140,356 | 98,664 | 51,913 | 65,364 |
| Bromates and bromides of soda | 44,509 | 35,211 | 91,219 | 83,009 | 69,335 | 69,064 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bromine | 20,300 | 30,200 | 18,300 | 15,400 | 32,600 | 27,558 |
| Bromides, etc. | 661,200 | 534,800 | 749,100 | 911,400 | 870,400 | 957,247 |
| Denmark— | | | | | | |
| Bromine | <i>n.a.</i> | 197,500 | 4,000 | 31,700 | 11,000 | 11,000 |
| Bromide of potash | 14,300 | 12,300 | 23,400 | 11,500 | 22,000 | 11,000 |
| Bromide of soda | 58,900 | 82,500 | 87,100 | 24,300 | 90,000 | 44,100 |
| Other bromides | 45,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 46,297 |
| Finland— | | | | | | |
| Bromine | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 6,032 | 2,015 | 2,646 |
| France— | | | | | | |
| Bromides | 400 | 2,600 | 1,100 | 3,100 | 18,000 | 13,228 |
| Germany (Federal)— | | | | | | |
| Bromine | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Bromides | 149,900 | 90,600 | 25,100 | 22,900 | <i>n.a.</i> | 238,761 |
| Greece— | | | | | | |
| Bromine | 842 | 717 | 1,109 | 1,629 | 606 | 454 |
| Italy— | | | | | | |
| Bromine | 110,700 | 311,407 | 698,788 | 1,023,600 | 477,962 | 111,995 |
| Bromides | 4,561 | 25,108 | 33,711 | 22,500 | 147,000 | 252,650 |
| Netherlands— | | | | | | |
| Bromides, etc. | 335,000 | 423,000 | 403,000 | 247,000 | 326,000 | 244,713 |
| Norway— | | | | | | |
| Bromine | 1,691 | 1,768 | 2,000 | 2,000 | 2,000 | — |
| Portugal— | | | | | | |
| Bromine | 653 | 589 | <i>n.a.</i> | 1,100 | 882 | 220 |
| Bromide of soda | 1,063 | 745 | } 4,000 | 20,700 | 9,500 | 12,787 |
| Bromide of potash | 4,698 | 6,169 | | | | |
| Bromide of ammonium | 697 | 646 | | | | |
| Spain— | | | | | | |
| Bromides | 6,662 | 2 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 82,978 |
| Sweden— | | | | | | |
| Bromine | 9,000 | <i>n.a.</i> | 7,000 | 22,000 | 9,000 | 17,637 |
| Algeria— | | | | | | |
| Bromine | — | 200 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Bromides | 26,700 | 10,600 | 20,700 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Congo Republic— | | | | | | |
| Bromides | 1,285 | 198 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Morocco— | | | | | | |
| Bromides | 9,830 | 6,934 | 4,672 | 11,691 | 7,072 | 5,344 |
| South Africa— | | | | | | |
| Bromine | 899 | 1,407 | 6,461 | 14,457 | <i>n.a.</i> | <i>n.a.</i> |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

IMPORTS OF BROMINE, ETC. (cont.)

Lb. avdp.

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|---------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Cuba— | | | | | | |
| Bromine | 6,788 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico— | | | | | | |
| Bromine | 130,139 | 85,085 | 151,841 | 49,423 | 130,723 | 84,433 |
| Bromides of potash and soda | 39,388 | 31,006 | 59,298 | 72,087 | 64,415 | 22,368 |
| United States— | | | | | | |
| Bromine and compounds | 11,933 | 26,200 | 347,163 | 293,582 | 461,108 | 374,012 |
| Argentina— | | | | | | |
| Bromine and compounds | 249,828 | 151,142 | 192,891 | 206,086 | 284,050 | 239,598 |
| Brazil— | | | | | | |
| Bromine | 1,142 | 6,508 | 2,469 | 1,512 | 2,473 | 344 |
| Bromides | 133,073 | 311,418 | 779,923 | 672,000 | 668,627 | 573,332 |
| Chile— | | | | | | |
| Bromine | 293 | 817 | 362 | 562 | 1,497 | <i>n.a.</i> |
| Bromides | 2,704 | 2,515 | 1,016 | 1,285 | 944 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Bromine | 146 | 60 | — | — | — | 1,181 |
| Bromides, etc. .. | 11,914 | 21,160 | 17,701 | 14,125 | 16,795 | 17,331 |
| Peru— | | | | | | |
| Bromine | 163 | 478 | 604 | 522 | 269 | 926 |
| Bromides | 10,781 | 11,584 | 3,413 | 5,593 | 6,620 | 7,311 |
| Iran (a)— | | | | | | |
| Bromides | 6,195 | 456 | 4,850 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Bromine compounds .. | 3,109 | 201 | — | 7 | 6,700 | 26,440 |
| Philippine Republic— | | | | | | |
| Bromide of potash .. | 4,535 | 24,295 | 18,973 | <i>n.a.</i> | <i>n.a.</i> | 21,599 |
| Thailand— | | | | | | |
| Bromide of potash .. | 20,704 | 20,386 | 17,245 | 25,513 | 12,946 | 19,207 |
| Turkey— | | | | | | |
| Bromine | 40 | 1,188 | 2,015 | 456 | — | 322 |
| Bromides | 46,244 | 8,093 | 3,497 | 3,622 | 6,285 | 7,209 |

(a) Years ended March 20 following that stated.

CADMIUM
PRODUCTION OF CADMIUM

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|---------------|---------------|---------------|-----------------|---------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 124 | 138 | 105 | 97 | 106 | 110 |
| Northern Rhodesia .. | 17 | — | 26 | 19 | 17 | 15 |
| Canada (b) | 784 | 964 | 1,052 | 606 | 1,163 | 1,085 |
| Australia | 353 | 341 | 300 | 311 | 353 | 486 |
| OTHER COUNTRIES | | | | | | |
| Austria | 11 | 20 | 15 | 19 | 22 | 19 |
| Belgium | 960 | 1,200 | 900 | 1,000 | 1,000 | 1,000 |
| France | 172 | 240 | 250 | 250 | 253 | 258 |
| Germany (Federal) .. | 314 | 413 | 403 | 425 | 250 | 219 |
| Italy | 201 | 246 | 262 | 341 | 180 | 277 |
| Netherlands (e) .. . | 40 | 40 | r 45 | r 85 | 95 | 100 |
| Norway | 107 | 127 | 108 | 103 | 113 | 107 |
| Poland (g) | 256 | r 380 | r 380 | r 390 | 390 | 420 |
| Spain | 6 | 6 | 12 | 25 | 34 | 59 |
| U.S.S.R. (g) | 1,279 | 1,480 | 1,670 | 1,970 | 1,970 | 2,170 |
| Yugoslavia | 25 | 32 | 38 | (g) 39 | (g) 39 | (g) 39 |
| Congo Republic .. . | 482 | 467 | 497 | 524 | 290 | 389 |
| South West Africa (a) .. | 1,200 | 578 | 773 | 780 | 544 | 472 |
| Guatemala | r 25 | n.a. | r 18 | r 39 | 4 | n.a. |
| Mexico (c) | 758 | 565 | 1,162 | 764 | 598 | 713 |
| United States— | | | | | | |
| Metal (d) | 4,318 | r 3,888 | r 4,663 | r 4,672 | 4,972 | 4,460 |
| Peru (f) | 85 | 76 | 107 | 129 | 126 | (g) 200 |
| Japan | 430 | 483 | 559 | 713 | 869 | 996 |
| Philippine Republic .. | — | — | — | — | 1 | 11 |
| TOTAL* | 10,000 | 10,000 | 11,000 | r 12,000 | 12,000 | 12,000 |

*In the case of South West Africa and Mexico the metal is wholly or mainly extracted in other countries and, to avoid duplication, is excluded from the total. A certain amount of duplication in the case of certain other countries, however, is unavoidable.

- (a) Estimated cadmium content of copper-lead-zinc concentrates produced and exported for treatment.
- (b) Metal produced plus cadmium content of concentrates exported.
- (c) Including cadmium content of flue dust, etc., exported for treatment.
- (d) Including secondary. In 1955 secondary (metal and cadmium content of compounds) amounted to 128 long tons.
- (e) Estimate. Source: "Metallgesellschaft".
- (f) Including cadmium content of concentrates.
- (g) Estimate. Source: United States Bureau of Mines.

EXPORTS OF CADMIUM, ETC.

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia and Nyasaland | 35 | 6 | 5 | 5 | 35 | 19 |
| Canada | 564 | 884 | 918 | 888 | 1,045 | 866 |
| Australia | 226 | 143 | 60 | 156 | 194 | 325 |
| OTHER COUNTRIES † | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U. (a) .. | 457 | 679 | 707 | 888 | 828 | 867 |
| France— | | | | | | |
| Cadmium (a) .. | 1 | 5 | 17 | 23 | 21 | 64 |
| Cadmium sulphide .. | 1 | — | — | 5 | 18 | 4 |
| Germany (Federal)— | | | | | | |
| Cadmium (a) .. | 57 | 83 | 106 | 77 | 63 | 48 |
| Cadmium oxide .. | 13 | 21 | 32 | 24 | 32 | 18 |
| Italy— | | | | | | |
| Cadmium (a) .. | 24 | 35 | 23 | 41 | 81 | 3 |
| Cadmium salts .. | 5 | 1 | 21 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Netherlands (a) .. | <i>n.a.</i> | <i>n.a.</i> | 99 | 118 | 174 | 242 |
| Norway | (d) 70 | 133 | 90 | 92 | 86 | 85 |
| Poland | 383 | 340 | 342 | 341 | <i>n.a.</i> | 285 |
| U.S.S.R. | 254 | 314 | 899 | 1,040 | 1,100 | 984 |
| Yugoslavia | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 50 |
| Congo Republic .. | 425 | 576 | (d) 500 | (d) 500 | (d) 300 | (d) 600 |
| South West Africa (b) .. | 1,200 | 578 | 773 | 780 | 544 | 472 |
| Mexico (c) | 695 | 468 | 1,094 | 696 | 534 | 1,073 |
| United States— | | | | | | |
| Metal, alloys, dross, flue dust, etc. | 259 | 402 | 1,093 | 313 | 320 | 586 |
| Peru | 49 | 71 | 71 | 93 | 117 | 147 |
| Japan | 114 | 57 | 4 | 22 | 255 | 1,175 |

(a) Including scrap.

(b) Cadmium content of concentrates exported for treatment.

(c) Including cadmium content of flue dust, etc., exported for treatment.

(d) Estimated.

IMPORTS OF CADMIUM, ETC.

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 824 | 1,127 | 1,389 | 1,149 | 1,157 | 1,380 |
| India | 61 | 96 | (a) 77 | (a) 71 | (a) 41 | (a) 60 |
| Australia (b)— | | | | | | |
| Cadmium salts .. | 1 | 2 | — | — | — | — |
| OTHER COUNTRIES | | | | | | |
| Austria | <i>n.a.</i> | 22 | 17 | 23 | 12 | 15 |
| Belgium-Luxemburg | | | | | | |
| E.U. (c) | 73 | 76 | 112 | 122 | 158 | 481 |
| Denmark | <i>n.a.</i> | 43 | 43 | 42 | 36 | 29 |
| France— | | | | | | |
| Cadmium (c) .. | 438 | 389 | 655 | 641 | 840 | 795 |
| Cadmium sulphide .. | 14 | 14 | 25 | 22 | 18 | 18 |
| Germany (Federal)— | | | | | | |
| Cadmium (c) .. | 521 | 630 | 942 | 797 | 903 | 987 |
| Cadmium oxide .. | 12 | 18 | 20 | 31 | 54 | 62 |
| Italy— | | | | | | |
| Cadmium (c) .. | — | 36 | 92 | 58 | 81 | 73 |
| Cadmium oxide .. | 1 | 5 | 14 | 16 | 23 | 15 |
| Cadmium sulphide .. | 5 | 5 | 10 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Netherlands— | | | | | | |
| Cadmium (c) .. | <i>n.a.</i> | <i>n.a.</i> | 102 | 133 | 213 | 186 |
| Cadmium salts .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 26 | 24 | 48 |
| Sweden | 86 | 137 | 104 | 129 | 102 | 180 |
| U.S.S.R. | 300 | 300 | 283 | 329 | 329 | 255 |
| Yugoslavia .. | 4 | 2 | 1 | 1 | — | — |
| Algeria | — | 1 | 1 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States— | | | | | | |
| Cadmium | 447 | 731 | 420 | 482 | 499 | 342 |
| Flue dust (cadmium content) .. | 544 | 689 | 831 | 107 | 701 | 333 |
| Argentina— | | | | | | |
| Cadmium and salts .. | 1 | 2 | 1 | 5 | 2 | 1 |
| Brazil— | | | | | | |
| Cadmium | 28 | 30 | 16 | 38 | 34 | 46 |
| Cadmium salts .. | — | — | — | — | 1 | — |

(a) Years ended March 31 following that stated.

(c) Including scrap.

(b) Years ended June 30 of that stated.

CEMENT
PRODUCTION OF CEMENT

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 11,666,000 | 12,591,000 | 13,288,000 | 14,149,000 | 14,027,000 | 13,836,000 |
| Kenya | 236,113 | 308,002 | 335,766 | 324,717 | 340,905 | 335,000 |
| Nigeria | (d) 112,990 | 120,700 | 155,000 | r 357,000 | 418,000 | 527,000 |
| Northern Rhodesia .. | 187,000 | 134,000 | 125,000 | 120,000 | 117,000 | 114,000 |
| Nyasaland | 39,000 | 34,219 | 30,000 | 36,000 | n.a. | n.a. |
| Southern Rhodesia .. | 596,000 | 417,000 | n.a. | 275,000 | n.a. | n.a. |
| Uganda | 104,447 | 80,332 | 71,056 | 64,884 | 55,000 | 54,282 |
| Canada (a) | 5,494,126 | 5,611,148 | 5,167,165 | 5,541,025 | 6,141,722 | 6,239,654 |
| Jamaica | 175,400 | 193,600 | 209,069 | 212,303 | 196,520 | 197,550 |
| Trinidad | 147,400 | 177,300 | 174,400 | 96,500 | 162,700 | 159,700 |
| Ceylon | 79,079 | 93,463 | 83,623 | 80,473 | 83,442 | 74,049 |
| Cyprus | 81,676 | 81,760 | 83,722 | 93,098 | 93,695 | 83,457 |
| Hong Kong | 149,966 | 139,820 | 147,620 | 181,341 | 208,591 | 213,198 |
| India | 6,068,000 | 6,825,000 | 7,720,000 | 8,114,000 | 8,450,000 | 9,207,000 |
| Malaya | 108,400 | 189,500 | 281,900 | 327,000 | 320,000 | 355,000 |
| Pakistan | 1,072,000 | 986,000 | 1,120,000 | 1,223,000 | 1,373,000 | 1,474,000 |
| Australia | 2,417,500 | 2,574,600 | 2,747,400 | 2,813,000 | 2,887,000 | 3,070,000 |
| New Zealand | 552,000 | 553,000 | 607,000 | 641,000 | 621,000 | 711,000 |
| TOTAL | 29,290,000 | 31,000,000 | 33,000,000 | 35,000,000 | 36,000,000 | 37,000,000 |
| Irish Republic | 512,660 | 618,462 | 733,602 | 732,528 | 873,459 | 789,041 |
| OTHER COUNTRIES | | | | | | |
| Albania | 77,000 | 73,000 | 72,000 | 118,000 | (c) 118,000 | (c) 150,000 |
| Austria | 2,120,190 | 2,378,330 | 2,785,040 | 3,035,450 | 3,008,830 | 3,259,960 |
| Belgium (b) | 3,993,276 | 4,368,480 | 4,318,620 | 4,678,792 | 4,817,296 | 4,635,000 |
| Bulgaria | 919,000 | 1,410,000 | 1,560,000 | 1,721,000 | 1,863,000 | 2,170,000 |
| Czechoslovakia | 4,045,000 | 4,669,000 | 4,971,000 | 5,259,000 | 5,620,000 | 5,100,000 |
| Denmark— | | | | | | |
| Portland cement .. | 951,000 | 1,214,073 | 1,248,173 | 1,352,952 | 1,401,604 | 1,267,106 |
| Special cements .. | 100,226 | 153,983 | 170,866 | 206,288 | 204,546 | 229,851 |
| Finland | 910,800 | 1,151,400 | 1,232,915 | 1,319,900 | 1,335,900 | 1,396,490 |
| France— | | | | | | |
| Portland cement .. | 9,061,905 | 8,847,996 | 9,134,976 | 9,455,689 | 11,571,177 | } 17,614,000 |
| Portland blast furnace cements .. | 3,026,101 | 3,095,017 | 3,163,445 | 3,126,525 | 2,773,763 | |
| Slag cements | 47,209 | 156,710 | 30,998 | 63,140 | 10,449 | |
| Masonry cements .. | 437,341 | 358,004 | 375,118 | 488,174 | 417,825 | |
| Natural cements .. | 355,324 | 172,606 | 119,177 | 173,931 | 390,596 | |
| Special cements .. | 664,491 | 1,147,519 | 1,111,728 | 1,831,010 | 1,451,948 | |
| Germany (Federal)— | | | | | | |
| Portland cement .. | 13,793,000 | 16,339,000 | 17,778,000 | 19,192,000 | 20,411,000 | 21,179,000 |
| Portland blast furnace cements .. | 4,479,000 | 5,130,000 | 5,849,000 | 6,515,000 | 6,701,000 | 6,723,000 |
| Special cements .. | 811,000 | 1,022,000 | 886,000 | 1,007,000 | 1,029,000 | 854,000 |
| Germany (East) | 3,502,000 | 4,139,000 | 4,953,000 | 5,192,000 | 5,346,000 | 5,372,000 |
| Greece | 1,339,000 | 1,421,000 | 1,558,661 | 1,741,292 | 1,891,000 | 2,240,000 |
| Hungary | 1,281,648 | 1,409,589 | 1,546,278 | 1,576,156 | 1,705,941 | 1,769,200 |
| Iceland | 32,000 | 77,000 | 72,000 | 74,000 | 96,000 | 97,000 |
| Italy | 12,566,394 | 14,105,441 | 15,683,552 | 17,698,986 | 19,838,415 | 21,700,000 |
| Luxemburg | 192,509 | 188,977 | 206,395 | 227,520 | 226,367 | 198,467 |
| Netherlands | 1,344,000 | 1,574,400 | 1,769,100 | 1,872,612 | 1,983,000 | 2,048,000 |
| Norway | 1,014,939 | 1,112,784 | 1,132,962 | 1,254,266 | 1,389,587 | 1,387,165 |
| Poland | 4,978,000 | 5,233,000 | 6,495,000 | 7,248,000 | 7,425,000 | 7,549,000 |

(a) Sold or used by producers. Excluding Portland cement made from imported clinker.

(b) Excluding natural cement.

(c) United States Bureau of Mines' estimate.

(d) Year ended March 31st of year following that stated.

PRODUCTION OF CEMENT (cont.)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|------------|------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Portugal | 1,008,009 | 1,014,731 | 1,182,826 | 1,224,717 | 1,378,759 | 1,410,159 |
| Roumania | 2,531,043 | 2,805,501 | 3,006,200 | 3,255,538 | 3,434,129 | 4,300,000 |
| Saar | 288,000 | 307,000 | (c) | (c) | (c) | (c) |
| Spain— | | | | | | |
| Portland cement | 4,306,789 | 4,565,928 | 4,693,092 | 5,603,290 | 6,187,313 | } 7,032,000 |
| Natural cement | 495,031 | 500,475 | 490,495 | 518,953 | 546,907 | |
| Other cements | 428,662 | 523,108 | 390,417 | 285,762 | 324,655 | |
| Sweden— | | | | | | |
| Portland cement | 2,357,810 | 2,714,338 | 2,745,842 | } 2,964,000 | 3,059,000 | 3,199,000 |
| Other cements | 112,263 | 102,677 | 127,277 | | | |
| Switzerland | 2,150,637 | 2,640,792 | 2,988,196 | 3,544,292 | 3,667,018 | 3,524,768 |
| U.S.S.R. | 32,780,000 | 38,171,000 | 44,801,000 | 50,194,000 | 56,394,000 | 60,036,000 |
| Yugoslavia | 1,936,000 | 2,185,000 | 2,360,000 | 2,299,000 | 2,478,000 | 2,781,000 |
| Algeria | 808,900 | 941,500 | 1,045,000 | 1,054,800 | 631,600 | 869,900 |
| Angola | 163,203 | 152,349 | 158,603 | 154,051 | 166,721 | 190,962 |
| Cameroun | 11,000 | (e) 11,000 | — | — | — | — |
| Canary Islands | 5,493 | 49,389 | 68,239 | 115,284 | 120,058 | (h) |
| Cape Verde Islands | 3,000 | 9,000 | 4,000 | 7,000 | (e) 7,000 | (e) 7,000 |
| Congo Republic | 385,260 | 339,925 | (f) 200,000 | 140,000 | (f) 150,000 | (f) 150,000 |
| Egypt | 1,487,000 | 1,756,000 | 2,015,000 | r 2,026,000 | 2,197,000 | 2,470,000 |
| Ethiopia (d) | 31,000 | 24,829 | 31,304 | 32,647 | 40,000 | 33,000 |
| Morocco | 396,200 | 493,300 | 570,700 | 620,400 | 687,200 | 747,300 |
| Mozambique | 177,604 | 209,996 | 219,000 | 208,828 | 176,335 | 164,849 |
| Senegal | 147,000 | 168,000 | 165,100 | 179,100 | 180,300 | 186,600 |
| Sudan | 88,000 | 98,000 | 119,000 | 82,000 | 84,000 | (e) 98,000 |
| Tunisia | 339,500 | 434,900 | 398,600 | 353,500 | 356,819 | 355,000 |
| South Africa | 2,678,635 | 2,605,000 | 2,662,000 | 2,557,420 | 2,616,870 | 2,838,820 |
| Cuba | 710,000 | 653,000 | n.a. | n.a. | n.a. | n.a. |
| Dominican Republic | 265,324 | 186,520 | 166,984 | 233,023 | 238,912 | 224,566 |
| Guatemala (f) | 120,000 | 93,000 | 96,000 | 104,000 | 98,000 | n.a. |
| Haiti | 36,549 | 38,067 | 52,130 | 49,104 | 55,712 | 49,687 |
| Honduras | — | 10,000 | 31,000 | 36,300 | 54,060 | 59,000 |
| Mexico | 2,498,642 | 2,666,064 | 3,040,339 | 2,987,149 | 3,299,000 | 3,615,732 |
| Nicaragua | 39,293 | 36,919 | 31,787 | 38,402 | 45,181 | 52,962 |
| Panama Republic | 66,000 | 96,000 | 107,000 | 112,000 | 106,000 | (e) 106,000 |
| Salvador | 85,788 | 81,763 | 84,970 | 73,568 | 64,082 | 77,030 |
| United States (a)— | | | | | | |
| Portland cement | 52,282,600 | 56,918,800 | 53,547,900 | 54,404,800 | 56,481,900 | 59,176,900 |
| Prepared masonry cement (b) | 2,410,600 | 2,720,100 | 2,442,800 | 2,398,500 | 2,518,500 | 2,602,800 |
| Natural, slag and hydraulic lime cements | 87,300 | 73,500 | 95,300 | 37,800 | 73,900 | 59,900 |
| Argentina | 2,432,000 | 2,330,000 | r 2,597,191 | r 2,860,355 | 2,901,866 | 2,486,208 |
| Bolivia | 28,454 | 28,990 | 12,166 | 43,809 | 48,646 | 63,382 |
| Brazil | 3,729,742 | 3,780,115 | 4,403,623 | 4,636,341 | 4,892,170 | 5,102,000 |
| Chile | 715,000 | 819,788 | 822,223 | 869,325 | 1,058,558 | 1,150,752 |
| Colombia | 1,194,100 | 1,326,335 | 1,363,048 | r 1,567,000 | 1,718,393 | 1,806,000 |
| Ecuador | 157,307 | 154,449 | 197,640 | 215,704 | 191,005 | 238,000 |
| Paraguay | 7,287 | 7,100 | 14,000 | 16,000 | 17,000 | 19,000 |
| Peru | 595,387 | 572,835 | r 590,219 | 590,218 | 689,503 | 742,000 |
| Uruguay | 426,000 | 415,000 | 408,000 | 383,000 | 368,000 | 335,000 |
| Venezuela | 1,589,998 | 1,842,116 | 1,463,523 | 1,489,526 | 1,485,053 | 1,545,051 |
| Afghanistan (g) | — | 33,000 | 36,000 | 40,000 | (e) 69,000 | 93,000 |
| Burma | 30,021 | 35,630 | 44,194 | 38,945 | 52,440 | 122,000 |
| China | 9,200,000 | 12,080,000 | 12,500,000 | 7,900,000 | 7,900,000 | 8,858,000 |
| Formosa | 994,225 | 1,055,435 | 1,160,000 | 1,480,000 | 1,840,000 | 2,210,000 |
| Indonesia | 294,000 | 339,000 | 381,000 | 438,000 | 503,000 | (e) 500,000 |

- (a) Including Puerto Rico.
- (b) Excluding masonry cement produced by companies purchasing Portland cement for reprocessing.
- (c) Included with Germany (Federal).
- (d) Years ended September 10 of that stated.
- (e) United States Bureau of Mines' estimate.
- (f) Estimated.
- (g) Years ended March 20 of year following that stated.
- (h) Included with Spain.

PRODUCTION OF CEMENT (cont.)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Iran (c) | 403,642 | 569,668 | 784,666 | 733,000 | (a) 730,000 | (a) 730,000 |
| Iraq | (b) 650,120 | (a) 600,000 | 786,836 | 906,160 | 878,247 | (a) 900,000 |
| Israel | 701,681 | 768,644 | 792,785 | 832,918 | 938,540 | 1,010,000 |
| Japan | 14,748,000 | 16,996,000 | 22,183,000 | 24,243,000 | 28,332,000 | 29,475,000 |
| Jordan | 112,365 | 108,529 | 162,206 | 219,602 | 231,561 | 280,772 |
| Korea (South) | 290,983 | 352,204 | 424,052 | 514,575 | 777,270 | 766,006 |
| Korea (North) | 1,244,000 | 1,896,000 | 2,249,000 | 2,226,000 | 2,338,000 | 2,490,000 |
| Lebanon | 498,510 | 731,698 | 840,254 | 860,639 | 609,644 | 882,457 |
| Philippine Republic | 633,177 | 715,677 | 782,461 | 1,002,951 | 945,605 | 936,295 |
| Saudi Arabia | n.a. | (d) 74,000 | (d) 89,000 | 103,000 | 150,000 | (d) 150,000 |
| Syria | 402,000 | 441,000 | 481,000 | 531,000 | 597,000 | 674,000 |
| Thailand | 449,000 | 502,000 | 518,000 | 797,000 | 950,000 | 980,000 |
| Turkey | 1,492,562 | 1,706,659 | 2,005,611 | 1,995,971 | 2,279,961 | 2,642,000 |
| Vietnam (North) | 297,000 | 375,200 | 399,300 | (d) 450,000 | (d) 455,000 | (d) 490,000 |
| TOTAL (a) | 229,000,000 | 259,000,000 | 278,000,000 | 294,000,000 | 316,000,000 | 333,000,000 |
| WORLD'S TOTAL (a) | 258,000,000 | 290,000,000 | 311,000,000 | 329,000,000 | 352,000,000 | 370,000,000 |

(a) Estimated.

(b) Years ended March 31 of year following that stated.

(c) Years ended March 20 of year following that stated.

(d) United States Bureau of Mines' estimate.

CHINA CLAY
PRODUCTION OF CHINA CLAY

Long ton

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 1,212,981 | 1,312,353 | 1,638,282 | 1,717,669 | 1,696,569 | 1,886,924 |
| Kenya | 1,185 | 1,143 | 1,036 | 729 | 1,155 | 6,558 |
| Nigeria | 75 | 5 | 4 | — | 5 | 15 |
| Southern Rhodesia | — | — | 5,905 | 18,202 | — | 10,929 |
| Swaziland | — | — | — | 52 | 2,448 | 1,975 |
| Tanganyika | 98 | 77 | 219 | 155 | 156 | 179 |
| Hong Kong | 7,621 | 7,256 | 6,663 | 8,430 | 6,374 | 5,019 |
| India | 182,136 | r 272,729 | r 357,178 | r 365,429 | 383,559 | 397,811 |
| Malaya | 1,200 | 1,282 | 1,223 | 1,571 | 3,459 | 1,176 |
| Pakistan | n.a. | n.a. | 73 | 706 | 20 | n.a. |
| Australia | 37,099 | 36,974 | 48,195 | r 51,088 | 36,070 | 50,709 |
| OTHER COUNTRIES | | | | | | |
| Austria (crude) | 295,523 | 292,883 | 317,991 | 338,461 | 331,080 | 343,829 |
| Belgium | n.a. | n.a. | 39,711 | 254,000 | 205,000 | n.a. |
| Czechoslovakia | 255,000 | 257,000 | 269,000 | 295,000 | 314,000 | n.a. |
| Denmark— | | | | | | |
| Crude | 6,490 | (c) 6,113 | (c) 6,205 | (c) 7,649 | (c) 7,278 | (c) 11,871 |
| Washed and pressed | 5,532 | (c) 4,331 | (c) 4,826 | (c) 4,169 | (c) 3,254 | n.a. |
| Washed waste | 4,099 | (c) 5,964 | (c) 5,774 | (c) 7,562 | (c) 9,977 | (c) 5,069 |
| France | 136,000 | 142,000 | 134,000 | 143,000 | n.a. | 130,000 |
| Germany (Federal) | r 361,049 | r 334,445 | r 338,767 | r 367,579 | 377,020 | 381,620 |
| Greece | 17,000 | 2,500 | 26,000 | 24,800 | n.a. | n.a. |
| Hungary | 32,100 | 32,779 | 42,803 | 41,694 | 40,173 | n.a. |
| Italy— | | | | | | |
| Crude | 59,492 | 57,120 | r 63,024 | 84,793 | n.a. | n.a. |
| Kaolinic earth | 54,480 | 39,901 | 45,312 | 28,819 | n.a. | n.a. |
| Portugal— | | | | | | |
| Crude | 34,066 | 16,759 | } 46,126 | 48,894 | 42,803 | 37,385 |
| Washed | 24,735 | 26,870 | | | | |
| Spain (crude) | 89,460 | 114,133 | 110,589 | 124,889 | 165,143 | n.a. |
| Sweden (b) | (d) 907 | 19,375 | 26,307 | 26,700 | 25,841 | n.a. |
| Yugoslavia | n.a. | 16,000 | n.a. | n.a. | 4,500 | 4,000 |
| Egypt | 8,964 | 11,041 | 20,000 | 27,000 | 13,363 | 20,677 |
| Eritrea | 1,000 | 5,000 | 2,000 | 4,000 | 1,000 | n.a. |
| Mozambique | 49 | 118 | 113 | r 118 | 177 | 5 |
| South Africa | 23,743 | 17,887 | 26,073 | 23,637 | 28,005 | (b) 33,812 |
| United States (a) | 1,984,094 | 2,263,816 | 2,437,903 | 2,446,264 | 2,676,926 | 2,824,619 |
| Argentina | 18,684 | 28,000 | 40,383 | 35,840 | 46,809 | n.a. |
| Chile | n.a. | n.a. | 8,000 | 14,000 | 29,000 | 36,316 |
| Colombia | 4,000 | 15,000 | 20,000 | r 50,000 | 70,000 | 75,000 |
| Ecuador | 709 | 709 | 311 | 536 | 371 | 346 |
| Peru | 48 | 121 | 592 | 459 | 344 | 289 |
| Formosa | 5,000 | 5,000 | n.a. | n.a. | n.a. | n.a. |
| Iran (e) | 463 | 2,160 | 4,200 | 3,000 | n.a. | n.a. |
| Japan | 21,035 | 20,537 | 20,943 | 29,844 | 70,725 | 97,662 |
| Korea (South) | 21,224 | 42,137 | 50,422 | 50,369 | 37,590 | 51,437 |
| Vietnam (North) | 1,000 | 1,000 | 2,000 | n.a. | 4,000 | n.a. |

China clay is known to have been produced in Bulgaria, East Germany, Roumania, U.S.S.R., Mexico, Brazil, China, Israel, Indonesia and Thailand.

(a) Sold or used by producers.

(c) Production in major establishments only.

(b) Sales

(d) Washed.

(e) Years ended March 20 of year following that stated.

EXPORTS OF CHINA CLAY

Long tons

| Exporting Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|---------|---------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 754,153 | 834,903 | 1,003,923 | 1,117,440 | 1,100,672 | 1,251,387 |
| Tanganyika | 5 | 42 | 70 | 74 | 90 | — |
| Hong Kong | 4,920 | 4,292 | 7,474 | 5,805 | 4,756 | 4,220 |
| India | 283 | 302 | (b) 217 | (b) 744 | (b) 474 | (b) 208 |
| Malaya | 81 | 83 | 97 | 79 | 70 | 74 |
| OTHER COUNTRIES | | | | | | |
| Austria | 31,549 | 27,190 | 31,712 | 35,091 | 38,465 | 38,538 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 2 | 29 | 76 | 133 | 116 | 323 |
| Czechoslovakia | 112,000 | 131,000 | 142,000 | 148,000 | 150,000 | <i>n.a.</i> |
| Denmark | 318 | 1,370 | 1,294 | 1,249 | 1,068 | 204 |
| France | 8,368 | 21,969 | 39,209 | 45,559 | 51,523 | 51,137 |
| Germany (Federal) | 23,607 | 20,372 | 26,595 | 33,300 | 37,793 | 51,476 |
| Greece | 886 | 1,772 | 1,842 | 3,407 | <i>n.a.</i> | <i>n.a.</i> |
| Italy | 322 | 37 | 135 | 93 | 108 | 267 |
| Netherlands | (a) 545 | (a) 558 | 597 | 226 | 44 | 96 |
| Portugal | 15,252 | 18,670 | 18,152 | 19,170 | 15,490 | 12,799 |
| Spain | 3,098 | 3,731 | 6,837 | 13,717 | 9,119 | 3,312 |
| Sweden | — | — | 18 | 159 | 10 | 11 |
| U.S.S.R. | 989 | 91,630 | <i>n.a.</i> | <i>n.a.</i> | 394 | 3,149 |
| Morocco | 25 | — | — | 7 | — | — |
| United States | 59,303 | 66,727 | 71,397 | 88,201 | 106,152 | 111,717 |
| Argentina | 197 | 198 | — | — | — | 59 |
| Brazil | 226 | 10 | 108 | 332 | 98 | 197 |
| Japan | 1,166 | 196 | 1,385 | 2,390 | 5,142 | 2,998 |
| Korea (South) | 13,387 | 5,098 | 12,117 | 12,063 | 7,619 | 13,626 |

(a) Including pipe clay.

(b) Years ended March 31 following that stated.

IMPORTS OF CHINA CLAY

Long tons

| Importing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|------------|------------|---------|---------|---------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | 116,278 | 121,194 | 119,273 | 129,879 | 139,688 | 155,141 |
| Hong Kong | 80 | 77 | 1,019 | 167 | 349 | — |
| India | 5,809 | 4,288 | 7,286 | 10,501 | 6,588 | 6,082 |
| Malaya | 31 | 122 | 119 | 212 | 237 | 395 |
| Pakistan | 4,040 | 2,424 | 3,737 | 5,631 | 9,065 | 1,416 |
| Australia | 2,502 | 14,654 | 9,093 | 14,890 | 12,389 | 22,119 |
| New Zealand | 1,261 | 1,368 | 1,914 | 1,978 | 1,693 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria | 2,279 | 6,159 | 6,745 | 7,173 | 8,546 | 9,312 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 39,907 | 40,938 | 45,711 | 43,810 | 45,537 | 51,494 |
| Denmark | 25,984 | 21,175 | 28,261 | 30,152 | 30,932 | 31,093 |
| Finland | 61,870 | 57,007 | 91,471 | 101,276 | 105,865 | 111,736 |
| France | 99,374 | 90,984 | 122,712 | 125,386 | 149,566 | 181,302 |
| Germany (Federal) | 184,706 | 229,858 | 267,868 | 287,664 | 294,688 | 333,271 |
| Italy | 94,361 | 110,905 | 158,135 | 183,183 | 202,408 | 224,047 |
| Netherlands | (b) 78,020 | (b) 98,291 | 111,578 | 108,386 | 100,105 | 110,399 |
| Norway | 33,874 | 38,887 | 47,152 | 56,253 | 48,384 | 66,739 |
| Poland | 65,000 | 62,800 | 70,000 | 72,600 | n.a. | 79,721 |
| Portugal | 144 | 133 | 169 | 802 | 222 | 277 |
| Spain | 1,984 | 571 | 3,231 | 3,463 | 7,242 | 3,308 |
| Sweden | 80,882 | 94,403 | 116,392 | 121,770 | 128,948 | 136,444 |
| Yugoslavia | 9,006 | 6,402 | 6,883 | 8,386 | 16,944 | 20,486 |
| Algeria | 3,306 | 3,220 | 3,700 | n.a. | n.a. | n.a. |
| Angola | 13 | — | 17 | 40 | 37 | 97 |
| Morocco | 1,724 | 2,023 | 2,395 | 1,885 | 1,446 | 4,247 |
| Mozambique | 19 | 33 | 19 | 38 | n.a. | n.a. |
| South Africa (a) | 1,860 | 3,739 | 3,678 | 3,911 | n.a. | n.a. |
| Tunisia | 13 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Costa Rica | n.a. | n.a. | 1,822 | 381 | 855 | 1,203 |
| Guatemala | n.a. | 2,686 | 2,369 | 1,219 | 241 | n.a. |
| Mexico | 3,840 | 9,904 | 11,345 | 7,744 | 8,299 | 9,943 |
| United States | 120,296 | 126,014 | 113,677 | 118,251 | 99,954 | 95,717 |
| Argentina | 1,745 | 637 | 5,121 | 6,113 | 5,330 | 6,353 |
| Brazil | 40 | 107 | 122 | 399 | 195 | 233 |
| Chile | 124 | 146 | 63 | 113 | 113 | n.a. |
| Colombia | 586 | 678 | 762 | 2,205 | 3,078 | 3,368 |
| Ecuador | 6 | 55 | n.a. | 35 | 29 | n.a. |
| Peru | 492 | 532 | 478 | 401 | 552 | 555 |
| Uruguay | 798 | 1,969 | 2,276 | n.a. | n.a. | n.a. |
| Venezuela | n.a. | 2,875 | 2,914 | 4,135 | 6,306 | 4,078 |
| Indonesia | 753 | 909 | 1,640 | 2,722 | n.a. | n.a. |
| Iran (c) | 264 | n.a. | 186 | n.a. | n.a. | 281 |
| Japan | 14,277 | 14,811 | 31,687 | 36,178 | 35,407 | 48,291 |
| Philippine Republic | 765 | 1,930 | 3,075 | 2,847 | 1,331 | 2,237 |
| Turkey | 110 | 838 | 15 | 4 | 1 | 66 |

(a) Including Cornish or China stone.

(c) Years ended March 20 following that stated.

(b) Including pipe clay.

CHROME ORE AND CHROMIUM

PRODUCTION OF CHROME ORE

Long tons

| Producing Country | Estimated Cr ₂ O ₃ content | | | | | | |
|-------------------------------|--|------------|------------|-------------|-------------|-------------|---------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1963 |
| COMMONWEALTH COUNTRIES | | | | | | | |
| Sierra Leone .. | 14,236 | 17,834 | 5,378 | 1,337 | (c) 9,350 | 2,738 | 1,000 |
| Southern Rhodesia .. | 552,540 | 484,918 | 596,791 | 527,581 | 453,294 | 368,210 | 177,000 |
| Cyprus (a) .. | 11,274 | 13,427 | 19,977 | 17,698 | 6,435 | 4,831 | 2,000 |
| India .. | 62,947 | r 94,086 | 98,531 | 45,201 | 65,595 | 63,767 | 3,000 |
| Pakistan .. | r 24,049 | 16,023 | 18,094 | 25,103 | 28,345 | 14,306 | 30,600 |
| Australia .. | 776 | 120 | 529 | — | 369 | 160 | 7,000 |
| TOTAL | r 665,822 | r 626,408 | 739,300 | r 616,920 | 563,000 | 454,012 | 185 |
| OTHER COUNTRIES | | | | | | | |
| Albania .. | 198,000 | 243,100 | 281,500 | 230,000 | 250,000 | 289,000 | n.a. |
| Greece .. | 64,479 | 64,262 | 44,969 | 76,624 | 78,750 | n.a. | n.a. |
| U.S.S.R. (e) .. | 790,000 | 840,000 | 902,000 | 906,000 | 1,130,000 | 1,210,000 | n.a. |
| Yugoslavia .. | 111,775 | 105,326 | 98,993 | 106,418 | 95,512 | 92,289 | n.a. |
| Egypt .. | — | 246 | 295 | 1,366 | — | — | — |
| Malagasy Republic .. | — | — | — | 10,300 | 19,000 | 11,000 | n.a. |
| South Africa .. | 621,483 | 669,534 | 759,751 | 883,683 | 898,369 | 779,654 | 400,000 |
| Sudan .. | — | — | — | — | 8,000 | 17,000 | n.a. |
| Cuba .. | (e) 73,900 | (h) 39,046 | (h) 29,262 | (e) 24,600 | (e) 35,000 | (e) 49,800 | n.a. |
| Guatemala .. | 1,044 | 404 | 178 | 100 | 38 | — | n.a. |
| United States (f) .. | 128,388 | (g) 94,113 | (g) 95,282 | (g) 73,000 | — | — | n.a. |
| Argentina .. | 148 | 6,126 | n.a. | n.a. | n.a. | 51,227 | n.a. |
| Brazil .. | 5,207 | n.a. | 5,577 | 15,212 | 24,447 | 43,344 | n.a. |
| Colombia .. | — | — | — | r 182 | 138 | 108 | n.a. |
| Iran (d) .. | 47,891 | 65,292 | 67,000 | 72,600 | 108,000 | (e) 98,000 | n.a. |
| Japan .. | 41,210 | 56,766 | 66,423 | 69,063 | 57,165 | 43,040 | n.a. |
| Philippine Republic .. | 409,735 | 643,166 | 722,840 | 630,189 | 522,896 | 451,870 | n.a. |
| Turkey .. | 512,674 | 381,539 | 472,045 | (f) 396,369 | (b) 460,000 | (b) 398,000 | n.a. |
| New Caledonia .. | 46,700 | 43,271 | 38,542 | 36,083 | 15,211 | — | n.a. |
| TOTAL | 3,100,000 | 3,300,000 | 3,600,000 | 3,500,000 | 3,700,000 | 3,600,000 | — |
| WORLD'S TOTAL | 3,700,000 | 3,900,000 | 4,300,000 | 4,100,000 | 4,300,000 | 4,000,000 | — |

Chrome ore is also produced in Bulgaria, Roumania and North Vietnam.

(a) Figures relate to saleable production.

(b) Estimated.

(c) Years ended March 20 following that stated. Probably partial production only.

(d) Shipments from mine.

(e) Produced for Federal Government only. Excludes quantity consumed by American Chrome Company.

(f) Imports into the United States.

(g) Including saleable production only of metallurgical chromite.

(c) Exports.

(e) United States Bureau of Mines' estimate.

(f) Shipments from mine.

(g) Produced for Federal Government only. Excludes quantity consumed by American Chrome Company.

(h) Including saleable production only of metallurgical chromite.

(i) Exports.

(j) United States Bureau of Mines' estimate.

EXPORTS OF CHROME ORE, ETC.

Long ton

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Chromium metal .. | 466 | 994 | 1,025 | 315 | 267 | 442 |
| Rhodesia & Nyasaland— | | | | | | |
| Ore | 367,037 | 492,304 | 482,715 | 424,993 | 385,430 | 275,217 |
| Ferro-chrome | 6,384 | 9,651 | r 9,221 | 8,920 | 7,839 | 9,838 |
| Sierra Leone— | | | | | | |
| Ore | 11,211 | 5,011 | 14,719 | 8,988 | 9,357 | 8,700 |
| Canada— | | | | | | |
| Ferro-chrome | 9,339 | 6,709 | 4,117 | 1,466 | 5,895 | 2,598 |
| Cyprus— | | | | | | |
| Ore and concentrates .. | 11,840 | 12,176 | 14,020 | 18,820 | 9,526 | 400 |
| India— | | | | | | |
| Ore | 48,624 | 80,362 | (a) 29,861 | (a) 41,034 | (a) 17,241 | (a) 11,469 |
| Pakistan— | | | | | | |
| Ore | 12,447 | 13,775 | 10,880 | 12,942 | 9,648 | 3,893 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 1,445 | 158 | 246 | 623 | 632 | 407 |
| France— | | | | | | |
| Chromium metal .. | 639 | 580 | 527 | 409 | 189 | 273 |
| Ferro-chrome | 10,623 | 21,000 | 18,526 | 16,218 | 15,070 | 17,605 |
| Germany (Federal)— | | | | | | |
| Ore | 569 | 574 | 521 | 7,190 | 778 | 1,445 |
| Chromium metal .. | 443 | 260 | 143 | 174 | 47 | 54 |
| Greece— | | | | | | |
| Ore | 29,208 | 20,783 | 28,595 | 27,945 | 19,228 | 15,085 |
| Italy— | | | | | | |
| Ore | — | — | 2 | — | — | 1,476 |
| Ferro-chrome | 5 | 8,743 | 7,488 | 10,797 | 2,276 | 1,942 |
| Netherlands— | | | | | | |
| Ore | 73 | 104 | 289 | 412 | 1,103 | 1,453 |
| Norway— | | | | | | |
| Ferro-chrome | 14,307 | 30,604 | 34,097 | 21,252 | 16,797 | 27,043 |
| Ferro-silico-chrome .. | n.a. | 2,256 | 6,950 | 3,158 | 2,631 | 4,692 |
| Sweden— | | | | | | |
| Ore | — | — | 3 | — | — | n.a. |
| Ferro-chrome | 9,871 | 15,597 | 15,592 | 18,656 | 17,057 | 22,613 |
| U.S.S.R.— | | | | | | |
| Ore | 211,600 | 267,700 | 420,300 | 431,000 | 464,500 | 558,045 |
| Ferro-chrome | 19,700 | 18,400 | 21,800 | 21,400 | 15,700 | 3,051 |
| Yugoslavia— | | | | | | |
| Ore and concentrates .. | 14,180 | 24,507 | 19,675 | 5,538 | 29,668 | 23,142 |
| Ferro-chrome | 7,611 | 7,871 | 8,822 | 7,303 | 5,763 | 7,184 |
| Egypt— | | | | | | |
| Ore | 5 | 5 | n.a. | n.a. | n.a. | n.a. |
| Malagasy Republic— | | | | | | |
| Ore | — | — | — | 4,925 | 18,706 | 12,795 |
| South Africa— | | | | | | |
| Ore | 540,870 | 599,513 | 743,827 | 846,685 | 779,084 | 578,170 |
| Cuba— | | | | | | |
| Ore | 54,349 | 25,530 | 24,400 | 29,298 | n.a. | n.a. |
| Guatemala— | | | | | | |
| Ore | — | 445 | n.a. | n.a. | n.a. | n.a. |
| United States— | | | | | | |
| Ore | 640 | 9,893 | 4,629 | 9,343 | 2,398 | 8,684 |
| Chromium metal .. | 53 | 10 | 56 | 13 | 16 | 10 |
| Ferro-chrome | 1,714 | 5,470 | 13,918 | 7,004 | 2,745 | 2,354 |
| Iran (b)— | | | | | | |
| Ore | 36,642 | 44,395 | 36,789 | 66,601 | n.a. | 72,593 |

(a) Years ended March 31 following that stated.

(b) Years ended March 20 following that stated.

EXPORTS OF CHROME ORE, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Japan— | | | | | | |
| Ferro-chrome | 4,081 | 17,273 | 14,533 | 15,911 | 12,288 | 7,838 |
| Philippine Republic— | | | | | | |
| Ore and concentrates .. | 390,560 | 735,250 | 783,346 | 621,466 | 435,306 | 476,158 |
| Turkey— | | | | | | |
| Ore | 507,854 | 301,050 | 380,130 | 382,541 | 344,054 | 209,305 |
| New Caledonia— | | | | | | |
| Ore | 41,096 | 44,041 | 44,154 | 21,750 | 14,773 | 17,672 |

IMPORTS OF CHROME ORE, ETC.

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|---------|---------|---------|---------|---------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore | 178,236 | 165,092 | 292,169 | 256,918 | 116,341 | 158,971 |
| Ferro-chrome | 25,764 | 31,901 | 46,606 | 42,358 | 24,510 | 34,458 |
| Ferro-silicon-chrome .. | 1,744 | 1,623 | 3,595 | 2,984 | 3,043 | 3,848 |
| Canada— | | | | | | |
| Ore | 34,051 | 43,462 | 52,699 | 63,632 | 64,258 | 44,334 |
| India— | | | | | | |
| Ore | — | — | 4,804 | 2,806 | 1,500 | — |
| Ferro-chrome | 131 | 271 | (a) 410 | (a) 803 | (a) 656 | (a) 477 |
| Australia— | | | | | | |
| Ore | 8,772 | 6,381 | 21,259 | 17,049 | 8,538 | 16,128 |
| Ferro-chrome | 1,892 | 2,824 | 5,714 | 4,133 | 1,974 | 2,713 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 54,849 | 52,290 | 58,899 | 82,060 | 61,551 | 46,413 |
| Ferro-chrome | 5,927 | 11,254 | 14,009 | 11,660 | 9,523 | 12,073 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 472 | 491 | 697 | 1,107 | 449 | 1,015 |
| Chromium metal | 8 | 6 | 14 | 9 | 14 | 71 |
| Ferro-chrome and silico- chrome | 2,031 | 2,759 | 4,258 | 4,161 | 4,672 | 4,469 |
| Denmark— | | | | | | |
| Ferro-chrome | 236 | 321 | 450 | 437 | 413 | 308 |
| Finland— | | | | | | |
| Ferro-chrome | 815 | 1,109 | 1,402 | 1,649 | 1,153 | 995 |
| France— | | | | | | |
| Ore | 103,969 | 151,202 | 185,677 | 194,624 | 158,279 | 151,235 |
| Ferro-chrome | 19 | 12 | 285 | 361 | 942 | 889 |
| Germany (Federal)— | | | | | | |
| Ore | 255,249 | 263,392 | 355,881 | 319,040 | 224,520 | 171,740 |
| Chromium metal | 6 | 8 | 40 | 48 | 38 | 74 |
| Germany (East)— | | | | | | |
| Ore (b) | 19,815 | 21,441 | 25,630 | 25,740 | 34,310 | 16,250 |
| Hungary— | | | | | | |
| Ore | 31,543 | 21,470 | 25,328 | 28,899 | 26,323 | 35,373 |
| Ferro-chrome | 1,754 | 2,130 | 2,260 | 3,419 | 4,035 | 5,632 |
| Italy— | | | | | | |
| Ore | 19,821 | 53,348 | 69,885 | 74,341 | 55,611 | 44,031 |
| Chromium metal | 33 | 5 | 19 | 19 | 18 | 29 |
| Ferro-chrome | 6,132 | 8,359 | 15,091 | 14,157 | 10,217 | 14,753 |
| Netherlands— | | | | | | |
| Ore | 569 | 708 | 1,235 | 844 | 2,302 | 2,657 |
| Chromium metal | n.a. | n.a. | 5 | 10 | 14 | 16 |
| Ferro-chrome | 244 | 290 | 499 | 302 | 438 | 376 |
| Norway— | | | | | | |
| Ore | 46,293 | 72,432 | 92,332 | 99,934 | 49,946 | 31,755 |
| Poland— | | | | | | |
| Ore | 63,000 | 60,900 | 99,100 | 123,000 | n.a. | 83,953 |
| Spain— | | | | | | |
| Ore | n.a. | n.a. | n.a. | 16,280 | 19,348 | 14,889 |
| Ferro-chrome | 402 | 950 | 581 | 1,314 | 1,656 | 1,873 |
| Sweden— | | | | | | |
| Ore | 59,545 | 108,768 | 138,723 | 105,184 | 104,136 | 113,336 |
| Chromium metal | n.a. | 50 | 115 | 75 | 32 | 105 |
| Ferro-chrome | 2,398 | 6,318 | 13,164 | 7,288 | 3,060 | 4,075 |
| Yugoslavia— | | | | | | |
| Ore | 32,070 | 4,923 | 22,715 | 15,638 | 36,282 | 58,040 |
| Mexico— | | | | | | 853 |
| Ferro-chrome | n.a. | n.a. | 222 | 674 | 630 | |

(a) Years ended March 31 following that stated.

 (b) Cr₂O₃ content.

IMPORTS OF CHROME ORE, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES (cont.) | | | | | | |
| United States— | | | | | | |
| Ore | 1,128,069 | 1,387,094 | 1,238,055 | 1,186,724 | 1,290,692 | 1,242,068 |
| (Cr ₂ O ₃ content) .. | 486,113 | 594,163 | 509,881 | 505,233 | 547,832 | 540,490 |
| Ferro-chrome (Cr content) | 14,255 | 57,202 | 30,523 | 16,694 | 22,144 | 17,808 |
| Metal and alloys .. | 2,077 | 2,558 | 811 | 618 | 578 | 860 |
| Brazil— | | | | | | |
| Ore | — | 14 | 8,102 | 1,719 | 4,148 | — |
| Ferro-chrome | 250 | 269 | 585 | 881 | 895 | 985 |
| Chile— | | | | | | |
| Ferro-chrome | 19 | 5 | 25 | 97 | 60 | n.a. |
| Japan— | | | | | | |
| Ore | 73,414 | 256,852 | 274,723 | 319,367 | 250,856 | 222,938 |
| Ferro-chrome | 51 | — | 2 | 1,006 | 530 | 2,008 |
| Turkey— | | | | | | |
| Ferro-chrome | 403 | 4 | 14 | 16 | 46 | 56 |

COAL, COKE AND BY-PRODUCTS

PRODUCTION OF COAL (Including Brown Coal and Lignite)

Long ton

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|--------------------|---------------------|--------------------|---------------------|--------------------|--------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Great Britain— | | | | | | |
| Mined— | | | | | | |
| Anthracite | 3,179,300 | 2,949,700 | 2,875,200 | 2,779,800 | 3,136,200 | 3,327,000 |
| Bituminous | 198,295,800 | 192,323,400 | 183,176,300 | 179,157,500 | 186,192,300 | 186,329,700 |
| Opencast— | | | | | | |
| Anthracite | 765,900 | 656,100 | 719,800 | 767,400 | 766,100 | 832,200 |
| Bituminous | 13,581,100 | 10,177,000 | 6,832,900 | 7,760,600 | 7,341,500 | 5,305,700 |
| Northern Ireland— | | | | | | |
| Bituminous | 2,971 | 5,362 | 4,965 | 12,527 | 12,165 | 9,115 |
| Nigeria— | | | | | | |
| Sub-bituminous | 924,419 | 741,757 | 561,995 | 597,365 | 623,948 | 586,130 |
| Southern Rhodesia— | | | | | | |
| Bituminous | 3,479,661 | 3,699,277 | 3,503,103 | 3,024,371 | 2,781,230 | 2,697,222 |
| Swaziland— | | | | | | |
| Anthracite | — | 1,423 | 11,469 | 964 | — | — |
| Tanganyika— | | | | | | |
| Bituminous | 1,109 | 1,739 | 2,264 | 2,302 | 3,024 | 2,051 |
| Canada— | | | | | | |
| Bituminous | 6,918,115 | 6,201,303 | 6,517,646 | 6,095,762 | 5,831,511 | 6,292,719 |
| Sub-bituminous | 1,505,040 | 1,548,110 | 1,375,515 | 1,215,804 | 1,336,760 | 1,477,047 |
| Lignite | 2,011,764 | 1,738,732 | 1,938,212 | 1,972,188 | 2,014,559 | 1,672,818 |
| India— | | | | | | |
| Bituminous | r45,328,186 | r47,046,078 | 51,762,147 | 55,180,089 | 60,401,000 | 64,886,000 |
| Lignite | r 18,726 | r 32,639 | 46,204 | 62,758 | 207,420 | 976,055 |
| Pakistan— | | | | | | |
| Lignite | 596,499 | r 732,634 | r 817,197 | r 900,860 | 979,327 | 1,223,000 |
| Malaya— | | | | | | |
| Sub-bituminous | 66,452 | 75,634 | 6,847 | — | — | — |
| Australia— | | | | | | |
| Semi-anthracite | 57,196 | 54,066 | 50,095 | 58,579 | 70,012 | 62,000 |
| Bituminous | 18,615,606 | 18,576,508 | 20,640,884 | 21,991,221 | 22,012,145 | 22,274,000 |
| Sub-bituminous | 1,769,049 | 1,667,868 | 1,877,981 | 1,956,258 | 2,399,166 | 2,521,000 |
| Brown coal | 11,643,629 | 13,034,605 | 14,967,202 | 16,279,569 | 17,137,000 | 18,457,000 |
| New Zealand— | | | | | | |
| Anthracite | 1,975 | 1,919 | 504 | 169 | 653 | 233 |
| Bituminous | 836,684 | 838,990 | 799,621 | 756,363 | 700,427 | 660,869 |
| Sub-bituminous | 1,702,707 | 1,798,352 | 2,051,703 | 2,011,546 | 1,700,856 | 1,919,892 |
| Lignite | 178,668 | 170,333 | 160,215 | 156,647 | 148,260 | 161,417 |
| TOTAL | 311,481,000 | r304,073,500 | 300,700,000 | r302,740,600 | 315,796,000 | 321,673,000 |
| Irish Republic— | | | | | | |
| Anthracite including dust | 139,215 | 152,584 | 128,170 | r 133,887 | 129,963 | 128,617 |
| Semi-bituminous and other coal | 61,618 | 77,773 | 76,166 | r 70,377 | 74,739 | 76,500 |
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Brown coal and lignite | 252,000 | 284,000 | 285,000 | 290,000 | 300,000 | n.a. |
| Austria— | | | | | | |
| Bituminous | 138,820 | 131,865 | 129,951 | 104,540 | 97,786 | 101,887 |
| Brown coal | 6,391,039 | 6,122,495 | 5,879,024 | 5,571,311 | 5,621,385 | 5,957,434 |
| Belgium— | | | | | | |
| Anthracite | } 26,635,000 | { 6,302,530 | 5,800,930 | 5,433,390 | 5,638,991 | } 21,079,661 |
| Bituminous .. .. . |  |  |  |  |  |  | 16,094,820 | 16,313,510 | 15,762,410 | 15,229,826 |

PRODUCTION OF COAL (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|--------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Bulgaria— | | | | | | |
| Anthracite and bituminous | 374,000 | 490,000 | 560,000 | 580,000 | 620,000 | 646,000 |
| Brown coal and lignite.. | 12,155,000 | 14,600,000 | 16,310,000 | 17,760,000 | 19,890,000 | 20,918,000 |
| Czechoslovakia— | | | | | | |
| Bituminous | 23,554,000 | 24,727,000 | 25,800,000 | 25,819,000 | 26,720,000 | 27,900,000 |
| Brown coal | 53,453,000 | 50,305,000 | 54,599,000 | 61,088,000 | 64,778,000 | } 71,400,000 |
| Lignite | 2,487,000 | 2,550,000 | 2,882,000 | 3,184,000 | 3,609,000 | |
| Denmark— | | | | | | |
| Lignite | 2,406,000 | 2,268,000 | 2,273,000 | 2,129,000 | 1,993,000 | 1,967,000 |
| France— | | | | | | |
| Anthracite and bituminous | 56,814,522 | 56,697,049 | 55,082,224 | 51,535,660 | 51,542,439 | 47,000,000 |
| Lignite | 2,281,539 | 2,140,170 | 2,242,583 | 2,860,683 | 2,836,391 | 2,436,000 |
| Germany— | | | | | | |
| Federal Republic (b)— | | | | | | |
| Anthracite | 6,903,415 | 7,002,177 | 6,680,378 | 7,135,369 | 7,942,384 | 8,822,263 |
| Bituminous (a) | 123,633,000 | 116,654,000 | 133,408,633 | 133,396,479 | 131,009,800 | 131,099,458 |
| Pechkohle | 1,748,717 | 1,751,484 | 1,754,782 | 1,735,060 | 1,732,211 | 1,812,180 |
| Brown coal | 92,240,870 | 92,190,421 | 94,620,781 | 95,660,108 | 99,581,347 | 104,975,646 |
| East Germany— | | | | | | |
| Bituminous | 2,858,000 | 2,796,000 | 2,678,000 | 2,629,000 | 2,534,000 | 2,444,000 |
| Brown coal | 211,574,000 | 211,391,000 | 221,904,000 | 233,184,000 | 243,091,000 | 250,204,000 |
| Greece— | | | | | | |
| Lignite | 1,174,000 | 1,495,600 | 2,453,000 | 2,464,000 | 2,547,000 | 3,265,000 |
| Hungary— | | | | | | |
| Bituminous | 2,584,884 | 2,691,045 | 2,802,465 | 3,022,096 | 3,287,982 | 3,651,000 |
| Brown coal | 17,498,271 | 18,255,533 | 19,139,598 | 20,065,809 | 20,322,146 | 21,586,000 |
| Lignite | 3,782,790 | 4,009,631 | 4,162,810 | 4,642,055 | 4,588,627 | 4,760,000 |
| Italy— | | | | | | |
| Anthracite | 43,032 | 30,743 | 19,228 | 23,620 | 15,905 | 13,579 |
| Bituminous | 669,508 | 696,251 | 706,059 | 706,264 | 665,586 | 562,400 |
| Brown coal | 817,772 | 1,202,832 | 781,887 | 1,501,370 | 1,747,504 | 1,343,981 |
| Netherlands— | | | | | | |
| Bituminous | 11,692,335 | 11,789,011 | 12,301,091 | 12,421,637 | 11,390,000 | 11,327,000 |
| Brown coal | 251,323 | 195,625 | 3,908 | — | — | — |
| Poland— | | | | | | |
| Bituminous | 93,480,000 | 97,500,000 | 102,800,000 | 104,900,000 | 107,900,000 | 111,000,000 |
| Brown coal | 7,421,600 | 9,112,000 | 9,180,000 | 10,175,000 | 10,916,000 | 15,100,000 |
| Portugal— | | | | | | |
| Anthracite | 558,190 | 518,876 | 428,000 | 447,141 | 398,714 | 409,000 |
| Brown coal | 153,892 | 156,939 | 154,000 | 155,613 | 150,182 | 140,000 |
| Roumania— | | | | | | |
| Anthracite and bituminous | 295,000 | 295,000 | 325,000 | 340,000 | 370,000 | 390,000 |
| Lignite | 2,901,103 | 3,228,000 | 3,095,000 | 3,196,000 | 3,625,000 | 3,990,000 |
| Brown coal | 4,074,000 | 4,328,000 | 4,614,000 | 5,030,000 | 5,443,000 | 5,725,000 |
| Saar— | | | | | | |
| Bituminous | 16,164,000 | 15,972,000 | (c) | (c) | (c) | (c) |
| Spain— | | | | | | |
| Anthracite | 3,071,448 | 2,578,866 | 2,474,638 | 2,555,714 | 2,601,083 | 2,773,000 |
| Bituminous | 11,144,956 | 10,748,167 | 11,091,054 | 11,022,547 | 9,893,054 | 10,017,000 |
| Lignite | 2,629,434 | 2,069,094 | 1,734,306 | 2,056,400 | 2,448,857 | 2,540,000 |
| Spitzbergen— | | | | | | |
| Bituminous | | | | | | |
| Norwegian mines | 283,414 | 247,704 | 397,240 | 363,224 | 465,380 | 277,938 |
| Russian mines (d) | 379,751 | 450,694 | 472,808 | 391,642 | 361,007 | 364,484 |

(a) Including Stockheim hard coal.

(b) Excluding production from "small mines", reported as follows (long tons):

Hard coal: 1958—935,634; 1959—798,157; 1960—903,590; 1961—814,620; 1962—705,739; 1963—608,898.

Brown coal: 1958—44,390; 1959—38,894; 1960—76,638; 1961—71,828; 1962—70,788; 1963—13.

(c) Included with Germany (Federal).

(d) Exports.

PRODUCTION OF COAL (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|--------------|--------------|--------------|--------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Sweden— | | | | | | |
| Bituminous | 313,719 | 267,921 | 246,565 | 197,000 | 145,848 | 88,000 |
| U.S.S.R.— | | | | | | |
| Bituminous and anthracite | 347,000,000 | 359,600,000 | 369,010,000 | 370,970,000 | 380,300,000 | 388,900,000 |
| Lignite | 141,000,000 | 138,900,000 | c132,600,000 | c127,440,000 | c129,000,000 | 134,000,000 |
| Yugoslavia— | | | | | | |
| Bituminous | 1,188,000 | 1,276,000 | 1,263,000 | 1,292,000 | 1,169,000 | 1,267,000 |
| Brown coal and lignite | 17,598,000 | 19,498,000 | 20,092,000 | 22,401,000 | 23,133,000 | 25,672,000 |
| Algeria (Sahara)— | | | | | | |
| Bituminous and anthracite | 150,713 | 119,784 | 116,283 | 76,319 | 52,000 | 39,000 |
| Congo Republic— | | | | | | |
| Bituminous | 289,675 | 262,616 | 160,000 | 71,621 | 75,000 | 90,000 |
| Malagasy Republic— | | | | | | |
| Bituminous | — | — | — | — | — | 2,000 |
| Morocco— | | | | | | |
| Anthracite | 501,944 | 457,324 | 405,983 | 403,700 | 360,000 | 397,800 |
| Mozambique— | | | | | | |
| Bituminous | 243,674 | 252,569 | 265,367 | 315,791 | 292,903 | 278,341 |
| South Africa— | | | | | | |
| Anthracite and bituminous | 36,499,340 | 35,876,381 | 37,570,611 | 38,939,978 | 40,623,162 | 41,783,891 |
| Greenland— | | | | | | |
| Bituminous | 31,000 | 27,000 | 28,000 | 31,000 | 26,000 | 39,000 |
| Mexico— | | | | | | |
| Bituminous | 1,447,477 | 1,561,000 | 1,748,000 | 1,789,000 | 1,863,000 | 2,038,000 |
| United States— | | | | | | |
| Anthracite | 18,902,805 | 18,436,862 | 16,801,287 | 15,577,178 | 15,083,612 | 16,310,164 |
| Bituminous | 364,302,241 | r365,535,685 | 368,539,000 | 357,105,000 | 374,189,000 | 407,342,048 |
| Lignite | 2,166,997 | r2,346,012 | 2,452,000 | 2,694,000 | 2,728,000 | 2,415,251 |
| Argentina— | | | | | | |
| Lignite | 256,862 | 295,800 | 266,900 | 330,000 | 281,200 | 246,400 |
| Brazil— | | | | | | |
| Bituminous and lignite | 2,204,393 | 2,293,018 | 2,293,287 | 2,351,863 | 2,468,371 | 2,783,781 |
| Chile— | | | | | | |
| Bituminous | 1,946,863 | 1,861,853 | 1,447,728 | 1,735,945 | 1,825,503 | 1,691,472 |
| Columbia— | | | | | | |
| Bituminous | 2,200,000 | 2,500,000 | r 2,600,000 | r 2,800,000 | 3,000,000 | 3,100,000 |
| Peru— | | | | | | |
| Anthracite | 105,072 | 58,218 | 30,707 | 20,592 | 22,114 | 13,000 |
| Bituminous | 114,781 | 112,204 | 128,960 | 143,877 | 138,162 | 116,000 |
| Venezuela— | | | | | | |
| Bituminous | 35,956 | 33,452 | 34,730 | 30,134 | 27,002 | 41,679 |
| Afghanistan— | | | | | | |
| Bituminous | 33,213 | 36,000 | 46,000 | 67,000 | (a) 66,000 | 96,000 |
| Burma | — | 1,369 | 112 | 1,586 | 2,515 | (a) 2,000 |
| China | 270,000,000 | 342,300,000 | 413,000,000 | 245,000,000 | 245,000,000 | 270,000,000 |
| Formosa— | | | | | | |
| Bituminous | 3,131,172 | 3,506,856 | 3,899,373 | 4,169,663 | 4,481,663 | 4,734,072 |
| Indonesia— | | | | | | |
| Bituminous | 593,902 | 627,551 | 647,717 | 540,449 | 464,000 | 567,000 |
| Iran (b)— | | | | | | |
| Bituminous | 181,379 | 232,799 | 230,000 | 249,000 | 200,000 | (a)200,000 |
| Japan— | | | | | | |
| Anthracite | 1,618,000 | 1,590,000 | 1,774,000 | r 1,863,000 | 1,843,000 | 1,770,000 |
| Bituminous | r47,271,000 | r44,921,000 | r48,487,000 | r51,759,000 | 51,695,000 | 49,459,000 |
| Lignite | 1,557,448 | 1,445,501 | 1,386,246 | 1,288,342 | 1,093,000 | 900,000 |

(a) Estimated.

(b) Years ended March 20 following that stated.

(c) Owing to revised method of calculation, not strictly comparable with earlier years. Under previous method of calculation 1960 production equalled 136,090,000 long tons.

PRODUCTION OF COAL (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------------|---------------|---------------|----------------|---------------|---------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Korea (South)— | | | | | | |
| Anthracite | 2,628,706 | 4,071,083 | 5,265,500 | 5,791,400 | 7,326,400 | 8,718,200 |
| Korea (North) | 6,773,000 | 8,714,000 | 10,452,000 | 11,604,000 | 12,991,000 | 13,818,000 |
| Mongolia | 466,000 | 593,000 | 609,000 | 736,800 | (a)690,000 | (a)790,000 |
| Philippine Republic— | | | | | | |
| Bituminous | 106,078 | 137,644 | 145,522 | 149,922 | 160,404 | 154,063 |
| Thailand— | | | | | | |
| Lignite | 123,000 | 107,808 | 106,081 | 106,684 | 133,089 | 134,910 |
| Turkey— | | | | | | |
| Bituminous | 6,446,963 | 6,420,846 | 6,207,446 | r 6,286,388 | 6,389,093 | 6,692,866 |
| Lignite | 3,760,172 | 3,605,103 | 3,356,845 | r 3,595,646 | 4,167,776 | 4,912,924 |
| Vietnam (North)— | | | | | | |
| Anthracite | 1,473,000 | 2,167,000 | 2,534,000 | r2,784,000 | 3,413,000 | (a)4,000,000 |
| Vietnam (South)— | | | | | | |
| Anthracite | 20,384 | 20,000 | 27,000 | 56,000 | 70,000 | 102,000 |
| TOTAL | 2,090,000,000 | 2,180,000,000 | 2,280,000,000 | r2,130,000,000 | 2,190,000,000 | 2,290,000,000 |
| WORLD'S TOTAL | 2,400,000,000 | 2,480,000,000 | 2,580,000,000 | r2,440,000,000 | 2,510,000,000 | 2,610,000,000 |

(a) United States Bureau of Mines' estimate.

PRODUCTION OF COKE

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Great Britain— | | | | | | |
| Gas-works—coke (a) .. | 11,145,000 | 10,070,000 | 9,866,000 | 9,820,000 | 9,729,000 | 9,719,000 |
| breeze (a) .. | 2,634,000 | 2,470,000 | 2,474,000 | 2,343,000 | 2,377,000 | 2,358,000 |
| Coke-ovens—coke .. | 18,452,000 | 17,047,000 | 18,834,000 | 17,782,000 | 15,536,000 | 15,485,000 |
| breeze .. | 1,216,000 | 1,121,000 | 1,294,000 | 1,263,000 | 1,175,000 | 1,222,000 |
| Southern Rhodesia .. | 186,149 | 291,879 | 226,796 | (e) 172,691 | (e) 107,062 | n.a. |
| Canada— | | | | | | |
| Gas-works—coke .. | 47,886 | 48,929 | 3,457,859 | 3,481,737 | 3,590,870 | 3,822,140 |
| breeze .. | | | | | | |
| Coke-ovens—coke .. | 3,062,029 | 3,602,708 | | | | |
| breeze .. | | | | | | |
| Hong Kong— | | | | | | |
| Gas-works (c) .. | 20,000 | 20,000 | 18,000 | 9,000 | 16,839 | 14,719 |
| India— | | | | | | |
| Gas-works .. | 122,470 | 127,377 | 125,524 | 125,080 | 122,920 | 106,370 |
| Hard .. | 3,023,551 | 4,231,448 | 4,702,208 | 6,127,780 | 6,937,252 | 8,240,000 |
| Soft .. | 1,785,470 | 1,781,576 | 1,787,286 | 1,775,836 | 2,064,961 | 2,255,024 |
| Australia (d)— | | | | | | |
| Gas-works—coke .. | 831,615 | 815,464 | 758,668 | 764,626 | 761,355 | 694,575 |
| breeze .. | 146,196 | 173,618 | (f) 316,549 | (f) 376,123 | (f) 456,719 | (f) 379,183 |
| Coke-ovens—coke .. | 2,295,737 | 2,196,650 | 2,376,097 | 2,738,505 | 2,716,894 | 2,759,060 |
| breeze .. | 182,390 | 170,190 | (g) | (g) | (g) | (g) |
| New Zealand (b)— | | | | | | |
| Gas-works .. | 72,493 | 72,016 | 77,036 | 86,732 | 76,920 | n.a. |
| Irish Republic— | | | | | | |
| Gas works (c) .. | 87,840 | 89,696 | 111,648 | 120,920 | 120,011 | 135,309 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Gas-works .. | 319,259 | 265,928 | 258,288 | 249,906 | 310,203 | 337,662 |
| Coke-ovens .. | 1,602,967 | 1,524,766 | 1,808,218 | 1,753,878 | 1,628,056 | 1,608,145 |
| Belgium— | | | | | | |
| Gas-works .. | 4,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 |
| Coke-ovens .. | 6,797,243 | 7,103,000 | 7,406,264 | 7,095,945 | 7,047,834 | 7,090,500 |
| Bulgaria .. | 10,302 | 8,878 | 20,037 | 19,686 | 7,671 | n.a. |
| Czechoslovakia— | | | | | | |
| Hard coke .. | 7,254,000 | 7,754,000 | 8,324,000 | 8,402,000 | 8,789,000 | 9,152,000 |
| Brown-coal coke .. | 2,059,000 | 2,149,000 | 2,142,000 | 2,121,000 | 2,078,000 | 2,080,000 |
| Denmark (gas-works) .. | 303,000 | 330,000 | 392,000 | 399,000 | 411,000 | 405,000 |
| Finland (gas-works) .. | 124,000 | r 134,000 | 136,000 | n.a. | n.a. | n.a. |
| France— | | | | | | |
| Gas-works (e) .. | 1,324,800 | 1,004,000 | 684,300 | 422,700 | 243,000 | 144,000 |
| Coke-ovens .. | 12,306,281 | 12,930,134 | 13,419,321 | 13,266,892 | 13,305,091 | 13,251,000 |
| Semi-coke .. | 272,108 | 283,297 | 292,622 | 273,202 | 265,028 | 267,000 |
| Germany (Federal)— | | | | | | |
| Gas-works .. | 4,882,000 | 4,935,000 | 5,138,000 | 4,870,000 | 4,882,000 | 4,746,000 |
| Coke-ovens—hard coke .. | 42,890,000 | 37,921,000 | 44,047,000 | 43,829,000 | 42,514,000 | 41,233,000 |
| do. brown-coal coke .. | 589,000 | 586,000 | 592,000 | 592,000 | 591,000 | 591,000 |
| Germany (East)— | | | | | | |
| Hard coke .. | 2,949,000 | 3,085,000 | 3,155,000 | 3,035,000 | 3,073,000 | 3,210,000 |
| Brown-coal coke .. | 7,456,000 | 7,422,000 | 7,577,000 | 7,544,000 | 7,540,000 | 7,448,000 |
| Greece (gas-works) .. | 20,519 | 19,057 | 23,000 | 23,000 | 22,000 | 21,000 |
| Hungary— | | | | | | |
| Gas-works .. | 416,000 | 425,000 | 441,000 | 429,000 | 458,000 | 432,000 |
| Coke-ovens—hard coke .. | 366,000 | 388,000 | 533,000 | 681,000 | 742,000 | 757,000 |
| do. brown-coal coke .. | 45,000 | 47,000 | 47,000 | 47,000 | 41,000 | 45,000 |

(a) Excluding coke used for heating retorts.

(b) Sales for years ended March 31 of the year following that stated.

(c) Including coke-breeze.

(d) Years ended June 30 of that stated.

(e) Sales.

(f) Including coke-ovens.

(g) Included with gas-works.

PRODUCTION OF COKE (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|--------------|--------------|--------------|------------|--------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Italy— | | | | | | |
| Gas-works | 814,698 | 787,308 | 803,192 | 769,788 | 763,270 | 713,377 |
| Coke-ovens | 3,307,264 | 3,006,769 | 3,656,403 | 3,835,075 | 4,259,293 | 4,522,230 |
| Luxemburg— | | | | | | |
| Gas-works | 35,000 | 34,000 | 36,000 | 35,000 | 35,000 | 35,000 |
| Netherlands— | | | | | | |
| Gas-works | 558,000 | 430,000 | 287,000 | 232,000 | 197,000 | 174,000 |
| Coke-ovens | 4,058,000 | 4,063,000 | 4,486,000 | 4,574,000 | 4,206,000 | 4,203,000 |
| Norway (gas-works) | 48,632 | 48,483 | 45,983 | 44,372 | 44,264 | 35,715 |
| Poland— | | | | | | |
| Gas-works | 964,200 | 972,100 | 969,800 | 1,013,200 | 1,079,100 | } 13,700,000 |
| Coke-ovens | 10,004,000 | 10,412,000 | 10,772,000 | 11,355,000 | 11,822,000 | |
| Portugal (gas-works) | 38,620 | 34,828 | 38,000 | 39,282 | 30,456 | 24,941 |
| Roumania— | | | | | | |
| Coke-ovens | 553,708 | 599,784 | 806,755 | 924,681 | 1,100,858 | 1,123,000 |
| Saar— | | | | | | |
| Coke-ovens | 4,109,535 | } 4,367,000 | (a) | (a) | (a) | (a) |
| Semi-coke | 111,644 | | | | | |
| Spain— | | | | | | |
| Gas-works | 264,514 | 268,114 | 243,951 | 248,530 | 228,171 | 191,000 |
| Coke-ovens | 2,018,637 | 2,369,221 | 2,532,905 | 2,568,001 | 2,695,066 | 2,696,000 |
| Sweden (f) | 702,165 | 722,760 | 720,792 | r 851,136 | 912,000 | n.a. |
| Switzerland— | | | | | | |
| Gas-works | 450,640 | 460,551 | 476,170 | 472,166 | 488,483 | 519,651 |
| U.S.S.R. (f) | 50,100,000 | 52,550,000 | r 55,345,000 | 57,678,000 | 59,967,000 | d 63,000,000 |
| Yugoslavia— | | | | | | |
| Gas-works | 25,400 | 20,500 | 19,500 | 16,700 | 17,300 | } 1,090,000 |
| Coke-ovens | 1,014,000 | 1,053,000 | 1,066,000 | 1,082,000 | 1,090,000 | |
| Algeria (gas-works) | 86,435 | 87,277 | 91,177 | 61,370 | n.a. | n.a. |
| Libya— | | | | | | |
| Gas-works (b) | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 |
| South Africa— | | | | | | |
| Gas-works | 91,285 | 86,301 | 81,710 | 77,267 | 100,571 | 102,776 |
| Coke-ovens | 1,767,730 | 1,968,544 | 2,076,596 | 2,188,506 | 2,168,490 | 2,475,023 |
| Mexico (coke-ovens) | 587,000 | 671,000 | 822,000 | 768,817 | 767,807 | 753,067 |
| United States— | | | | | | |
| Coke-ovens— | | | | | | |
| Coke | 47,326,545 | 48,918,996 | 50,195,632 | 45,384,294 | 45,623,589 | 47,596,079 |
| Breeze and screenings | 3,264,462 | 3,313,364 | 3,308,434 | 2,979,611 | 3,057,786 | 3,222,148 |
| Beehive— | | | | | | |
| Coke | 534,261 | 959,193 | 901,437 | 786,409 | 724,886 | 866,695 |
| Breeze and screenings | 52,239 | 66,265 | 33,633 | 47,790 | 38,779 | 26,434 |
| Brazil | (c) 499,802 | (c) 513,074 | 693,000 | 688,000 | 709,000 | 660,000 |
| Chile | (b) 480,000 | 321,398 | n.a. | 255,741 | 293,800 | 304,959 |
| Columbia | 276,191 | 244,160 | 244,300 | 197,000 | n.a. | 393,683 |
| Peru | 32,403 | 31,651 | 29,994 | 35,421 | 38,876 | 39,000 |
| Uruguay (gas-works)— | | | | | | |
| Coke | 30,001 | 27,764 | 31,065 | 23,105 | 22,194 | 20,825 |
| Breeze | 4,253 | 4,036 | 4,485 | 3,774 | 3,823 | 2,842 |
| China (d) | 18,000,000 | r 20,000,000 | 25,000,000 | r 15,000,000 | 15,000,000 | 15,000,000 |
| Formosa | r 181,026 | r 168,921 | 190,668 | 183,793 | 226,795 | 229,801 |
| Iran (e) | n.a. | 22,000 | 25,000 | n.a. | n.a. | n.a. |
| Japan— | | | | | | |
| Gas-works | 2,840,917 | 3,172,889 | 3,660,982 | 3,736,845 | 3,399,336 | 3,320,990 |
| Coke-ovens | 4,388,192 | 5,188,015 | 6,380,352 | 8,366,879 | 8,751,877 | 9,108,116 |
| Beehive, etc. | 1,424,970 | 1,819,864 | 2,033,937 | 2,373,635 | 2,614,015 | 2,767,438 |
| Korea (North) (d) | r 460,000 | r 692,000 | r 804,000 | r 900,000 | 1,100,000 | 1,200,000 |
| Korea (South) | 1,300 | — | — | — | 35,000 | — |

(a) Included with Germany (Federal).

(b) Estimated.

(c) Volta Redonda only.

(d) United States Bureau of Mines' estimate.

(e) Years ended March 20 of year following that stated.

(f) Including coke-breeze.

PRODUCTION OF COKE (cont.)

Long ton

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|---------|-------------|-------------|-----------|---------|---------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Turkey— | | | | | | |
| Gas-works | 108,739 | (a) 115,000 | (a) 100,000 | 119,000 | 150,000 | 166,000 |
| Coke-ovens | 547,930 | 521,102 | 520,938 | r 518,000 | 505,000 | 810,000 |
| Semi-coke | 80,025 | 81,320 | 82,437 | 81,000 | 83,000 | 78,000 |

(a) Estimated.

PRODUCTION OF BRIQUETTES

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------|------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Great Britain | 2,199,000 | 1,719,000 | 1,453,000 | 1,468,000 | 1,548,000 | 1,652,000 |
| Canada | 182,187 | 136,727 | 72,484 | 60,113 | 48,296 | 65,000 |
| Australia (a)— | | | | | | |
| Brown-coal briquettes .. | 626,174 | 642,950 | 974,670 | 1,806,619 | 1,819,954 | 1,805,347 |
| New Zealand | 16,349 | 15,755 | 15,082 | 14,287 | 11,829 | 12,645 |
| Irish Republic | 128 | 483 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Brown-coal briquettes .. | 2,405 | — | — | — | — | — |
| Belgium | 1,020,000 | 985,959 | 1,062,400 | 1,152,000 | 1,576,008 | 2,263,032 |
| Czechoslovakia— | | | | | | |
| Coal briquettes | 387,000 | 372,000 | 322,000 | 149,000 | — | — |
| Brown-coal briquettes | 326,000 | 323,000 | 429,000 | 708,000 | 775,000 | <i>n.a.</i> |
| Denmark— | | | | | | |
| Brown-coal briquettes .. | 29,915 | (e) 20,062 | (e) 18,491 | (e) 34,249 | (e) 41,458 | (e) 53,390 |
| France | 6,993,509 | 6,459,303 | 5,976,028 | 5,995,109 | 6,839,514 | 7,868,000 |
| Germany (Federal)— | | | | | | |
| Coal briquettes | 5,544,000 | 4,636,000 | 5,136,354 | 4,791,975 | 5,573,939 | 6,268,739 |
| Brown-coal briquettes .. | 16,177,000 | 14,965,000 | 15,003,894 | 15,270,209 | 15,520,870 | 15,584,213 |
| Germany (East)— | | | | | | |
| Brown-coal briquettes .. | 53,155,000 | 53,197,000 | 55,162,000 | 57,080,000 | 58,784,000 | 59,304,000 |
| Hungary— | | | | | | |
| Coal briquettes | 873,078 | 1,036,867 | 1,033,274 | 1,105,468 | 1,108,012 | <i>n.a.</i> |
| Brown coal semi-coke | | | | | | |
| Briquettes | 63,928 | 28,396 | 12,125 | 14,190 | 62,549 | <i>n.a.</i> |
| Netherlands— | | | | | | |
| Coal briquettes | 1,069,163 | 1,043,550 | 1,162,400 | 1,168,932 | 1,346,000 | 1,536,000 |
| Brown-coal briquettes .. | 73,931 | 62,860 | 61,500 | 72,888 | 69,700 | 62,000 |
| Poland— | | | | | | |
| Coal briquettes | 631,000 | 672,000 | 707,000 | 664,000 | 644,000 | 629,000 |
| Brown-coal briquettes .. | 271,000 | 315,000 | 308,000 | 333,000 | 340,000 | <i>n.a.</i> |
| Portugal | 73,852 | 59,039 | 52,668 | 54,915 | 44,304 | 44,050 |
| Spain | 1,410,847 | 1,257,001 | 1,125,302 | 1,100,122 | 1,217,769 | 1,165,000 |
| Switzerland (b) | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 |
| Algeria | 49,845 | 48,713 | 44,237 | 39,905 | (b) 27,000 | (b) 40,000 |
| Morocco | 17,392 | 15,031 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tunisia | 1,394 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States (c) | 924,340 | 773,321 | 664,629 | 510,950 | 508,949 | 492,149 |
| Korea (South) | 334,866 | 455,048 | 450,000 | 579,134 | <i>n.a.</i> | <i>n.a.</i> |
| Turkey (d) | 113,729 | 117,313 | 147,764 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Years ended June 30 of that stated.

(b) Estimated.

(c) In addition packaged fuel produced was as follows (long tons):

1958—31,937; 1959—30,103; 1960—22,059; 1961—17,125; 1962—15,571; 1963—12,692.

(d) Sales.

(e) Production in major establishments only.

PRODUCTION OF COAL BY-PRODUCTS*

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Great Britain— | | | | | | |
| Tar (crude) distilled .. | 2,722,000 | 2,616,000 | 2,681,000 | 2,656,000 | 2,570,000 | 2,583,000 |
| Tar (refined) | 538,000 | 556,000 | 547,000 | 560,000 | 566,000 | 574,000 |
| Pitch | 512,000 | 464,000 | 412,000 | 418,000 | 354,000 | 418,000 |
| Motor benzol | 168,000 | 116,000 | 115,000 | 131,000 | 123,000 | 110,000 |
| Other motor spirits, etc. | 56,700 | 5,700 | 5,700 | 6,300 | 6,700 | 6,000 |
| Other refined light oils .. | 226,700 | 260,000 | 287,000 | 238,000 | 224,000 | 236,000 |
| Creosote-pitch mixture | 899,000 | 857,000 | 1,051,000 | 904,000 | 1,020,000 | 1,008,000 |
| Creosote oil | 433,000 | 380,000 | 410,000 | 400,000 | 430,000 | 400,000 |
| White naphthalene | 6,500 | 6,100 | 6,300 | 7,300 | 6,300 | 6,200 |
| Hot-pressed do. | 23,500 | 29,300 | 22,600 | 16,800 | } 72,100 | } 73,500 |
| Crude do. | 25,100 | 27,200 | 45,300 | 47,000 | | |
| Pyridine bases | 1,600 | 1,500 | 1,400 | 1,300 | 2,000 | 3,200 |
| Natural phenol | 18,600 | 18,200 | 18,500 | 20,600 | 16,300 | 16,600 |
| Refined cresylic acid .. | 64,000 | 67,000 | 75,000 | 66,000 | 66,000 | 70,200 |
| Anthracene 40-50% .. | 2,300 | 3,700 | 4,000 | 4,200 | 4,000 | 3,900 |
| Southern Rhodesia— | | | | | | |
| Tar (crude) | 3,176 | (c) 6,081 | (c) 3,446 | 4,842 | (c) 6,575 | n.a. |
| Motor benzol | 507 | (c) 415 | (c) 562 | 608 | (c) 297 | n.a. |
| Ammonia liquor | 1,020 | (c) 1,041 | (c) 1,040 | 1,068 | (c) 872 | n.a. |
| Canada— | | | | | | |
| Tar (crude) | 183,948 | 211,187 | n.a. | n.a. | n.a. | n.a. |
| Tar (refined) | 16,482 | r 13,030 | 13,490 | 19,250 | n.a. | n.a. |
| Pitch | 102,230 | r 120,000 | 113,000 | 71,000 | n.a. | n.a. |
| Creosote oils | 45,600 | r 50,790 | 67,043 | 43,819 | n.a. | n.a. |
| Ammonium sulphate .. | 26,234 | 25,024 | n.a. | n.a. | n.a. | n.a. |
| Benzol | 27,665 | 35,279 | n.a. | n.a. | n.a. | n.a. |
| Toluol, xylol and naphthalene | 9,531 | 10,727 | n.a. | n.a. | n.a. | n.a. |
| India (coke-ovens)— | | | | | | |
| Tar | 113,134 | 163,554 | 203,307 | 255,972 | 311,624 | 288,555 |
| Benzol | 4,096 | 3,198 | 3,527 | 5,767 | 5,965 | 8,877 |
| Benzene | 3,094 | 4,268 | 4,277 | 7,260 | 8,898 | 19,363 |
| Toluol | 282 | 216 | 368 | 269 | 192 | 218 |
| Toluene | 236 | 685 | 955 | 1,043 | 2,009 | 2,139 |
| Xylene | — | — | — | 76 | 298 | 506 |
| Solvent naphtha | 478 | 513 | 492 | 514 | 735 | 122 |
| Pitch | 3,004 | 6,931 | 7,042 | 36,051 | 45,110 | 53,384 |
| Naphthalene | 82 | 28 | 7 | 1,206 | 3,985 | 3,324 |
| Ammonium sulphate .. | 24,547 | 34,471 | 39,125 | 52,525 | 62,492 | 72,902 |
| Light oil | 576 | 2,257 | 3,347 | 3,947 | 3,741 | 5,749 |
| Middle oil | 479 | 424 | 459 | 3,126 | 7,606 | 10,233 |
| Heavy oil (230-270°C.) | 248 | 623 | 589 | 3,303 | 6,885 | 5,338 |
| Anthracene oil | 817 | 536 | 467 | 3,753 | 13,574 | 16,274 |
| Australia— | | | | | | |
| Tar (crude) (a) | 254,507 | 255,383 | 266,472 | 292,985 | 291,709 | 276,343 |
| Tar (refined) (a) | 141,805 | 147,161 | 152,041 | 152,168 | 152,191 | 197,512 |
| Tar oils (crude) (a) .. | 17,869 | 17,750 | 17,141 | 18,034 | 18,948 | 15,771 |
| Benzol for blending .. | 19,251 | 18,093 | 18,837 | 22,007 | n.a. | n.a. |
| New Zealand (b)— | | | | | | |
| Tar (gas-works) | 13,234 | 13,046 | 12,707 | 11,909 | 12,046 | n.a. |
| Irish Republic (gas-works)— | | | | | | |
| Tar | 12,784 | 14,074 | 13,903 | 12,737 | 17,036 | 18,572 |

*Some of the products are derived from the crude products shown. Duplication, therefore, is unavoidable in many cases.

See page 89 for conversion rates.

See Nitrogen Compounds (pages 233-235) for total production of ammonium sulphate.

(a) Years ended June 30 of the year stated.

(b) Sales for years ended March 31 of the year following that stated.

(c) Sales.

PRODUCTION OF COAL BY-PRODUCTS (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| Belgium— | | | | | | |
| Tar (crude) | 243,310 | 253,548 | 263,572 | 265,157 | 272,163 | 272,463 |
| Benzol (crude) | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 70,700 | 62,839 |
| Benzol (motor) | 54,175 | 57,245 | 20,270 | } 7,070 | <i>n.a.</i> | <i>n.a.</i> |
| do. industrial | 8,184 | 8,941 | 26,104 | | | |
| Benzene | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 40,800 | 40,600 |
| Toluol and xylol | 1,156 | } 2,090 | 6,058 | 11,610 | 14,362 | 14,964 |
| Solvent naphtha | 386 | | | | | |
| Denmark (a)— | | | | | | |
| Tar (gas-works) | 39,845 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Benzol (crude) | 84 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| France— | | | | | | |
| Tar (crude) | 713,190 | 705,186 | 700,000 | 645,004 | 644,000 | 640,000 |
| Ammonium sulphate | 115,000 | 119,325 | 125,100 | 127,600 | 130,406 | <i>n.a.</i> |
| Benzol (crude) | 135,757 | 144,558 | 151,700 | 152,161 | 160,000 | 160,000 |
| Pitch | 214,249 | 209,175 | 218,246 | 199,179 | 194,970 | 204,000 |
| Naphthalene (crude) | 32,080 | 43,424 | 45,588 | 50,902 | 49,813 | 44,000 |
| Germany (Federal)— | | | | | | |
| Tar (crude) | 1,870,000 | 1,713,000 | 2,042,000 | 2,017,000 | 1,965,000 | 1,925,000 |
| Pitch | 966,024 | 862,390 | r 979,854 | r 972,262 | 964,507 | 974,942 |
| Tar oils | 646,578 | 589,034 | 660,684 | 698,283 | 740,873 | 720,055 |
| Naphthalene | 91,342 | 108,525 | 126,253 | 140,434 | 147,862 | 155,987 |
| Benzol (crude) | 539,000 | 487,000 | 592,660 | 581,631 | 563,355 | 542,754 |
| Refined benzols | 559,887 | 511,186 | 642,173 | 620,343 | 605,233 | 561,786 |
| Phenol | 12,908 | 15,100 | 15,701 | 14,709 | 18,935 | 17,886 |
| Cresol and xylol | 20,422 | 25,317 | 24,323 | 23,787 | 25,198 | 24,060 |
| Anthracene | 39,496 | 32,597 | 32,514 | 35,323 | 40,210 | 37,014 |
| Pyridine and bases | 717 | 782 | 940 | 918 | 991 | 954 |
| Hungary— | | | | | | |
| Brown coal tar | 28,897 | 30,258 | 30,475 | 28,478 | 26,969 | <i>n.a.</i> |
| Pitch | 22,552 | 20,207 | 34,492 | 34,294 | 40,279 | <i>n.a.</i> |
| Benzol | 2,407 | 3,922 | 2,960 | 5,896 | 5,034 | <i>n.a.</i> |
| Creosote | 8,654 | 10,666 | 14,536 | 9,434 | 9,410 | <i>n.a.</i> |
| Italy— | | | | | | |
| Tar | 170,921 | 163,179 | 180,299 | 197,655 | 215,422 | 217,063 |
| Ammonium sulphate | 38,360 | 35,295 | 37,929 | 41,203 | <i>n.a.</i> | <i>n.a.</i> |
| Benzol (crude) | 35,043 | 30,444 | 35,637 | 36,383 | 35,563 | 44,651 |
| Naphthalene (crude) | 6,751 | 6,109 | 8,848 | 8,874 | 9,010 | 10,146 |
| Distillates | 46,083 | 50,996 | 63,970 | 73,051 | 70,759 | 74,423 |
| Benzol (refined) | 20,413 | 23,548 | 27,659 | 30,365 | 29,147 | 24,450 |
| Toluol and xylol | 6,601 | 6,847 | 6,226 | 6,655 | 6,584 | 6,183 |
| Pitch | 53,226 | 59,045 | 76,574 | 82,896 | 80,121 | 92,231 |
| Solvent naphtha | 1,033 | 1,111 | 1,215 | 1,417 | 1,465 | 1,306 |
| Norway— | | | | | | |
| Tar (gas-works) | 5,577 | 5,594 | 5,318 | 4,810 | 4,767 | 3,490 |
| Poland— | | | | | | |
| Tar (coke-ovens) | 435,400 | 453,800 | 479,900 | 500,500 | 533,500 | <i>n.a.</i> |
| Tar (gas-works) | 67,100 | 71,200 | 71,100 | 74,300 | 81,100 | <i>n.a.</i> |
| Ammonium sulphate (coke-ovens) | 110,600 | 113,100 | 115,700 | 122,900 | 130,500 | <i>n.a.</i> |
| Benzol (coke-ovens) | 139,200 | 140,200 | 147,700 | 154,800 | 163,500 | <i>n.a.</i> |
| Portugal (gas-works)— | | | | | | |
| Creosote | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,363 | 1,144 | 1,189 |
| Pitch | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,147 | 826 | 1,043 |
| Spain— | | | | | | |
| Tar | (b) 107,787 | (b) 130,613 | 139,922 | 132,676 | 135,188 | <i>n.a.</i> |
| Pitch | 28,571 | 33,510 | 34,155 | 26,231 | 28,116 | <i>n.a.</i> |
| Benzol | 32,491 | 35,640 | 39,157 | 37,566 | 52,593 | <i>n.a.</i> |
| Benzene | 5,084 | 3,595 | 7,742 | 8,010 | 11,544 | <i>n.a.</i> |

(a) Years ended March 31 of year following that stated.

(b) Including some tar from oil-shale.

PRODUCTION OF COAL BY-PRODUCTS (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Spain (cont.)— | | | | | | |
| Toluol | 1,892 | 1,203 | 2,325 | 2,007 | 1,850 | n.a. |
| Toluene | 788 | 1,150 | 798 | 812 | 468 | n.a. |
| Xylene | — | — | 71 | 422 | 387 | n.a. |
| Solvent naphtha | 354 | 244 | 201 | 230 | 122 | n.a. |
| Anthracene | 10,048 | 10,114 | 13,142 | 7,943 | 6,692 | n.a. |
| Naphthalene | 4,932 | 5,286 | 6,337 | 6,263 | 5,947 | n.a. |
| Ammonium sulphate | n.a. | 208,266 | 319,058 | 353,429 | n.a. | n.a. |
| Creosote | 9,077 | 9,484 | 10,924 | 10,064 | n.a. | n.a. |
| Sweden— | | | | | | |
| Tar (crude) | 34,190 | 35,573 | 33,623 | 37,718 | n.a. | n.a. |
| Other tar | 31,958 | 32,850 | n.a. | n.a. | n.a. | n.a. |
| Pitch | 373 | 297 | 236 | 312 | n.a. | n.a. |
| Benzol, toluol, etc. | 3,401 | 11,336 | 10,560 | 11,502 | n.a. | n.a. |
| Distillates, etc. | 6,093 | | | | | |
| Switzerland— | | | | | | |
| Tar (crude) (gas-works) | 27,282 | 26,608 | 28,561 | 27,291 | 27,071 | 28,903 |
| Yugoslavia— | | | | | | |
| Benzol | 8,664 | 11,113 | 11,182 | 11,242 | 9,905 | n.a. |
| Algeria— | | | | | | |
| Tar (gas-works) | 5,173 | 5,250 | 5,368 | 3,703 | n.a. | n.a. |
| United States— | | | | | | |
| Coke-ovens— | | | | | | |
| Tar (crude) | 2,860,326 | 2,793,710 | 2,938,289 | 2,706,743 | 2,778,255 | 2,871,263 |
| Pitch | 736,134 | 640,808 | 929,046 | 1,049,227 | 991,437 | 921,985 |
| Sulphate equivalent of ammonia produced (a) | 660,036 | 639,913 | 656,644 | 618,807 | 598,777 | 641,766 |
| Benzol | 394,266 | 399,437 | 451,088 | 400,684 | 380,757 | 374,758 |
| do, motor | 3,736 | 1,337 | 2,070 | 2,762 | 4,802 | 7,815 |
| Toluol and xylol | 119,218 | 112,704 | 125,733 | 117,551 | 113,754 | 106,806 |
| Solvent naphtha | 14,164 | 12,895 | 14,700 | 14,474 | 13,731 | 11,413 |
| Other light products | 15,510 | 10,499 | 12,288 | 11,707 | 14,110 | 14,774 |
| All sources (c)— | | | | | | |
| Tar (crude) | 2,860,326 | 2,793,710 | 2,938,289 | 2,706,743 | 2,788,255 | 2,871,263 |
| Water gas and oil gas tar | 121,970 | 65,342 | 93,162 | 70,513 | 82,419 | n.a. |
| Crude light oil | 730,903 | 710,120 | 781,670 | 713,343 | 705,627 | n.a. |
| Benzol (b) | 483,537 | 461,100 | 493,713 | 441,867 | 427,553 | n.a. |
| Toluol | 105,320 | 100,110 | 109,910 | 103,070 | 98,732 | n.a. |
| Xylol | 29,380 | 26,170 | 27,600 | 26,510 | 24,760 | n.a. |
| Solvent naphtha | 51,487 | 25,110 | 29,010 | 29,320 | 34,365 | n.a. |
| Other light oil derivatives | 27,730 | 21,230 | 23,260 | 25,280 | 29,750 | n.a. |
| Naphthalene (crude) | 154,056 | 189,863 | 230,821 | 221,949 | 189,377 | n.a. |
| Creosote oil | 445,817 | 358,880 | 368,390 | 348,250 | 360,460 | n.a. |
| Tar, road | 296,480 | 282,510 | 267,370 | 244,490 | 265,650 | n.a. |
| Tar for other uses (d) | 125,360 | 123,070 | 128,190 | 122,640 | 96,278 | n.a. |
| Distillate products, others | 98,417 | 80,210 | 75,317 | 94,008 | 126,550 | n.a. |
| Pitch of tar | 1,420,000 | 1,364,000 | 1,701,000 | 1,826,000 | 1,678,000 | n.a. |
| Pitch of tar coke | 26,000 | 31,000 | 25,000 | 12,000 | 16,000 | n.a. |

(a) Actual ammonium sulphate produced was as follows (long tons):

1958—571,802; 1959—547,087; 1960—563,967; 1961—529,980; 1962—523,000; 1963—552,000.

(b) Excluding motor benzol, included with "Other light oil derivatives".

(c) Including products obtained from coke-ovens except ammonium sulphate.

(d) Used for paints, etc.

PRODUCTION OF COAL BY-PRODUCTS (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Brazil (a)— | | | | | | |
| Tar | 45,253 | 52,274 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Benzol | 3,861 | 3,112 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Toluol and xylol | 909 | 705 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Solvent naphtha | 63 | 59 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Naphthalene | 1,875 | 1,718 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Creosote oil | 2,434 | 2,345 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium sulphate | 4,547 | 4,971 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Pitch | 2,805 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Carbolic acid | 926 | 415 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Tar | 15,073 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Benzol | 5,367 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium sulphate | 2,947 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Uruguay (gas-works)— | | | | | | |
| Tar | 2,813 | 2,798 | 2,933 | 2,396 | 2,045 | 2,007 |
| Benzol | 165 | 152 | 139 | 163 | 165 | 151 |
| Japan— | | | | | | |
| Tar | 655,460 | 734,492 | 888,410 | 1,053,784 | 1,075,477 | 1,128,400 |
| Benzol (crude) | 126,656 | 160,223 | 196,929 | 242,717 | 254,739 | 268,593 |
| do. (other) | 76,046 | 93,326 | 122,873 | 161,407 | 194,298 | 247,372 |
| Toluol and xylol | 14,672 | 20,293 | 31,739 | 134,556 | 41,603 | <i>n.a.</i> |
| Solvent naphtha | 7,250 | 8,846 | 10,996 | 10,786 | 8,906 | <i>n.a.</i> |
| Creosote oil | 156,887 | 179,195 | 199,484 | 230,967 | 249,116 | 267,390 |
| Carbolic acid (crude) | <i>n.a.</i> | 10,409 | 11,287 | 4,211 | 15,359 | <i>n.a.</i> |
| Naphthalene (crude) | 27,166 | 35,761 | 50,889 | 60,256 | 58,028 | <i>n.a.</i> |
| do. (refined) | 29,262 | 10,176 | 10,656 | 11,314 | 9,021 | <i>n.a.</i> |
| Anthracene | 6,107 | 7,904 | 11,621 | 13,322 | 12,568 | <i>n.a.</i> |
| Ammonium sulphate | 118,925 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 217,603 | <i>n.a.</i> |
| Turkey— | | | | | | |
| Road tar | 10,954 | — | 17,887 | 18,432 | 15,939 | 21,745 |
| Pitch | 15,350 | 14,960 | 10,800 | 1,760 | 3,450 | 11,300 |
| Benzol | 4,963 | 4,404 | 4,581 | 4,244 | 4,074 | 5,145 |
| Toluol and xylol | 372 | 386 | 436 | 473 | 446 | 657 |
| Solvent naphtha | 48 | 25 | 80 | 43 | 53 | 131 |
| Creosote | 4,788 | 4,452 | 4,716 | 2,312 | 2,705 | 6,905 |
| Carbolic acid | 19 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Anthracene | 85 | 45 | 169 | 6 | 39 | 94 |
| Ammonium sulphate | 4,314 | 2,948 | 4,549 | 4,200 | 4,030 | 6,595 |
| Naphthalene | 657 | 587 | 667 | 659 | 557 | 866 |

*The following rates have been used for conversion of Imperial gallons to long tons: Tar, 195; Benzol, 250; Creosote, 210; Motor fuel, 310; Toluol, 255; Solvent naphtha, 260; Phenol, 210; Cresylic acid, 214.

(a) Volta Redonda only.

EXPORTS OF COAL, COKE AND BY-PRODUCTS*

Long ton

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-----------|-----------|--------------|------------|--------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Anthracite— | | | | | | |
| smalls and graded .. | 685,313 | 428,955 | 536,065 | 715,278 | 1,016,834 | 1,583,838 |
| large | 138,488 | 99,549 | 86,856 | 73,583 | 111,494 | 180,938 |
| other | 293,746 | 283,902 | 269,923 | 295,639 | 272,002 | 523,492 |
| Bituminous— | | | | | | |
| smalls and graded .. | 1,808,495 | 1,842,330 | 3,148,244 | 3,535,062 | 2,509,121 | 4,733,358 |
| unscreened | 273,213 | 178,211 | 221,573 | 171,316 | 203,095 | 305,432 |
| large | 504,404 | 302,594 | 593,030 | 477,988 | 219,702 | 204,32 |
| other | 519,025 | 339,303 | 286,850 | 328,188 | 379,933 | 344,606 |
| Bunkers | 840,162 | 633,503 | 317,372 | 110,108 | 53,510 | n.a. |
| Coke, gas | 682,491 | 607,192 | 674,490 | 636,587 | 722,664 | 518,885 |
| do. other | 709,413 | 758,742 | 876,837 | 842,582 | 1,004,325 | 1,500,718 |
| Manufactured fuel .. | 148,167 | 134,310 | 93,002 | 59,997 | 100,603 | 135,335 |
| Tar | 73,297 | 55,146 | 69,678 | 68,281 | 74,742 | 59,546 |
| Pitch | 179,524 | 166,840 | 184,338 | 168,717 | 210,065 | 291,688 |
| Channel Islands (Jersey) | | | | | | |
| Coke | 12,327 | 8,312 | 11,527 | 12,405 | 15,210 | 14,332 |
| Tar | — | 3,147 | 3,762 | 2,885 | 3,709 | 3,821 |
| Gibraltar— | | | | | | |
| Coal (bunkers) (b) .. | 12,000 | 6,000 | 6,812 | n.a. | n.a. | n.a. |
| Malta— | | | | | | |
| Coal (bunkers on merchant ships) (b) .. | r 215 | r 33 | — | — | — | — |
| Kenya— | | | | | | |
| Coal (bunkers) (b) .. | 14 | 63 | 66 | 176 | 156 | 216 |
| Nigeria— | | | | | | |
| Coal | 98,248 | 74,561 | 26,780 | 51,041 | 32,199 | 8,031 |
| Coke and patent fuel | n.a. | n.a. | n.a. | n.a. | n.a. | 34,250 |
| Rhodesia and Nyasaland— | | | | | | |
| Coal | 419,854 | 157,192 | 175,026 | 243,787 | 192,966 | 245,175 |
| Coke | 60,885 | 62,881 | 70,869 | 111,736 | 52,238 | 42,328 |
| Canada— | | | | | | |
| Coal | 301,853 | 422,896 | 761,521 | 838,693 | 798,142 | 941,399 |
| do. (bunkers) (c) .. | 25,621 | 19,320 | 17,737 | 14,895 | 17,312 | 13,559 |
| do. do. (a) | 300,431 | 238,257 | 257,114 | 222,549 | 218,679 | 236,357 |
| Lignite | 419 | 112 | 16 | n.a. | n.a. | n.a. |
| Coke | 102,163 | 113,009 | 111,392 | 155,621 | 112,521 | 121,711 |
| Tar and pitch | 6,101 | 42 | 8 | 22,568 | 26,876 | 77,004 |
| Trinidad and Tobago— | | | | | | |
| Coal (bunkers) (b) .. | 614 | 35 | 73 | 38 | 18 | n.a. |
| Aden— | | | | | | |
| Coal (bunkers) (b) .. | 3,565 | 425 | — | — | — | — |
| Ceylon— | | | | | | |
| Coal (bunkers) (b) .. | 2,274 | 713 | 324 | 447 | 627 | 171 |
| Cyprus— | | | | | | |
| Coal (bunkers) (b) .. | 90 | — | — | 1 | — | — |
| Hong Kong— | | | | | | |
| Coal | 3,028 | 539 | 9,583 | 6,264 | 3,910 | 5,416 |
| Coke | 942 | 955 | 839 | 210 | 30 | 87 |
| India— | | | | | | |
| Coal | 1,713,872 | 1,374,660 | (d)1,129,383 | (d)919,409 | (d)1,097,121 | (d)1,486,734 |
| Coke | 78,786 | 35,310 | (d) 41,516 | (d) 340 | (d) 31 | (d) — |
| Tar and pitch | 200 | 832 | (d) 3,186 | (d) 6,721 | (d) 1,065 | (d) 1,525 |

*For Ammonium sulphate, etc. see Nitrogen Compounds, pages 236-237.

(a) Foreign coal, "ex-warehoused for ships' stores". (See imports.)

(b) Foreign coal. (See imports.)

(c) Domestic produce. Shipments from mines to ships' bunkers.

(d) Years ended March 31 following that stated.

EXPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Malaya— | | | | | | |
| Coal | 15 | 5 | 1 | — | 3 | 26 |
| do. (bunkers) (a) .. | 4,322 | 1,361 | 82 | 54 | 852 | 15 |
| Coke | 364 | 332 | 489 | 496 | 404 | 1,361 |
| Tar | 53 | 69 | 28 | 18 | 753 | 239 |
| Australia (c)— | | | | | | |
| Coal | 836,336 | 645,249 | 1,087,844 | 1,888,415 | 3,469,552 | 2,676,522 |
| do. (bunkers) .. | 11,608 | 8,187 | 8,117 | 179 | 37 | 1,703 |
| Coke | 112,760 | 8,823 | 75,502 | 81,075 | 78,359 | 30,986 |
| New Zealand— | | | | | | |
| Coal | 1 | 7,142 | 18,157 | 13,559 | 48 | 6 |
| do. (bunkers) .. | 579 | — | — | — | — | — |
| Coke | 895 | 2,761 | 5 | 33 | 19 | 20 |
| Tar | 1 | — | 2 | — | — | — |
| Irish Republic— | | | | | | |
| Anthracite | 2,100 | 1,086 | 10,329 | 17,000 | 11,968 | 14,635 |
| Other coal | 5,422 | 3,460 | 11,479 | 44,297 | 27,940 | 142 |
| Coal (bunkers) (a) .. | 1,268 | 311 | 320 | 448 | 186 | 363 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Coal | 8 | 35 | 26 | 63 | 28 | 36 |
| Brown coal | 39,821 | 37,093 | 37,119 | 31,825 | 19,643 | 19,780 |
| Coke | 15 | 23 | 38 | 20 | 9,952 | 81 |
| Tar | 64 | 28 | 1 | — | — | 407 |
| Pitch | 5,169 | 2,772 | 2,932 | 3,854 | 1,054 | 2,387 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Coal | 2,779,509 | 2,216,472 | 2,187,163 | 2,730,488 | 2,709,649 | 1,920,853 |
| do. (bunkers) (b) .. | 6,596 | 7,222 | 15,252 | 8,270 | 8,692 | 2,971 |
| Coke | 828,762 | 625,642 | 736,973 | 624,729 | 416,655 | 477,277 |
| Briquettes | 184,721 | 150,948 | 176,007 | 140,306 | 285,990 | 692,851 |
| Tar | 5,885 | 20,373 | 15,251 | 12,512 | 6,261 | 10,322 |
| Pitch | 31,043 | 27,330 | 55,823 | 39,379 | 23,292 | 26,189 |
| Czechoslovakia— | | | | | | |
| Coal | 1,482,000 | 1,565,000 | 2,160,000 | 2,408,000 | 2,347,000 | n.a. |
| Brown coal | 1,246,000 | 1,295,000 | 1,420,000 | 1,342,000 | 1,522,000 | n.a. |
| Coke | 1,028,000 | 1,190,000 | 1,296,000 | 1,348,000 | 1,545,000 | n.a. |
| Denmark— | | | | | | |
| Coal | n.a. | 408 | — | 3 | 234 | 2,217 |
| Brown coal briquettes | 8,289 | 1,939 | 8,964 | 28,862 | 26,345 | 48,996 |
| Coke | 14,901 | 10,944 | 18,296 | 24,131 | 40,148 | 52,306 |
| Tar and pitch .. | 21,526 | 15,943 | 14,242 | 12,802 | 15,154 | 33,656 |
| France— | | | | | | |
| Anthracite | 12,412 | 9,962 | 14,794 | 12,935 | 23,275 | 13,753 |
| Bituminous | 4,694,838 | 2,938,227 | 1,381,364 | 1,311,872 | 1,315,849 | 972,521 |
| Brown coal | — | 295 | 465 | 361 | 61 | 20 |
| Coke | 136,369 | 117,084 | 103,966 | 72,584 | 55,983 | 50,108 |
| Briquettes | 18,802 | 16,802 | 26,207 | 23,768 | 30,838 | 13,883 |
| Brown coal briquettes | 39 | 175 | 168 | 106 | 243 | 597 |
| Coal, coke and briquettes— | | | | | | |
| Bunkers (domestic produce) .. | 25,807 | 21,993 | (b) 1,350 | n.a. | n.a. | n.a. |
| do. (foreign produce) .. | 11,351 | 7,315 | n.a. | n.a. | n.a. | n.a. |
| Tar and pitch .. | 63,207 | 55,219 | 34,945 | 25,974 | 11,944 | 16,770 |

(a) Foreign coal (see imports).

(b) Bunkers for foreign ships only.

(c) Years ended June 30 of that stated.

EXPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long ton

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|--------------|--------------|--------------|--------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Coal | 10,932,165 | 14,325,745 | 17,245,972 | } 16,666,158 | { 17,572,444 | } 16,093,365 |
| do. (bunkers) (a) .. | 118,125 | 100,591 | 89,180 | | | |
| Brown coal | 23,171 | 71,303 | 214,519 | 245,032 | 222,951 | 199,061 |
| Coke | 9,229,959 | 8,842,565 | 10,719,700 | 10,771,878 | 10,151,115 | 11,881,974 |
| Coal briquettes .. . | 411,219 | 322,589 | 355,006 | 357,468 | 395,102 | 447,634 |
| Brown-coal briquettes | 1,629,584 | 1,483,242 | 1,302,463 | 1,433,600 | 1,424,860 | 1,490,403 |
| Tar and pitch | 162,114 | 185,779 | 265,348 | 251,130 | 262,007 | 258,316 |
| Germany (East)— | | | | | | |
| Coal | 9,649 | 8,570 | 984 | 198 | 591 | 571 |
| Coke | 77,000 | 86,000 | 104,000 | 117,000 | 113,079 | 112,104 |
| Brown coal briquettes .. | 6,092,000 | 6,249,000 | 6,239,000 | 6,107,000 | 6,498,000 | 6,870,745 |
| Hungary— | | | | | | |
| Coal | 92,000 | n.a. | 63,341 | 48,808 | 52,199 | 148,507 |
| Italy— | | | | | | |
| Coal (incl. bunkers) .. . | 5,722 | 3,281 | 3,054 | 5,149 | 4,418 | 23,762 |
| Coke | 19,253 | 36,617 | 115,369 | 163,649 | 170,007 | 146,419 |
| Tar | 3,116 | 2,437 | 1,776 | 576 | 3,775 | 3,115 |
| Pitch | 25,543 | 21,435 | 22,806 | 20,583 | 29,542 | 43,592 |
| Netherlands— | | | | | | |
| Coal | 1,296,324 | 1,776,649 | 2,131,176 | 2,318,849 | 2,293,540 | 2,530,659 |
| do. (bunkers) .. . | (a) 6,832 | (a) 6,686 | (a) 1,481 | (a) 1,496 | (a) 1,212 | (a) 804 |
| Brown coal | 44,972 | 10,342 | — | 22 | 9 | 20 |
| Coke | 1,658,470 | 2,024,599 | 2,269,911 | 2,438,035 | 2,187,692 | 2,084,173 |
| Briquettes | 292,443 | 392,221 | 498,463 | 533,082 | 610,660 | 756,901 |
| Brown coal briquettes .. | 28,375 | 24,227 | 27,277 | 37,557 | 38,855 | 33,698 |
| Tar | 208 | 1,246 | 18,437 | 27,931 | 26,451 | 20,669 |
| Pitch | 25,655 | 16,120 | 6,281 | 6,932 | 8,783 | 15,207 |
| Norway— | | | | | | |
| Coal | 163,790 | 97,184 | 170,668 | 159,948 | 177,146 | 172,473 |
| Tar | 971 | — | 2,631 | 2,675 | 1,928 | 3,965 |
| Pitch | 539 | 25 | 30 | 19 | 17 | 27 |
| Poland— | | | | | | |
| Coal | 15,947,700 | 15,753,500 | 17,220,700 | 16,783,700 | 17,032,600 | 16,624,919 |
| Brown coal | 5,100,300 | 5,676,900 | 5,368,800 | 5,779,600 | 5,570,600 | 5,645,014 |
| Coke | 2,036,500 | 2,035,800 | 2,053,000 | 2,104,800 | 2,111,000 | 2,314,460 |
| Portugal— | | | | | | |
| Coal | 183 | 110 | 67 | 2,563 | 102 | 124 |
| do. (bunkers) (a) .. . | 1,758 | 1,710 | 367 | 473 | 1,523 | 802 |
| Tar and pitch | 82 | 69 | 11 | 18 | 15 | 29 |
| Spain— | | | | | | |
| Anthracite | — | — | — | 15,244 | — | 5,925 |
| Bituminous (incl. bunkers) .. . | 51,445 | 45,745 | } (c) 19,066 | (c) 20,760 | (c) 15,353 | (c) 1,639 |
| Other coal | 18,571 | 16,342 | | | | |
| Coke | 534 | 698 | (c) 23,664 | (c) 27,140 | (c) — | (c) 14,678 |
| Tar and pitch | 9 | 2 | 120 | 7 | — | — |
| Spitzbergen— | | | | | | |
| Coal (including bunkers) | 685,078 | 656,213 | 784,151 | 705,043 | 826,000 | 642,422 |
| Sweden— | | | | | | |
| Coal | 39 | 966 | 427 | 36,104 | 19,911 | 22,556 |
| Coke | 18,954 | 16,654 | 10,639 | 6,575 | 6,235 | 7,147 |
| Tar, pitch, etc. .. . | 4,774 | 23 | 17 | 4,515 | 9,577 | 13,855 |
| Switzerland— | | | | | | |
| Coal | 3,448 | 1,105 | 1 | 3 | 1,729 | 296 |
| Coke | 1,707 | 5,435 | 2,326 | 310 | 387 | 131 |
| Briquettes | 561 | 178 | 42 | 2,497 | 182 | 838 |
| Tar and pitch | (b) 485 | (b) 412 | 245 | 13 | 143 | 271 |
| U.S.S.R.— | | | | | | |
| Anthracite | 1,861,100 | 1,810,000 | 1,792,200 | 2,172,100 | 3,213,400 | 4,168,100 |
| Other coal | 7,932,700 | 9,084,200 | 10,328,300 | 12,706,100 | 15,642,000 | 16,519,900 |
| Coke | 2,378,800 | 2,427,100 | 2,604,200 | 2,968,400 | 3,269,500 | 3,736,000 |
| Pitch | 204,300 | 162,300 | 190,600 | 145,200 | 127,800 | 142,200 |

(a) Bunkers for foreign ships only.
 (b) Including pitch from petroleum.

(c) Excluding exports to Spanish Dependencies.

EXPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|------------|------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Yugoslavia— | | | | | | |
| Bituminous | 65,697 | 95,332 | 104,655 | 98,812 | 83,044 | 83,224 |
| Brown coal | 60,962 | 55,537 | 6,177 | 6,842 | 14,756 | 39,377 |
| Lignite | 3,878 | 670 | 1,276 | 5,606 | 11,685 | 25,100 |
| Briquettes | 30 | 36 | 49 | 39 | 2 | — |
| Pitch | 10,200 | 7,679 | 11,203 | 21,057 | 11,927 | 12,484 |
| Tar | 733 | — | — | 1,153 | 431 | — |
| Algeria— | | | | | | |
| Coal and briquettes | 7,298 | 4,390 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| do. (bunkers) | — | — | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| do. do. (b) | 3,422 | 2,703 | 1,103 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Coke | 7 | 18 | 51 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tar | — | — | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canary Islands— | | | | | | |
| Coal | — | 12 | — | — | 202 | <i>n.a.</i> |
| Cape Verde Islands— | | | | | | |
| Coal (bunkers) (b) | 5 | 1 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ceuta— | | | | | | |
| Coal | 485 | 76 | — | — | — | <i>n.a.</i> |
| do. (bunkers) (b) | 2,757 | 1,250 | 601 | 390 | 203 | <i>n.a.</i> |
| Egypt— | | | | | | |
| Coal (bunkers for foreign ships) (b) | 187 | 26 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Coal (bunkers) | 6 | 3 | — | — | — | — |
| Morocco— | | | | | | |
| Anthracite | 211,621 | 206,566 | 185,091 | 194,130 | 155,530 | 172,935 |
| Other coal | 8,550 | 13,627 | 46 | 816 | 7 | — |
| Briquettes | 4,192 | 3,099 | 3,856 | 4,786 | 1,849 | 291 |
| Mozambique— | | | | | | |
| Coal (incl. bunkers) | 46,480 | 43,189 | 58,599 | 59,832 | 51,922 | 62,340 |
| South Africa— | | | | | | |
| Coal | 648,220 | 503,838 | 933,554 | 1,038,147 | 1,618,277 | 1,491,945 |
| do. (bunkers) | 10,779 | 1,852 | 1,808 | 1,383 | 1,146 | <i>n.a.</i> |
| Coke | 1,985 | 1,630 | 12,656 | 8,981 | 13,593 | 3,735 |
| Tar and pitch | 9,664 | 24,621 | 17,273 | 10,860 | 3,946 | 6,774 |
| Mexico— | | | | | | |
| Coal and coke | 325 | 20 | 334 | — | — | — |
| Tar | 1 | — | — | — | — | — |
| United States— | | | | | | |
| Anthracite | 2,035,588 | 1,596,034 | 1,286,071 | 1,380,793 | 1,608,682 | 2,993,921 |
| Bituminous | 44,904,805 | 33,261,992 | 32,625,960 | 31,223,058 | 34,297,700 | 42,034,317 |
| do. (bunkers) | 320,106 | 326,612 | 274,832 | 245,551 | 190,322 | 199,234 |
| Coke | 350,729 | 410,912 | 315,193 | 397,529 | 325,029 | 402,894 |
| Briquettes | 49,072 | 29,873 | 18,862 | 11,367 | 16,604 | 72,260 |
| Tar and pitch | 59,634 | 27,628 | 107,106 | 65,096 | 52,978 | <i>n.a.</i> |
| Chile— | | | | | | |
| Coal (including bunkers) | 49,939 | 61,168 | 31,849 | 725 | 1,101 | <i>n.a.</i> |
| Coke | 3,149 | — | — | — | — | <i>n.a.</i> |
| Peru— | | | | | | |
| Coal | 2,363 | 52,235 | 26,998 | 1,968 | 10,457 | 6,889 |
| Venezuela— | | | | | | |
| Coal | 2 | 237 | — | — | — | — |
| Formosa— | | | | | | |
| Coal (including bunkers) | 29,833 | 89,432 | 186,073 | 236,966 | 126,341 | 89,302 |
| Indonesia— | | | | | | |
| Coal (including bunkers) | 19,105 | 14,403 | 6,946 | 89 | 202 | <i>n.a.</i> |
| Iran (a)— | | | | | | |
| Coal | 249 | 306 | 367 | 264 | <i>n.a.</i> | <i>n.a.</i> |

(a) Years ended March 20 following that stated.

 (b) Foreign coal (*see imports*).

EXPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long ton

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|--------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Japan— | | | | | | |
| Coal | 169,238 | 54,769 | 21,429 | 56,065 | 62,452 | 90,464 |
| do. (bunkers) .. | 10,170 | 6,555 | 12,838 | 9,816 | <i>n.a.</i> | <i>n.a.</i> |
| Coke | 3,240 | 14,147 | 6,639 | 8,119 | 14,463 | 16,054 |
| Tar and pitch .. | 19,026 | 7,909 | 18,907 | 14,569 | 30,368 | 31,608 |
| Korea (South)— | | | | | | |
| Anthracite | 27,814 | 66,848 | 120,854 | 237,475 | 296,725 | 258,801 |
| Lebanon— | | | | | | |
| Coal | 890 | 1,022 | (a) 1,706 | (a) 1,674 | <i>n.a.</i> | <i>n.a.</i> |
| Coke | 747 | 620 | 416 | 542 | <i>n.a.</i> | <i>n.a.</i> |
| Briquettes | 1,527 | 2,056 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Turkey— | | | | | | |
| Coal | — | 3,882 | 30,316 | — | — | 5,856 |
| Vietnam (South)— | | | | | | |
| Coal | — | — | — | 68 | <i>n.a.</i> | <i>n.a.</i> |

(a) Including briquettes.

IMPORTS OF COAL, COKE AND BY-PRODUCTS*

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|------------------------------------|-----------|----------|----------|----------|----------|----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Coal | 793,927 | 117,964 | 13,223 | 39,900 | 21,829 | 32,123 |
| Coke | 5,834 | 4,416 | 3,291 | 2,109 | 3,111 | 788 |
| Manufactured fuel | — | 4 | 6 | 56 | 173 | 222 |
| Channel Islands— | | | | | | |
| Anthracite | 128,803 | 102,827 | 116,473 | 84,356 | 79,556 | 84,204 |
| Bituminous | 160,873 | 147,094 | 130,950 | 105,076 | 110,143 | 100,443 |
| Coke | 351 | 237 | 4,167 | 5,042 | 7,316 | 8,006 |
| Gibraltar— | | | | | | |
| Coal (b) | 14,225 | 7,057 | 6,720 | 6,820 | 2,781 | 2,900 |
| Malta— | | | | | | |
| Coal (c) | r 7,108 | r 2,752 | r 2,046 | r 2,056 | 2,377 | 2,549 |
| Coke | r 242 | r 604 | r 582 | r 1,020 | 1,225 | 267 |
| Gambia— | | | | | | |
| Coal, coke and patent fuel | 7 | 103 | — | 3 | — | — |
| Tar | 11 | 38 | 22 | 7 | 1 | 3 |
| Ghana— | | | | | | |
| Coal | } 105,668 | } 79,058 | } 36,870 | } 49,284 | } 28,451 | } 41,033 |
| Coke and patent fuel .. .. . |  |  |  |  |  |  | 4,748 | 374 | 588 |
| Tar | 1,084 | 717 | 519 | 836 | 338 | 940 |
| Kenya— | | | | | | |
| Coal (c) | 35,082 | 35,985 | 38,900 | 35,528 | 23,518 | 40,053 |
| Coke | 2,634 | 354 | 2,384 | 1,437 | 1,562 | 1,572 |
| Tar | 7 | 6 | 6 | (a) 6 | — | (a) 1 |
| Mauritius— | | | | | | |
| Coal | 18,572 | 13,597 | 2,384 | 5,756 | 3,014 | 2,085 |
| Coke | 273 | 244 | 466 | 255 | 198 | 182 |
| Tar | 20 | 13 | 23 | 21 | 86 | 134 |
| Nigeria— | | | | | | |
| Coal, coke and patent fuel | 920 | 711 | 901 | 2,446 | 1,394 | 1,399 |
| Tar | 804 | 715 | 1,343 | 1,138 | 1,137 | 1,261 |
| Rhodesia and Nyasaland— | | | | | | |
| Coal | 45,981 | 48,588 | 56,765 | 65,020 | 62,421 | 59,129 |
| Coke | 284 | 99 | 134 | 35 | 241 | 35 |
| Tar | 82 | 678 | 571 | 809 | 523 | 171 |
| St. Helena— | | | | | | |
| Coal | 64 | 67 | 49 | 67 | 94 | 110 |
| Sierra Leone— | | | | | | |
| Coal, coke and briquettes | 30,491 | 15,670 | 11,199 | 10,649 | 15,321 | 4,452 |
| Tar | 239 | 211 | 140 | (d) 208 | 193 | 113 |
| Tanganyika— | | | | | | |
| Coal | 394 | 218 | 321 | 228 | 315 | 366 |
| Coke | 370 | 188 | 424 | 516 | 456 | 500 |
| Tar | 34 | 23 | 24 | 14 | 5 | 10 |
| Uganda— | | | | | | |
| Coal | 39 | 32 | 40 | 44 | 80 | 72 |
| Coke | 2 | 17 | 82 | 76 | 134 | 456 |
| Tar | 19 | 18 | 13 | 16 | 20 | 4 |
| Zanzibar— | | | | | | |
| Coal | 28 | 111 | 28 | 3 | 92 | 17 |

*For ammonium sulphate, etc., see Nitrogen Compounds, pages 238-245.

(a) Excess of re-exports.

(b) Imported chiefly for bunkering purposes. (See exports.)

(c) Includes coal imported for bunkering purposes. (See exports.)

(d) Total imports.

IMPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------------|------------|------------|------------|-----------|------------|------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Canada— | | | | | | |
| Anthracite | 1,381,951 | 1,361,166 | 1,098,667 | 858,329 | 790,336 | 739,071 |
| do. dust | 7,351 | 70,895 | 59,786 | 86,454 | 26,035 | 17,470 |
| Bituminous | 11,242,029 | 11,030,876 | 10,681,129 | 9,811,048 | 10,214,035 | 10,936,295 |
| do. (a) | 300,431 | 238,257 | 257,114 | 222,549 | 218,678 | 236,357 |
| Brown coal | 924 | — | — | — | — | — |
| Briquettes | 37,339 | 21,894 | 13,864 | 8,571 | 6,793 | 5,752 |
| Coke | 272,616 | 341,681 | 265,810 | 257,829 | 219,945 | 209,473 |
| Tar | 3,426 | 1,798 | 2,155 | 1,756 | 2,528 | 2,630 |
| Pitch | 55,168 | 51,684 | 71,653 | 95,059 | 84,191 | 101,384 |
| Bahamas— | | | | | | |
| Coal | 60 | 2 | 4 | 2 | 3 | 1 |
| Barbados— | | | | | | |
| Coal, coke, and patent fuel | 973 | 715 | 810 | 578 | 603 | 319 |
| Bermuda— | | | | | | |
| Bituminous (b) | 1,098 | 10 | 10 | 10 | 10 | n.a. |
| British Honduras— | | | | | | |
| Coal and coke | — | 19 | 24 | 17 | 28 | 14 |
| Grenada— | | | | | | |
| Coal | — | 1 | 6 | 3 | 3 | 2 |
| Coke | 3 | 2 | 10 | — | — | — |
| Jamaica— | | | | | | |
| Coal (b) | 400 | 235 | 255 | 210 | 206 | 154 |
| Coke | 804 | 575 | 406 | 526 | 506 | 657 |
| Tar | 43 | 62 | 28 | 22 | 20 | 33 |
| St. Kitts— | | | | | | |
| Coal, coke and patent fuel | 208 | 11 | 17 | 10 | — | 5 |
| St. Lucia— | | | | | | |
| Coal | 5 | 13 | 25 | 19 | 9 | 10 |
| Tar | 6 | 6 | 4 | — | 3 | 1 |
| St. Vincent— | | | | | | |
| Coal | 6 | 4 | 2 | 3 | 3 | — |
| Trinidad and Tobago— | | | | | | |
| Coal (b) | 827 | 1,160 | 1,289 | (c) 572 | 1,007 | n.a. |
| Coke | 153 | 304 | 89 | 161 | 113 | n.a. |
| British Guiana— | | | | | | |
| Coal | 495 | 152 | 224 | 264 | 136 | n.a. |
| Coke | 98 | 42 | 42 | 102 | 84 | n.a. |
| Patent fuel | 25 | 70 | 20 | 43 | 85 | n.a. |
| Tar | 238 | 186 | 223 | 424 | 172 | n.a. |
| Falkland Islands— | | | | | | |
| Coal | — | 26 | 427 | — | 5 | 123 |
| Coke | 95 | 75 | 243 | 129 | — | 200 |
| Aden— | | | | | | |
| Coal (b) | — | 1,319 | 1,452 | 1,635 | — | 1,246 |
| Coke | 1 | — | — | — | — | — |
| Ceylon— | | | | | | |
| Coal (b) | 172,121 | 173,345 | 256,077 | 137,141 | 139,005 | 142,847 |
| Coke | 2,730 | 1,238 | 240 | 2,246 | 530 | 598 |
| Tar | 64 | 288 | 113 | 43 | 58 | 54 |
| Cyprus— | | | | | | |
| Coal (b) | 645 | 648 | 417 | 1 | 82 | 283 |
| Coke | 27 | — | 165 | 186 | 196 | 232 |
| Tar and pitch | 4 | 2 | — | 5 | 3 | 1 |
| Hong Kong— | | | | | | |
| Coal | 199,303 | 205,086 | 226,369 | 239,043 | 215,253 | 190,374 |
| Coke | 5,762 | 5,226 | 6,076 | 4,112 | 4,017 | 4,040 |

(a) "Ex-warehoused for ships' stores." (See exports.) (c) Excess of re-exports.

(b) Including imports for bunkering purposes.

(See exports.)

IMPORTS OF COAL, COKE AND BY PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|-------------|-------------|-------------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| India— | | | | | | |
| Coal | 1,329 | 1,832 | 1,302 | 3,482 | 10,832 | 2,718 |
| Coke | 1,070 | 20 | — | 533 | 3,027 | 100 |
| Tar and pitch | 87 | 34 | (b) 2,543 | (b) 1,410 | (b) 155 | (b) 59 |
| Goa— | | | | | | |
| Coal | 14,476 | 12,209 | 8,052 | n.a. | n.a. | (e) |
| Coke | 110 | 59 | n.a. | n.a. | n.a. | (e) |
| Malaya— | | | | | | |
| Anthracite | 15 | 27,623 | 23,931 | 26,964 | 18,957 | 27,099 |
| Bituminous (c) | 1,875 | 1,100 | 9,669 | 14,244 | 19,781 | 6,013 |
| Coke | 2,780 | 4,656 | 5,805 | 6,862 | 6,309 | 9,608 |
| Tar | 473 | 492 | 150 | 507 | 1,836 | 2,577 |
| Pakistan— | | | | | | |
| Coal | 1,344,644 | 913,860 | 2,062,536 | 1,240,380 | 1,311,602 | 1,231,145 |
| Coke | 52,022 | 42,119 | 28,297 | — | — | — |
| Tar and pitch | 2,536 | 3,380 | 6,039 | 591 | 7,130 | 267 |
| Australia (a)— | | | | | | |
| Coal | 9,335 | 7,526 | 7,678 | 6,629 | 4,792 | 7,929 |
| Coke | 9,778 | 6,845 | 8,802 | 9,768 | 44 | 29,052 |
| Tar and pitch | 2,790 | 3,098 | 4,602 | 2,846 | 3,696 | 8,343 |
| Fiji— | | | | | | |
| Coal | 3,262 | 10,083 | 7,087 | 1,926 | 7,026 | 6,324 |
| Coke | 218 | 183 | 211 | 211 | 165 | 224 |
| Tar | 74 | 158 | 254 | 11 | 43 | 35 |
| New Guinea (a)— | | | | | | |
| Coal and coke | 27 | 35 | 26 | 19 | 18 | 8 |
| New Zealand— | | | | | | |
| Coal | 116 | 82 | 132 | 9,784 | 7,535 | 78 |
| Coke | — | 57 | 55 | 357 | 100 | n.a. |
| Tar | 10,528 | 6,764 | 5,499 | 5,688 | 5,383 | n.a. |
| Pitch | 975 | 980 | 722 | 834 | 367 | n.a. |
| Sabah— | | | | | | |
| Coal and coke | 79 | 84 | 33 | 64 | 66 | n.a. |
| Papua (a)— | | | | | | |
| Coal and coke | 33 | 51 | 25 | 21 | 17 | 16 |
| Sarawak— | | | | | | |
| Coal and coke | (d) 14 | 27 | 171 | (d) 23 | (d) 19 | 20 |
| Tar | 136 | 197 | 144 | 127 | 92 | 95 |
| Western Samoa— | | | | | | |
| Coal and coke | 7 | 126 | 155 | 5 | 30 | n.a. |
| Irish Republic— | | | | | | |
| Anthracite | r 41,960 | r 60,906 | 54,979 | 56,098 | 57,297 | 56,980 |
| Bituminous (c) | r 1,312,217 | r 1,512,562 | r 1,595,192 | 1,716,304 | 1,405,217 | 1,377,870 |
| Coke | 6,540 | 6,801 | 7,248 | 6,986 | 15,613 | 12,058 |
| Patent fuel | 12,467 | 4,044 | 2,524 | 2,777 | 2,692 | 3,779 |
| Tar | 17,892 | 8,609 | 5,215 | 6,890 | 10,912 | 3,588 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Coal | 3,664,557 | 3,223,949 | 3,661,335 | 3,455,803 | 3,593,228 | 3,888,509 |
| Brown coal | 237,181 | 118,564 | 66,233 | 42,785 | 40,868 | 85,697 |
| Coke | 593,855 | 714,939 | 887,590 | 758,057 | 793,662 | 900,602 |
| Briquettes | 536,947 | 481,691 | 537,741 | 501,363 | 610,142 | 684,744 |
| Tar, pitch, etc. | 4,739 | 11,511 | 6,339 | 8,516 | 8,247 | 19,336 |

(a) Years ended June 30 of that stated.

(e) With effect from April, 1963, figures included

(b) Years ending March 31 following that stated.

with those of India.

(c) Including imports for bunkering purposes. (See exports.)

(d) Coke only.

IMPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|------------|------------|------------|-----------|------------|------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Canada— | | | | | | |
| Anthracite | 1,381,951 | 1,361,166 | 1,098,667 | 858,329 | 790,336 | 739,071 |
| do. dust | 7,351 | 70,895 | 59,786 | 86,454 | 26,035 | 17,470 |
| Bituminous | 11,242,029 | 11,030,876 | 10,681,129 | 9,811,048 | 10,214,035 | 10,936,295 |
| do. (a) | 300,431 | 238,257 | 257,114 | 222,549 | 218,678 | 236,357 |
| Brown coal | 924 | — | — | — | — | — |
| Briquettes | 37,339 | 21,894 | 13,864 | 8,571 | 6,793 | 5,752 |
| Coke | 272,616 | 341,681 | 265,810 | 257,829 | 219,945 | 209,473 |
| Tar | 3,426 | 1,798 | 2,155 | 1,756 | 2,528 | 2,630 |
| Pitch | 55,168 | 51,684 | 71,653 | 95,059 | 84,191 | 101,384 |
| Bahamas— | | | | | | |
| Coal | 60 | 2 | 4 | 2 | 3 | 1 |
| Barbados— | | | | | | |
| Coal, coke, and patent fuel | 973 | 715 | 810 | 578 | 603 | 319 |
| Bermuda— | | | | | | |
| Bituminous (b) | 1,098 | 10 | 10 | 10 | 10 | n.a. |
| British Honduras— | | | | | | |
| Coal and coke | — | 19 | 24 | 17 | 28 | 14 |
| Grenada— | | | | | | |
| Coal | — | 1 | 6 | 3 | 3 | 2 |
| Coke | 3 | 2 | 10 | — | — | — |
| Jamaica— | | | | | | |
| Coal (b) | 400 | 235 | 255 | 210 | 206 | 154 |
| Coke | 804 | 575 | 406 | 526 | 506 | 657 |
| Tar | 43 | 62 | 28 | 22 | 20 | 33 |
| St. Kitts— | | | | | | |
| Coal, coke and patent fuel | 208 | 11 | 17 | 10 | — | 5 |
| St. Lucia— | | | | | | |
| Coal | 5 | 13 | 25 | 19 | 9 | 10 |
| Tar | 6 | 6 | 4 | — | 3 | 1 |
| St. Vincent— | | | | | | |
| Coal | 6 | 4 | 2 | 3 | 3 | — |
| Trinidad and Tobago— | | | | | | |
| Coal (b) | 827 | 1,160 | 1,289 | (c) 572 | 1,007 | n.a. |
| Coke | 153 | 304 | 89 | 161 | 113 | n.a. |
| British Guiana— | | | | | | |
| Coal | 495 | 152 | 224 | 264 | 136 | n.a. |
| Coke | 98 | 42 | 42 | 102 | 84 | n.a. |
| Patent fuel | 25 | 70 | 20 | 43 | 85 | n.a. |
| Tar | 238 | 186 | 223 | 424 | 172 | n.a. |
| Falkland Islands— | | | | | | |
| Coal | — | 26 | 427 | — | 5 | 123 |
| Coke | 95 | 75 | 243 | 129 | — | 200 |
| Aden— | | | | | | |
| Coal (b) | — | 1,319 | 1,452 | 1,635 | — | 1,246 |
| Coke | 1 | — | — | — | — | — |
| Ceylon— | | | | | | |
| Coal (b) | 172,121 | 173,345 | 256,077 | 137,141 | 139,005 | 142,847 |
| Coke | 2,730 | 1,238 | 240 | 2,246 | 530 | 598 |
| Tar | 64 | 288 | 113 | 43 | 58 | 54 |
| Cyprus— | | | | | | |
| Coal (b) | 645 | 648 | 417 | 1 | 82 | 283 |
| Coke | 27 | — | 165 | 186 | 196 | 232 |
| Tar and pitch | 4 | 2 | — | 5 | 3 | 1 |
| Hong Kong— | | | | | | |
| Coal | 199,303 | 205,086 | 226,369 | 239,043 | 215,253 | 190,374 |
| Coke | 5,762 | 5,226 | 6,076 | 4,112 | 4,017 | 4,040 |

(a) "Ex-warehoused for ships' stores." (See exports.) (c) Excess of re-exports.

(b) Including imports for bunkering purposes.

(See exports.)

IMPORTS OF COAL, COKE AND BY PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|-------------|-------------|-------------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| India— | | | | | | |
| Coal | 1,329 | 1,832 | 1,302 | 3,482 | 10,832 | 2,718 |
| Coke | 1,070 | 20 | — | 533 | 3,027 | 100 |
| Tar and pitch | 87 | 34 | (b) 2,543 | (b) 1,410 | (b) 155 | (b) 59 |
| Goa— | | | | | | |
| Coal | 14,476 | 12,209 | 8,052 | n.a. | n.a. | (e) |
| Coke | 110 | 59 | n.a. | n.a. | n.a. | (e) |
| Malaya— | | | | | | |
| Anthracite | 15 | 27,623 | 23,931 | 26,964 | 18,957 | 27,099 |
| Bituminous (c) | 1,875 | 1,100 | 9,669 | 14,244 | 19,781 | 6,013 |
| Coke | 2,780 | 4,656 | 5,805 | 6,862 | 6,309 | 9,608 |
| Tar | 473 | 492 | 150 | 507 | 1,836 | 2,577 |
| Pakistan— | | | | | | |
| Coal | 1,344,644 | 913,860 | 2,062,536 | 1,240,380 | 1,311,602 | 1,231,145 |
| Coke | 52,022 | 42,119 | 28,297 | — | — | — |
| Tar and pitch | 2,536 | 3,380 | 6,039 | 591 | 7,130 | 267 |
| Australia (a)— | | | | | | |
| Coal | 9,335 | 7,526 | 7,678 | 6,629 | 4,792 | 7,929 |
| Coke | 9,778 | 6,845 | 8,802 | 9,768 | 44 | 29,052 |
| Tar and pitch | 2,790 | 3,098 | 4,602 | 2,846 | 3,696 | 8,343 |
| Fiji— | | | | | | |
| Coal | 3,262 | 10,083 | 7,087 | 1,926 | 7,026 | 6,324 |
| Coke | 218 | 183 | 211 | 211 | 165 | 224 |
| Tar | 74 | 158 | 254 | 11 | 43 | 35 |
| New Guinea (a)— | | | | | | |
| Coal and coke | 27 | 35 | 26 | 19 | 18 | 8 |
| New Zealand— | | | | | | |
| Coal | 116 | 82 | 132 | 9,784 | 7,535 | 78 |
| Coke | — | 57 | 55 | 357 | 100 | n.a. |
| Tar | 10,528 | 6,764 | 5,499 | 5,688 | 5,383 | n.a. |
| Pitch | 975 | 980 | 722 | 834 | 367 | n.a. |
| Sabah— | | | | | | |
| Coal and coke | 79 | 84 | 33 | 64 | 66 | n.a. |
| Papua (a)— | | | | | | |
| Coal and coke | 33 | 51 | 25 | 21 | 17 | 16 |
| Sarawak— | | | | | | |
| Coal and coke | (d) 14 | 27 | 171 | (d) 23 | (d) 19 | 20 |
| Tar | 136 | 197 | 144 | 127 | 92 | 95 |
| Western Samoa— | | | | | | |
| Coal and coke | 7 | 126 | 155 | 5 | 30 | n.a. |
| Irish Republic— | | | | | | |
| Anthracite | r 41,960 | r 60,906 | 54,979 | 56,098 | 57,297 | 56,980 |
| Bituminous (c) | r 1,312,217 | r 1,512,562 | r 1,595,192 | 1,716,304 | 1,405,217 | 1,377,870 |
| Coke | 6,540 | 6,801 | 7,248 | 6,986 | 15,613 | 12,058 |
| Patent fuel | 12,467 | 4,044 | 2,524 | 2,777 | 2,692 | 3,779 |
| Tar | 17,892 | 8,609 | 5,215 | 6,890 | 10,912 | 3,588 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Coal | 3,664,557 | 3,223,949 | 3,661,335 | 3,455,803 | 3,593,228 | 3,888,509 |
| Brown coal | 237,181 | 118,564 | 66,233 | 42,785 | 40,868 | 85,697 |
| Coke | 593,855 | 714,939 | 887,590 | 758,057 | 793,662 | 900,602 |
| Briquettes | 536,947 | 481,691 | 537,741 | 501,363 | 610,142 | 684,744 |
| Tar, pitch, etc. | 4,739 | 11,511 | 6,339 | 8,516 | 8,247 | 19,336 |

(a) Years ended June 30 of that stated.

(e) With effect from April, 1963, figures included with those of India.

(b) Years ending March 31 following that stated.

(c) Including imports for bunkering purposes. (See exports.)

(d) Coke only.

IMPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-----------|-----------|-----------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Coal | 5,557,903 | 5,027,969 | 4,061,418 | 4,169,341 | 4,858,653 | 7,223,635 |
| do. coke | 3,625,196 | 3,641,645 | 4,071,186 | 4,083,023 | 3,917,714 | 3,830,069 |
| do. briquettes .. . | 106,777 | 103,154 | 127,624 | 158,173 | 163,814 | 191,788 |
| Brown coal | 3,298 | 304 | — | — | 26 | — |
| do. do. coke | 1,223 | 34 | 36 | 169 | 239 | 93 |
| do. do. briquettes .. . | 254,243 | 213,410 | 221,524 | 225,871 | 233,338 | 246,536 |
| Tar | 8,580 | 7,836 | 22,441 | 31,995 | 31,829 | 26,227 |
| Pitch | 31,002 | 2,735 | 555 | 4,801 | 26,226 | 102,267 |
| Czechoslovakia— | | | | | | |
| Coal | 2,535,000 | 2,318,000 | 2,364,000 | 3,302,000 | 3,959,000 | <i>n.a.</i> |
| Denmark— | | | | | | |
| Coal | 2,639,299 | 2,809,220 | 3,894,049 | 3,721,971 | 3,867,021 | 3,904,546 |
| Coke | 1,484,467 | 1,125,538 | 1,320,859 | 1,169,024 | 1,339,783 | 1,394,703 |
| Coal briquettes .. . | 20,029 | 9,241 | 8,359 | 5,041 | 7,485 | 8,031 |
| Brown coal briquettes .. . | 196,044 | 129,258 | 168,444 | 180,908 | 215,611 | 189,954 |
| Coke briquettes .. . | <i>n.a.</i> | 39,436 | 24,154 | 6,332 | 14,407 | 3,433 |
| Tar | 42 | 90 | 80 | 40 | 70 | 74 |
| Pitch | 234 | 275 | 264 | 247 | 149 | 234 |
| Faroe Islands— | | | | | | |
| Coal | 1,422 | 1,257 | 971 | 1,745 | 1,218 | 3,584 |
| Finland— | | | | | | |
| Anthracite | 246,105 | 191,651 | 204,920 | 172,970 | 243,527 | 277,987 |
| Other coal | 1,844,763 | 2,335,229 | 2,685,505 | 2,562,470 | 2,335,604 | 1,870,165 |
| Briquettes | <i>n.a.</i> | <i>n.a.</i> | 8,139 | 6,974 | 7,725 | 8,169 |
| Coke | 345,446 | 280,355 | 225,849 | 256,517 | 350,939 | 346,291 |
| Tar | — | 175 | 92 | 58 | 44 | 29 |
| France— | | | | | | |
| Anthracite | 2,269,912 | 1,925,654 | 1,842,949 | 2,168,081 | 2,505,764 | 3,794,565 |
| Bituminous | 8,333,720 | 7,585,886 | 8,047,083 | 6,977,579 | 7,580,043 | 11,882,693 |
| Lignite | 922 | 169 | 79 | 1,310 | 1,528 | 1,724 |
| Coke | 4,388,705 | 4,014,797 | 4,972,098 | 5,481,533 | 4,602,265 | 5,442,467 |
| Coal briquettes .. . | 456,437 | 418,416 | 418,812 | 432,283 | 515,140 | 797,734 |
| Brown-coal briquettes .. . | 589,159 | 553,429 | 379,278 | 472,351 | 490,385 | 493,147 |
| Tar and pitch | 426,521 | 375,098 | 419,092 | 366,350 | 357,211 | 431,329 |
| Germany (Federal)— | | | | | | |
| Coal | 15,926,954 | 8,248,236 | 6,583,296 | 6,678,059 | 7,180,036 | 7,639,393 |
| Brown coal | 895,505 | 982,526 | 1,061,554 | 1,098,146 | 1,103,717 | 1,143,996 |
| Coke | 233,124 | 434,502 | 530,961 | 388,257 | 431,969 | 426,052 |
| Coal briquettes .. . | 57,652 | 131,505 | 214,434 | 212,436 | 371,132 | 643,118 |
| Brown-coal briquettes .. . | 57,704 | 62,500 | 85,218 | 161,321 | 232,212 | 401,915 |
| Tar and pitch | 85,420 | 78,371 | 53,899 | 54,023 | 66,060 | 97,737 |
| Germany (East)— | | | | | | |
| Coal | 7,280,000 | 7,956,000 | 7,901,000 | 7,811,000 | 8,741,000 | 8,709,242 |
| Brown coal | 5,166,000 | 5,759,000 | 5,444,000 | 5,858,000 | 5,637,000 | 5,695,602 |
| Coke | 2,413,000 | 2,559,000 | 2,487,000 | 2,790,000 | 2,919,000 | 3,178,987 |
| Greece— | | | | | | |
| Anthracite | 24,953 | 17,620 | 8,765 | 5,025 | 9,901 | 12,032 |
| Other coal | 189,933 | 146,680 | 197,097 | 196,107 | 169,363 | 9,076 |
| Coke | 31,039 | 24,684 | 25,297 | 31,037 | 30,816 | 108,879 |
| Tar and pitch | 688 | 721 | 237 | 392 | 853 | 444 |
| Hungary— | | | | | | |
| Coal | 1,124,149 | 1,207,493 | 1,408,160 | 1,697,589 | 1,685,207 | 2,473,615 |
| Coke | 1,127,718 | 1,045,519 | 1,025,560 | 930,947 | 950,013 | 1,058,855 |
| Pitch | 11,832 | 2,993 | 3,406 | 613 | 313 | 363 |
| Iceland— | | | | | | |
| Coal | 29,811 | 27,644 | 21,136 | 17,118 | 15,881 | <i>n.a.</i> |
| Coke | 3,054 | 2,182 | 2,256 | 1,296 | 2,090 | <i>n.a.</i> |
| Tar | 103 | 111 | 16 | 41 | 6 | <i>n.a.</i> |

IMPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | | | | | | |
|-----------------------------------|-------------|-------------|-----------|-------------|-------------|-------------|-----------|-----------|---------|---------|---------|---------|
| OTHER COUNTRIES | | | | | | | | | | | | |
| <i>(cont.)</i> | | | | | | | | | | | | |
| Italy— | | | | | | | | | | | | |
| Anthracite | } 8,658,672 | { 949,203 | 8,267,162 | } 9,548,672 | 10,266,480 | 10,500,222 | | | | | | |
| Bituminous | | | | | | | 6,789,150 | 1,388,111 | | | | |
| Lignite | | | | | | | 50,173 | 13,890 | 18,833 | 23,062 | 24,002 | 39,037 |
| Coke | | | | | | | 257,470 | 163,994 | 247,523 | 237,213 | 320,733 | 663,851 |
| Briquettes | | | | | | | 194,550 | 236,429 | 322,037 | 363,202 | 371,889 | 386,161 |
| Tar | | | | | | | 4,473 | 2,529 | 465 | 411 | 127 | 82 |
| Pitch | 101 | 212 | 600 | 1,281 | 1,538 | 2,123 | | | | | | |
| Netherlands— | | | | | | | | | | | | |
| Coal | 6,983,495 | 6,404,506 | 6,986,864 | 7,045,810 | 8,782,016 | 9,791,606 | | | | | | |
| Brown coal | 8,518 | 10,244 | 180,280 | 235,963 | 211,995 | 187,806 | | | | | | |
| Coke | 289,316 | 405,990 | 365,316 | 306,425 | 354,820 | 515,303 | | | | | | |
| Briquettes | 176,795 | 131,744 | 143,717 | 116,833 | 132,803 | 196,544 | | | | | | |
| Brown-coal briquettes | 301,312 | 261,490 | 246,445 | 234,560 | 237,193 | 260,484 | | | | | | |
| Tar | 14,437 | 26,452 | 29,995 | 54,173 | 30,314 | 56,980 | | | | | | |
| Pitch | 17,697 | 7,675 | 18,410 | 44,336 | 41,048 | 48,515 | | | | | | |
| Norway— | | | | | | | | | | | | |
| Coal (b) | 397,480 | 263,106 | 310,814 | 284,648 | 247,957 | 220,957 | | | | | | |
| Coke | 501,580 | 598,680 | 735,568 | 690,157 | 664,110 | 813,909 | | | | | | |
| Briquettes | 2,513 | 1,006 | 122 | 347 | 134 | 191 | | | | | | |
| Tar and pitch | 11,100 | 32,971 | 43,832 | 42,682 | 45,002 | 52,300 | | | | | | |
| Poland— | | | | | | | | | | | | |
| Anthracite | 13,100 | 15,900 | 19,400 | 18,500 | <i>n.a.</i> | 18,700 | | | | | | |
| Other coal | 618,000 | 881,200 | 763,600 | 895,300 | 1,025,500 | 1,245,021 | | | | | | |
| Brown-coal briquettes | 491,700 | 1,292,500 | 402,600 | 582,900 | 501,900 | 511,886 | | | | | | |
| Portugal— | | | | | | | | | | | | |
| Anthracite | 9,991 | 6,049 | 8,141 | 28,592 | 9,107 | 11,926 | | | | | | |
| Other coal | 355,851 | 285,994 | 336,391 | 338,756 | 355,753 | 438,593 | | | | | | |
| Coke | 24,687 | 33,718 | 40,950 | 187,288 | 173,477 | 205,693 | | | | | | |
| Briquettes | 2,710 | 650 | 245 | 2,506 | 1,244 | 712 | | | | | | |
| Tar and pitch | 4,710 | 4,150 | 3,206 | 2,130 | 2,978 | 2,036 | | | | | | |
| Roumania— | | | | | | | | | | | | |
| Coal | 149,100 | 188,800 | 409,700 | 433,700 | 738,100 | 686,878 | | | | | | |
| Coke | 606,400 | 688,700 | 645,400 | 472,100 | 707,300 | 903,501 | | | | | | |
| Spain— | | | | | | | | | | | | |
| Anthracite | 3,751 | 7,818 | 31 | 22 | 211 | <i>n.a.</i> | | | | | | |
| Bituminous | 1,085,122 | 815,139 | 302,858 | 210,859 | 1,510,191 | 1,656,395 | | | | | | |
| Coke | — | 5,997 | 36,494 | 283,845 | 301,152 | 125,716 | | | | | | |
| Tar and pitch | 59,420 | 48,249 | 37,770 | 26,018 | 93,896 | 71,645 | | | | | | |
| Sweden— | | | | | | | | | | | | |
| Anthracite | 29,977 | 31,535 | 50,466 | 51,697 | 51,716 | 69,614 | | | | | | |
| Other coal | 1,657,000 | 1,700,469 | 1,847,585 | 1,776,101 | 1,833,285 | 1,679,007 | | | | | | |
| Coke | 1,583,000 | 1,491,078 | 1,794,990 | 1,568,373 | 1,499,347 | 1,607,632 | | | | | | |
| Briquettes | 62,898 | 23,991 | 14,381 | 11,468 | 14,872 | 16,012 | | | | | | |
| Tar, pitch, etc. | 10,601 | 14,151 | 28,207 | 25,954 | 12,372 | 10,240 | | | | | | |
| Switzerland— | | | | | | | | | | | | |
| Coal | 1,645,461 | 1,648,646 | 1,921,852 | 1,640,619 | 1,663,745 | 1,969,973 | | | | | | |
| Lignite | 307 | 610 | 544 | 472 | 260 | 338 | | | | | | |
| Coke | 493,860 | 471,705 | 517,548 | 448,486 | 516,729 | 680,885 | | | | | | |
| Briquettes | 302,311 | 234,507 | 227,343 | 247,809 | 223,010 | 266,082 | | | | | | |
| Tar and pitch | (a) 88,477 | (a) 100,581 | 21,010 | 21,397 | 20,252 | 20,837 | | | | | | |
| U.S.S.R.— | | | | | | | | | | | | |
| Coal | 3,765,600 | 4,314,800 | 4,700,000 | 4,600,000 | 4,800,000 | 5,000,000 | | | | | | |
| Coke | 667,300 | 620,100 | 647,600 | 637,800 | 597,400 | 643,700 | | | | | | |
| Yugoslavia— | | | | | | | | | | | | |
| Anthracite | 96,633 | 101,904 | 134,857 | 142,531 | 120,460 | 118,559 | | | | | | |
| Other coal | 976,268 | 1,171,206 | 1,226,643 | 1,307,354 | 1,227,207 | 1,319,178 | | | | | | |
| Coke | 45,148 | 237,727 | 298,911 | 193,003 | 240,130 | 225,451 | | | | | | |
| Coke dust | 10,513 | — | 1,055 | 2,932 | 3,017 | 797 | | | | | | |
| Tar and pitch | 2,474 | 5,515 | 4,063 | 3,821 | 1,082 | 673 | | | | | | |

(a) Including pitch from petroleum.

(b) Excluding coal imported from Spitzbergen.

IMPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|-----------|---------|-----------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Algeria— | | | | | | |
| Coal | 504,462 | 406,818 | 328,045 | n.a. | n.a. | n.a. |
| Coke | 265 | 197 | 211 | n.a. | n.a. | n.a. |
| Briquettes | 4,629 | 3,435 | 3,659 | n.a. | n.a. | n.a. |
| Tar and pitch | 7,090 | 8,478 | 15,438 | n.a. | n.a. | n.a. |
| Angola— | | | | | | |
| Coal | 15,207 | 17,082 | 44,566 | 23,234 | 15,362 | 4,120 |
| Coke | 2,239 | 2,609 | 1,594 | 1,507 | 1,425 | 5,328 |
| Tar and pitch | n.a. | n.a. | n.a. | 2,905 | 465 | 262 |
| Cameroun— | | | | | | |
| Coal, coke, etc. | 527 | 174 | 733 | 976 | 306 | n.a. |
| Canary Islands— | | | | | | |
| Coal | 21,937 | 24,577 | (c) 1,008 | — | (c) 6,821 | n.a. |
| Cape Verde Islands— | | | | | | |
| Coal (a) | 1,505 | 665 | 59 | n.a. | n.a. | n.a. |
| Ceuta— | | | | | | |
| Coal (a) | 14,872 | 6,589 | n.a. | n.a. | n.a. | n.a. |
| Congo Republic— | | | | | | |
| Coal | 149,363 | 138,619 | n.a. | n.a. | n.a. | n.a. |
| Coke | 76,884 | 68,029 | n.a. | n.a. | n.a. | n.a. |
| Briquettes | 402 | 664 | n.a. | n.a. | n.a. | n.a. |
| Pitch | 248 | 191 | n.a. | n.a. | n.a. | n.a. |
| Tar | 263 | 1,173 | n.a. | n.a. | n.a. | n.a. |
| Egypt— | | | | | | |
| Coal | 74,892 | 42,870 | 44,673 | 45,259 | 56,836 | n.a. |
| Coke | 202,955 | 43,885 | 127,774 | 278,819 | 235,039 | n.a. |
| Briquettes | 26 | — | 104 | — | — | n.a. |
| Tar and pitch | 12 | 289 | 82 | 695 | 1,073 | n.a. |
| Equatorial African Community— | | | | | | |
| Coal, coke, briquettes .. . | 127 | 230 | 229 | 110 | 122 | n.a. |
| Ethiopia (b)— | | | | | | |
| Coal | 8,614 | 5,571 | 8,681 | 9,585 | n.a. | n.a. |
| French Somaliland— | | | | | | |
| Coal | 175 | 12 | 60 | — | — | n.a. |
| Ivory Coast— | | | | | | |
| Coal and briquettes .. . | 51 | 120 | 59 | 63 | 30 | n.a. |
| Coke | 169 | 114 | 128 | 172 | n.a. | n.a. |
| Libya— | | | | | | |
| Coal, coke, briquettes .. . | 35,670 | 30,154 | 32,781 | 37,763 | 6,082 | n.a. |
| Malagasy Republic— | | | | | | |
| Coal and briquettes .. . | 10,949 | 12,591 | 17,362 | 4,593 | 5,332 | 14,295 |
| Coke | 44 | 32 | 34 | 92 | 46 | 42 |
| Tar and pitch | 70 | 93 | 56 | 59 | 38 | 72 |
| Melilla— | | | | | | |
| Coal | 11,129 | 6,988 | n.a. | — | (c) 3,470 | n.a. |
| Morocco— | | | | | | |
| Coal | 78,158 | 63,329 | 81,391 | 84,185 | 69,353 | 92,487 |
| Coke | 8,525 | 9,470 | 8,508 | 7,230 | 6,629 | 8,862 |
| Tar | 37 | 1 | 3 | 1 | — | 505 |
| Pitch | 2,204 | 1,259 | 1,303 | 861 | 1,002 | |
| Mozambique— | | | | | | |
| Coal | 307,521 | 276,323 | 288,210 | 299,597 | 318,890 | 288,403 |
| Coke | 1,081 | 1,026 | 1,025 | 1,497 | n.a. | n.a. |
| Tar, pitch and asphalt. . . | 8,939 | 6,052 | 4,716 | 5,268 | n.a. | n.a. |
| Reunion— | | | | | | |
| Coal and briquettes .. . | 3,007 | 84 | n.a. | n.a. | n.a. | n.a. |
| Senegal— | | | | | | |
| Coal and briquettes .. . | 82 | 2,131 | 112 | 78 | 27 | n.a. |
| Coke | 413 | 399 | 234 | 294 | 279 | n.a. |

(a) Imported chiefly for bunkering purposes. (See exports).

(c) Excluding imports from Spain.

(b) Years ended September 10 of that stated.

IMPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-----------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| South Africa— | | | | | | |
| Coal | 54,962 | 26,899 | 1,818 | 2 | 57,981 | <i>n.a.</i> |
| Coke | 12 | 4 | 3 | 4 | 11 | <i>n.a.</i> |
| Sudan— | | | | | | |
| Coal | 47,679 | 31,113 | 10,162 | 15,748 | 8,261 | 17,630 |
| Coke | — | 295 | 1,577 | 417 | 1,477 | 591 |
| Tar | 204 | 31 | 79 | 31 | 118 | <i>n.a.</i> |
| Togo— | | | | | | |
| Coal and briquettes .. | — | — | — | 566 | 32 | <i>n.a.</i> |
| Tunisia— | | | | | | |
| Coal | 19,625 | 23,360 | 33,467 | 42,656 | 27,051 | 28,187 |
| Coke | 16,481 | 5,366 | 10,012 | 9,143 | 8,666 | 8,752 |
| Tar and pitch | 288 | 7 | 9 | 3 | 75 | <i>n.a.</i> |
| Costa Rica— | | | | | | |
| Coal | 60 | 49 | 53 | 27 | 38 | 36 |
| Coke | 113 | 117 | 83 | 153 | 79 | 149 |
| Cuba— | | | | | | |
| Coal | 47,784 | 57,460 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Coke | 40,647 | 69,222 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Tar and pitch | 383 | 139 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Dominican Republic— | | | | | | |
| Coal, coke, briquettes, etc. | 1,427 | 628 | 384 | 650 | <i>n.a.</i> | <i>n.a.</i> |
| French West Indies— | | | | | | |
| Guadeloupe— | | | | | | |
| Coal | 888 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Martinique— | | | | | | |
| Coal | 15 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Greenland— | | | | | | |
| Coal | 9,464 | 7,556 | 17,485 | 14,489 | 14,950 | 16,893 |
| Guatemala— | | | | | | |
| Coal | 460 | 152 | 123 | 56 | 149 | <i>n.a.</i> |
| Coke | 89 | 110 | 136 | 150 | 45 | <i>n.a.</i> |
| Honduras— | | | | | | |
| Coal | 166 | 147 | 128 | 140 | 182 | 94 |
| Coke | 21 | 4 | — | 10 | 5 | 3 |
| Mexico— | | | | | | |
| Coal | 39,302 | 56,632 | 47,137 | 49,375 | 46,048 | 44,055 |
| Coke | 3,026 | 3,522 | 6,046 | 5,954 | 9,022 | 20,910 |
| Tar | 237 | 209 | 1,253 | 296 | 548 | 2,615 |
| Nicaragua— | | | | | | |
| Coal | 19 | 15 | 16 | 9 | 12 | 14 |
| Coke | 49 | 42 | 72 | 74 | 50 | 69 |
| Panama Republic— | | | | | | |
| Coal | 105 | 150 | 30 | 19 | <i>n.a.</i> | <i>n.a.</i> |
| Salvador— | | | | | | |
| Coal | 138 | 176 | 111 | 93 | 99 | 57 |
| Coke | 110 | 130 | 119 | 153 | 205 | 204 |
| Tar | 79 | 56 | 57 | 58 | 44 | 71 |
| St. Pierre and Miquelon— | | | | | | |
| Coal | 12,133 | 9,302 | 10,920 | 9,912 | 7,358 | 10,032 |
| United States— | | | | | | |
| Anthracite | 3,896 | 2,351 | 1,318 | 707 | 6,771 | 4,129 |
| Bituminous | 166,187 | 134,532 | 123,093 | 146,660 | 206,759 | 236,896 |
| Lignite | 40 | — | 10 | — | — | <i>n.a.</i> |
| Slack and culm. . . . | 107,827 | 200,033 | 109,482 | — | 762 | <i>n.a.</i> |
| Coke | 108,497 | 110,049 | 112,808 | 112,962 | 126,681 | 136,246 |
| Briquettes | 164 | 165 | 4,937 | 6,552 | 7,496 | 4,125 |
| Tar and pitch | 21,649 | 25,337 | 21,088 | 18,412 | 33,551 | <i>n.a.</i> |
| Argentina— | | | | | | |
| Coal | 1,331,941 | 1,300,305 | 1,379,851 | 1,196,334 | 609,998 | 756,796 |
| Coke | 101,600 | 68,055 | 69,092 | 44,532 | 22,259 | 1,886 |
| Tar and pitch | 1,238 | 526 | 391 | 658 | 412 | 68 |

IMPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|-----------|------------|------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Bolivia— | | | | | | |
| Coal and coke | 1,333 | 572 | 2,821 | 1,786 | 1,105 | 1,265 |
| Brazil— | | | | | | |
| Coal | 557,602 | 624,458 | 1,018,764 | 844,645 | 877,873 | 852,622 |
| Coke | 45,256 | 65,999 | 29,769 | 43,160 | 27,061 | 38,606 |
| Chile— | | | | | | |
| Coal | 98,095 | 23,522 | 262,640 | 364,594 | 871,900 | n.a. |
| Coke | 569 | 632 | 781 | 628 | 628 | n.a. |
| Tar and pitch | 5,529 | 8,776 | 24,669 | 21,900 | 20,104 | n.a. |
| Colombia— | | | | | | |
| Coal | 5 | 204 | 1 | 18 | — | 14 |
| Coke | 83 | 40 | 30 | 49 | 23 | 11 |
| Peru— | | | | | | |
| Coal | — | 10 | — | — | — | 1,065 |
| Coke | 655 | 690 | 1,828 | 18,365 | 4,373 | 8,400 |
| Tar | 67 | 49 | 10 | 131 | 128 | 44 |
| Surinam— | | | | | | |
| Coal | 6 | 88 | 32 | n.a. | 117 | n.a. |
| Uruguay— | | | | | | |
| Coal | 100,174 | 49,719 | 74,892 | n.a. | n.a. | n.a. |
| Coke | 1,891 | 1,474 | 3,269 | n.a. | n.a. | n.a. |
| Venezuela— | | | | | | |
| Coal | 684 | 131 | 97 | 42 | 3,091 | 14,704 |
| Coke | n.a. | 733 | 578 | 12,958 | 122,964 | 124,895 |
| Burma— | | | | | | |
| Coal | 335,981 | 402,527 | 336,536 | 353,621 | 325,328 | 205,921 |
| Coke | 5,396 | 11,917 | 10,790 | 7,493 | 11,413 | 5,531 |
| Formosa— | | | | | | |
| Coke | 4,375 | 4,884 | — | — | — | 7,095 |
| Tar and pitch | 2,643 | 2,432 | 300 | 276 | — | n.a. |
| Indonesia— | | | | | | |
| Coal | 20,830 | 41,655 | 34,281 | 25,075 | n.a. | n.a. |
| Coke | 150 | 3,624 | 254 | 644 | n.a. | n.a. |
| Tar | 98 | 147 | 212 | 53 | n.a. | n.a. |
| Iraq— | | | | | | |
| Coal | 437 | 2,637 | 521 | 384 | 681 | n.a. |
| Coke | 1,660 | 993 | 1,696 | 383 | 762 | n.a. |
| Tar and pitch | 70 | 2,738 | 5,466 | 2,838 | 162 | n.a. |
| Israel— | | | | | | |
| Anthracite | 20,969 | 13,990 | 34,174 | 17,609 | 20,122 | 12,730 |
| Other coal | 596 | 10,120 | 70 | | | |
| Coke | 3,801 | 6,409 | 11,544 |  |  |  | 27,110 | 25,598 | 7,517 |
| Japan— | | | | | | |
| Anthracite | 497,460 | 511,210 | 814,411 | 1,102,018 | 1,288,793 | 10,966,639 |
| Other coal | 4,074,973 | 4,380,232 | 7,346,876 | 9,881,599 | 10,452,607 | |
| Coke | 2 | 1 | 2 | 180,054 | 116,427 | |
| Tar and pitch | 4,694 | 9,323 | 25,498 | 23,300 | 7,528 | |
| Korea (South)— | | | | | | |
| Coal | 760,106 | 370,207 | 35,146 | 277,236 | 177,175 | 128,152 |
| Lebanon— | | | | | | |
| Coal | 1,999 | 4,410 | (a) 1,083 | (a) 1,033 | (a) 2,542 | n.a. |
| Coke | 3,101 | 2,376 | 4,036 | 2,929 | 2,846 | n.a. |
| Briquettes | — | 2,740 | n.a. | — | n.a. | n.a. |
| Philippine Republic— | | | | | | |
| Coal | 155 | 49 | 23 | 2 | 78 | 231 |
| Coke | 6,353 | 8,114 | 8,849 | 7,523 | 12,191 | 14,373 |
| Tar | 272 | 193 | 156 | 725 | 588 | 837 |
| Syria— | | | | | | |
| Coal | 906 | 1,533 | 274 | n.a. | n.a. | n.a. |
| Coke | 1,408 | 1,829 | 2,285 | 2,239 | 1,918 | 1,057 |
| Briquettes | 1,672 | 1,762 | 1,859 | 2,088 | 1,599 | 1,901 |

(a) Including briquettes.

IMPORTS OF COAL, COKE AND BY-PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|---------|---------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Thailand— | | | | | | |
| Coal | 12,450 | 11,536 | 10,860 | — | — | — |
| Coke | 1,658 | 1,399 | 2,618 | 2,389 | 2,259 | 3,177 |
| Tar | 3 | — | 37 | 48 | 40 | 38 |
| Vietnam (South)— | | | | | | |
| Coal | 63,469 | 15,333 | 10,553 | 5,184 | <i>n.a.</i> | <i>n.a.</i> |
| French Polynesia— | | | | | | |
| Coal | 1,009 | — | — | 25 | 12 | <i>n.a.</i> |
| New Caledonia— | | | | | | |
| Coal | 160,742 | 144,570 | 136,941 | 66,328 | 46,759 | } 170,768 |
| Coke | 67,956 | 32,084 | 128,554 | 199,534 | 101,809 | |

COBALT
PRODUCTION OF COBALT ORE
(Metal content)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Northern Rhodesia (a) .. | 1,644 | 2,027 | 1,862 | 1,721 | 846 | 964 |
| Uganda (b) | 500 | 660 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada (c) | 1,210 | 1,406 | 1,593 | 1,421 | 1,554 | 1,257 |
| Australia (d) | 15 | 14 | 14 | 17 | 15 | 17 |
| OTHER COUNTRIES | | | | | | |
| Finland (e) | 1,898 | 1,908 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Congo Republic (f) .. | 6,398 | 8,298 | 8,092 | 8,195 | 9,530 | 7,260 |
| Morocco | 910 | 1,188 | 1,251 | 1,270 | 1,413 | 1,349 |
| United States | 2,162 | 1,337 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| New Caledonia | 128 | 180 | — | — | — | — |
| TOTAL | 15,000 | 17,000 | 16,000 | 15,000 | 16,000 | 13,000 |

Ores containing cobalt are also known to have been produced in Cyprus, Greece, Norway, Spain, Sweden, the U.S.S.R., China and Korea.

(a) Refined metal plus estimated cobalt content of cobalt alloy and other cobalt.

(b) Cobalt content of concentrates stockpiled.

(c) Metal recovered from smelter products plus cobalt contained in cobalt ores and residues exported.

(d) Estimated cobalt content of cobalt oxide.

(e) Cobalt content of pyrites.

(f) Electrolytic cobalt plus recoverable cobalt in cobalt alloy.

METAL PRODUCTION OF COBALT

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-------|-------|-------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Northern Rhodesia .. | 1,048 | 1,141 | 930 | 678 | 715 | 671 |
| OTHER COUNTRIES | | | | | | |
| France | 395 | 301 | 525 | 540 | 621 | 648 |
| Germany (Federal) (a) .. | 978 | 1,380 | 1,501 | 1,591 | 1,620 | 1,484 |
| Norway (c) | 319 | 384 | 470 | 546 | 592 | 615 |
| Congo Republic | 4,717 | 5,926 | 5,530 | 6,384 | 8,929 | 6,715 |
| United States (b) | 1,624 | 1,099 | 688 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

Cobalt and its compounds are also known to have been produced in the United Kingdom, Canada, Belgium and the U.S.S.R.

(a) Obtained chiefly from pyrite sinter imported from Cyprus, Finland, Norway, Spain, Sweden and other countries. Including secondary metal.

(b) In addition, the following amounts of cobalt oxide, hydrate, salts and driers were produced (in terms of cobalt content):

| Year | Long tons | Year | Long tons |
|---------|-----------|---------|-----------|
| 1958 .. | 580 | 1961 .. | 601 |
| 1959 .. | 605 | 1962 .. | 645 |
| 1960 .. | 699 | 1963 .. | 696 |

(c) Obtained from copper-nickel matte imported from Canada.

EXPORTS OF COBALT, ETC.

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|--------|-----------|-----------|-----------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Cobalt (a) | 30 | 52 | 42 | 44 | 42 | 110 |
| Cobalt oxide | 394 | 316 | 244 | 274 | 332 | 359 |
| Other compounds | 557 | 684 | 648 | 684 | 601 | <i>n.a.</i> |
| Rhodesia and Nyasaland— | | | | | | |
| Cobalt | 934 | 1,329 | 1,176 | 540 | 880 | 529 |
| Cobalt alloy | — | 27 | 131 | 5 | — | — |
| Canada— | | | | | | |
| Cobalt | 457 | 304 | 377 | 270 | 242 | 330 |
| Cobalt alloys | 4 | 1 | 1 | — | — | — |
| Cobalt oxides and salts .. | 233 | 491 | 525 | 679 | 728 | 490 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Cobalt (b) | 1,091 | 2,325 | 2,449 | 1,046 | 2,352 | 671 |
| France— | | | | | | |
| Ingots and scrap | 18 | 62 | 87 | (a) 228 | (a) 429 | (a) 451 |
| Cobalt salts | 1 | 6 | 18 | 6 | 11 | 11 |
| Germany (Federal)— | | | | | | |
| Cobalt (c) | 453 | 796 | 788 | 820 | 1,002 | 872 |
| Cobalt oxide | 108 | 65 | 50 | 16 | 19 | 30 |
| Norway— | | | | | | |
| Cobalt | <i>n.a.</i> | 314 | 382 | 626 | 635 | 629 |
| Sweden— | | | | | | |
| Cobalt | — | 3 | 17 | 15 | 13 | 4 |
| U.S.S.R.— | | | | | | |
| Cobalt | 206 | 196 | 214 | 261 | 200 | 197 |
| Congo Republic— | | | | | | |
| Cobalt | 5,139 | 6,311 | (d) 6,000 | (d) 6,400 | (d) 8,900 | (d) 6,700 |
| Cobalt-copper ingots | 4,274 | 5,162 | (d) 5,600 | (d) 4,400 | (d) 1,500 | (d) 1,300 |
| Morocco— | | | | | | |
| Ore | 8,196 | 10,845 | 12,027 | 5,243 | 2,390 | 6,988 |
| United States— | | | | | | |
| Ore and metal (c) | 785 | 310 | 816 | 926 | 865 | 958 |

(a) Including alloys.

(b) Exports of cobalt metal are not separately recorded. Figures relate to imports into the United States and Japan from Belgium.

(c) Including alloys and scrap.

(d) Estimated.

IMPORTS OF COBALT, ETC.

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Cobalt | 707 | 927 | 1,653 | 1,417 | 1,238 | } 378 |
| Cobalt alloys | 49 | 28 | 18 | 12 | 3 | |
| Cobalt oxide | 317 | 561 | 808 | 932 | 1,048 |  | n.a. |
| Canada— | | | | | | |
| Cobalt oxide | 7 | 11 | 9 | 13 | 18 | 13 |
| Hong Kong— | | | | | | |
| Cobalt oxide | 34 | 37 | 43 | 20 | 36 | 45 |
| India— | | | | | | |
| Cobalt oxide | 21 | 24 | 28 | 45 | 38 | 29 |
| Australia (a)— | | | | | | |
| Cobalt ingots, etc. | 38 | 58 | 83 | 46 | 37 | 68 |
| Cobalt oxide | 36 | 15 | 9 | 17 | 12 | 10 |
| Cobalt salts | 51 | 76 | 69 | 59 | 3 | 2 |
| New Zealand— | | | | | | |
| Cobalt salts | 315 | 341 | 330 | 372 | 172 | 1 |
| OTHER COUNTRIES | | | | | | |
| Denmark— | | | | | | |
| Cobalt | <i>n.a.</i> | 20 | 40 | 7 | 12 | 10 |
| France— | | | | | | |
| Ore | 6,593 | 6,920 | 6,678 | 9,162 | 9,542 | 10,356 |
| Ingots and scrap | 18 | 49 | 172 | (c) 157 | (c) 168 | (c) 266 |
| Cobalt oxide | 141 | 85 | 115 | 68 | 79 | 80 |
| Germany (Federal)— | | | | | | |
| Ore | 1 | — | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cobalt (b) | 414 | 338 | 857 | 758 | 570 | 459 |
| Cobalt oxide | 185 | 176 | 236 | 209 | 211 | 212 |
| Italy— | | | | | | |
| Cobalt (b) | 91 | 182 | 453 | 417 | 220 | 371 |
| Cobalt oxide | <i>n.a.</i> | 92 | 126 | 132 | 147 | 276 |
| Netherlands— | | | | | | |
| Cobalt | <i>n.a.</i> | <i>n.a.</i> | 172 | 213 | 140 | 120 |
| Portugal— | | | | | | |
| Cobalt oxide | 3 | 5 | 2 | 1 | 5 | 4 |
| Sweden— | | | | | | |
| Cobalt | 79 | 158 | 321 | 308 | 150 | 130 |
| Yugoslavia— | | | | | | |
| Cobalt | 19 | 29 | 43 | 21 | 36 | 43 |
| Mexico— | | | | | | |
| Cobalt oxide | 12 | 30 | 36 | 29 | 26 | 32 |
| United States— | | | | | | |
| Ore | — | 345 | 2,885 | — | — | 13 |
| <i>Co content</i> | — | 16 | 140 | — | — | 12 |
| Cobalt metal | 6,490 | 8,968 | 4,822 | 4,480 | 5,257 | 4,608 |
| Cobalt oxide | 374 | 695 | 651 | 304 | 436 | 209 |
| Cobalt salts | 105 | 124 | 103 | 71 | 54 | 42 |
| Argentina— | | | | | | |
| Cobalt metal | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 14 | 22 |
| Cobalt salts | 28 | 46 | 36 | 36 | 7 | 12 |
| Brazil— | | | | | | |
| Cobalt oxide | 23 | 24 | 45 | 30 | 43 | 36 |
| Japan— | | | | | | |
| Ore | — | — | 1 | — | <i>n.a.</i> | — |
| Ingots, slabs and grains | 281 | 913 | 1,130 | 1,546 | 1,093 | 853 |
| Cobalt oxide | 132 | 197 | 230 | 282 | 240 | 247 |

(a) Years ended June 30 of that stated.

(b) Including alloys and scrap.

(c) Including alloys.

COPPER
PRODUCTION OF COPPER ORE
(Metal content)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|----------------|------------------|------------------|---------------------------|--------------------|---------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 13 | 11 | 16 | 14 | 6 | <i>n.a.</i> |
| Kenya (<i>f</i>) .. | 1,400 | 1,400 | 1,200 | 1,800 | 1,500 | 1,500 |
| Northern Rhodesia (<i>d</i>) .. | 393,814 | 534,673 | 567,255 | 565,656 | 553,442 | 578,784 |
| Southern Rhodesia .. | 7,527 | 10,729 | 13,506 | 13,610 | 13,524 | 16,507 |
| Tanganyika .. | 1,581 | 1,081 | 1,254 | 99 | — | — |
| Uganda (<i>h</i>) .. | 10,831 | 11,943 | 14,515 | 13,163 | 15,331 | 15,960 |
| Canada (<i>g</i>) .. | 308,137 | 352,919 | 392,198 | <i>r</i> 387,579 | 408,380 | 409,585 |
| Cyprus (<i>e</i>) .. | 32,691 | 35,695 | 34,907 | 28,201 | 24,763 | 25,893 |
| India .. | 8,502 | 8,368 | <i>r</i> 8,988 | <i>r</i> 8,910 | 9,745 | 10,000 |
| Australia .. | 75,715 | 94,950 | 109,435 | 95,626 | 106,972 | 112,746 |
| New Zealand .. | — | — | — | — | 10 | 20 |
| TOTAL .. | 840,000 | 1,052,000 | 1,143,000 | <i>r</i> 1,115,000 | 1,134,000 | 1,171,000 |
| Irish Republic .. | 652 | 4,229 | 6,145 | 5,834 | 2,350 | — |
| OTHER COUNTRIES | | | | | | |
| Albania (<i>c</i>) .. | 1,700 | 2,000 | 2,100 | 2,300 | 2,500 | 2,500 |
| Austria .. | 2,467 | 2,474 | 1,993 | 1,926 | 2,003 | 1,902 |
| Bulgaria .. | 7,000 | 10,800 | 13,900 | <i>r</i> 16,000 | 18,000 | (<i>b</i>) 18,000 |
| Finland (<i>d</i>) .. | 28,411 | 28,900 | 28,000 | 33,500 | 34,600 | 33,400 |
| France (<i>d</i>) .. | 676 | 529 | 553 | 359 | 221 | 236 |
| Germany— | | | | | | |
| Federal Republic .. | 1,325 | 1,753 | 1,750 | 1,632 | 1,815 | 2,246 |
| East (<i>b</i>) .. | 18,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 |
| Italy .. | 3,637 | 3,518 | 2,948 | 2,373 | 2,655 | <i>n.a.</i> |
| Norway .. | 15,626 | 14,132 | 15,148 | 13,732 | 15,290 | 14,040 |
| Poland (<i>c</i>) .. | 7,900 | 8,800 | 10,400 | 11,500 | 13,500 | 13,000 |
| Portugal .. | 731 | 708 | 517 | 556 | 513 | (<i>c</i>) 490 |
| Spain (<i>i</i>) .. | 8,441 | 8,763 | 8,047 | 9,433 | 7,769 | 6,584 |
| Sweden .. | 18,262 | 17,035 | 17,201 | <i>r</i> 17,899 | 18,789 | 17,667 |
| U.S.S.R. (<i>b</i>) .. | 430,000 | 430,000 | 450,000 | 470,000 | 500,000 | 550,000 |
| Yugoslavia .. | 34,679 | 34,054 | 32,751 | 37,310 | 50,900 | 61,112 |
| Algeria .. | 449 | 59 | 117 | 599 | 767 | (<i>b</i>) 1,000 |
| Angola .. | 1,506 | 1,726 | 1,882 | 912 | 1,754 | 128 |
| Congo Republic (<i>h</i>) .. | 233,810 | 277,861 | 297,523 | 290,574 | 292,296 | 266,692 |
| Congo, Republic of .. | — | — | — | 158 | 827 | 286 |
| Mauritania .. | — | 41 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Morocco .. | 1,027 | 1,166 | 1,240 | 1,710 | 2,458 | 1,777 |
| South Africa .. | 48,763 | 49,729 | 45,399 | 51,743 | 45,638 | 54,279 |
| South West Africa .. | 28,000 | 31,000 | 20,000 | 25,000 | 23,000 | 32,000 |
| Cuba .. | 12,493 | 8,877 | 11,659 | (<i>b</i>) 10,000 | (<i>b</i>) 6,500 | (<i>b</i>) 5,000 |
| Haiti .. | — | — | 900 | 3,400 | 6,016 | 5,851 |
| Mexico (<i>d</i>) .. | 63,937 | 56,369 | 59,377 | 48,535 | 46,381 | 54,979 |
| Nicaragua .. | — | 894 | 4,820 | 6,178 | 7,157 | 7,168 |
| United States (<i>d</i>) .. | 874,401 | 736,470 | 964,437 | 1,040,317 | 1,096,804 | 1,083,184 |
| Argentina .. | <i>n.a.</i> | 179 | 508 | 542 | 398 | — |
| Bolivia (<i>a</i>) .. | 2,829 | 2,197 | 2,235 | 2,048 | 2,325 | 2,946 |

(a) Exports of ore (metal content) and metal.

(b) Estimated.

(c) United States Bureau of Mines' estimate.

(d) Amount estimated as recoverable.

(e) Estimated copper content of concentrates, cement copper and cupreous pyrites exported. The copper content of copper concentrates and cement copper produced was as follows (long tons): 1958—22,800; 1959—25,200; 1960—24,000; 1961—21,600; 1962—20,400; 1963—22,000.

(f) Copper content of cement copper.

(g) Blister copper plus recoverable copper in ores and matte exported.

(h) Smelter.

(i) Excluding copper contained in iron pyrites, estimated at about 10,000 tons per annum in recent years. This may or may not be recovered.

PRODUCTION OF COPPER ORE (cont.)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Brazil (c) | 1,200 | r 1,100 | r 1,100 | r 1,700 | 1,600 | 1,500 |
| Chile (d) | 458,960 | 537,401 | 527,787 | 529,767 | 577,000 | 591,000 |
| Ecuador | 47 | 132 | 99 | 99 | 155 | 378 |
| Peru | 52,772 | (d) 49,030 | (d) 178,851 | (d) 194,924 | (d) 164,156 | 174,571 |
| Burma (b) | 130 | 150 | 140 | 110 | 150 | 170 |
| China (a) (b) | 30,000 | 40,000 | 40,000 | 60,000 | 75,000 | 75,000 |
| Formosa | 1,520 | 1,601 | 2,067 | 2,197 | 2,074 | 1,593 |
| Israel | 256 | r 4,409 | r 5,492 | r 6,154 | 5,816 | 7,381 |
| Japan | 80,212 | 83,902 | 87,774 | 94,886 | 101,964 | 105,377 |
| Korea (South) | 350 | 250 | 300 | 250 | 550 | 600 |
| Korea (North) | n.a. | 5,300 | (c) 5,900 | (c) 5,900 | (c) 7,900 | (c) 7,900 |
| Philippine Republic | 46,287 | 48,739 | 43,315 | 51,056 | 53,864 | 62,680 |
| Turkey (a) | 22,174 | 23,468 | 25,602 | 19,678 | 25,368 | 24,398 |
| TOTAL | 2,600,000 | 2,600,000 | 2,900,000 | 3,100,000 | 3,200,000 | 3,300,000 |
| WORLD'S TOTAL | 3,400,000 | 3,600,000 | 4,100,000 | 4,200,000 | 4,300,000 | 4,500,000 |

Ores containing copper are also known to have been produced in Fiji, Czechoslovakia, Hungary, Malaya and Iran.

(a) Smelter.

(b) Estimated.

(c) United States Bureau of Mines' estimate.

(d) Amount estimated as recoverable.

METAL PRODUCTION OF COPPER

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|------------------|------------------|------------------|--------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Northern Rhodesia .. | 375,146 | 531,334 | r 558,882 | r 559,949 | 539,101 | 567,396 |
| Southern Rhodesia .. | — | — | n.a. | 11,531 | 12,142 | 14,453 |
| Uganda .. | 10,831 | 11,943 | 14,515 | 13,163 | 15,331 | 15,960 |
| Canada (a) .. | 285,200 | 326,839 | 355,319 | 354,345 | 333,616 | 315,000 |
| India .. | 7,840 | 7,553 | 8,769 | 8,204 | 9,626 | 9,441 |
| Australia .. | 64,608 | 68,494 | 71,037 | 62,497 | 87,337 | 88,492 |
| TOTAL .. | 743,625 | 946,163 | 1,009,000 | 1,009,689 | 997,153 | 1,011,000 |
| OTHER COUNTRIES | | | | | | |
| Albania .. | (g) 980 | 990 | 929 | 1,269 | (g) 1,200 | (g) 1,800 |
| Austria (b) .. | 9,397 | 10,358 | 11,575 | 11,646 | 12,666 | 12,844 |
| Bulgaria .. | 6,025 | r 10,925 | r 15,846 | 18,602 | 19,094 | 20,198 |
| Finland .. | 30,244 | 32,090 | 30,481 | 33,800 | 33,394 | 37,200 |
| Germany— | | | | | | |
| Federal Republic .. | 69,000 | 63,100 | 61,400 | 63,200 | 67,700 | 65,800 |
| East (e) .. | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 |
| Italy .. | 104 | 361 | n.a. | n.a. | n.a. | n.a. |
| Norway .. | 17,291 | 18,945 | 21,273 | 21,623 | 18,851 | 17,619 |
| Poland .. | 17,095 | 17,200 | 21,400 | 21,800 | 23,700 | 29,100 |
| Spain .. | 4,960 | r 10,836 | 8,072 | 17,883 | 19,928 | 23,098 |
| Sweden .. | 19,882 | 24,930 | 21,363 | 20,377 | 22,410 | 28,600 |
| U.S.S.R. (e) .. | 430,000 | 430,000 | 450,000 | 470,000 | 500,000 | 550,000 |
| Yugoslavia .. | 33,140 | 34,694 | 35,165 | 30,381 | 45,019 | n.a. |
| Angola .. | 1,369 | 1,396 | 1,400 | 800 | 700 | 100 |
| Congo Republic .. | 233,810 | 277,861 | 297,523 | 290,574 | 292,296 | 266,692 |
| South Africa .. | 47,684 | 48,074 | 45,399 | 51,395 | 45,451 | 53,647 |
| South-West Africa .. | — | — | — | — | 1,195 | 20,500 |
| Mexico .. | 59,919 | 54,558 | 57,912 | 46,873 | 44,801 | 53,576 |
| United States (d) .. | 954,511 | 751,603 | 1,101,454 | 1,077,995 | 1,180,905 | 1,157,768 |
| Bolivia (c) .. | 88 | 117 | 175 | 117 | — | — |
| Chile .. | 431,837 | 503,898 | 494,147 | 494,102 | 548,423 | 548,563 |
| Peru .. | 37,859 | 32,292 | 160,908 | 177,659 | 145,498 | 154,900 |
| China (e) .. | 30,000 | 40,000 | 40,000 | 60,000 | 75,000 | 75,000 |
| Formosa .. | 1,637 | 1,774 | 1,752 | r 2,215 | 2,451 | 1,458 |
| Japan (f) .. | 101,769 | 152,396 | 184,371 | 199,625 | 208,778 | 240,076 |
| Korea (South) .. | 791 | 736 | 994 | 1,300 | 2,175 | 2,341 |
| Korea (North) .. | n.a. | 4,893 | (g) 8,000 | (g) 7,900 | (g) 10,000 | (g) 10,000 |
| Turkey .. | 22,174 | 23,468 | 25,602 | 19,678 | 25,368 | 24,398 |
| TOTAL .. | 2,600,000 | 2,600,000 | 3,100,000 | r 3,200,000 | 3,400,000 | 3,500,000 |
| WORLD'S TOTAL .. | 3,300,000 | 3,500,000 | 4,100,000 | r 4,200,000 | 4,400,000 | 4,500,000 |

(a) Copper content of blister and anode copper.

(b) Including secondary metal.

(c) Exports.

(d) In addition, secondary metal was recovered as follows (long tons): 1958—711,954; 1959—830,866; 1960—778,025; 1961—757,981; 1962—823,061; 1963—870,023.

(e) Estimated.

(f) In addition, secondary metal was recovered as follows (long tons): 1958—20,234; 1959—38,512; 1960—59,818; 1961—73,005; 1962—57,381; 1963—42,463.

(g) United States Bureau of Mines' estimate.

EXPORTS OF COPPER, ETC.*

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|---------|---------|---------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unwrought—Refined .. | 55,539 | 77,403 | 49,090 | 71,510 | 108,906 | 45,836 |
| Alloys .. | 33,044 | 30,755 | 29,393 | 37,576 | 46,518 | 39,652 |
| Scrap (a) .. | 772 | 707 | 444 | 1,435 | 8,010 | 6,276 |
| Semi-manufactures .. | 126,698 | 56,322 | 64,304 | 38,035 | 35,426 | 29,971 |
| do. alloys .. | 24,110 | 26,314 | 27,731 | 34,716 | 27,213 | 25,994 |
| Sulphate .. | 26,515 | 31,086 | 25,366 | 19,463 | 18,382 | 17,805 |
| Kenya— | | | | | | |
| Unwrought (a) .. | 3,328 | 3,167 | 3,053 | 3,667 | 4,006 | 3,041 |
| Rhodesia and Nyasaland— | | | | | | |
| Ore and concentrates .. | 23,184 | 22,611 | 30,880 | 11,802 | 5,593 | 13,854 |
| Matte .. |  |  |  |  |  |  | 8,932 | 8,461 | 12,996 | 2,578 | 806 |
| Unwrought— | | | | | | |
| Blister .. | 146,273 | 160,178 | 151,070 | 146,802 | 118,941 | 132,612 |
| Electrolytic .. | 256,360 | 354,206 | 396,821 | 390,030 | 404,547 | 432,929 |
| Other .. | — | 2,091 | 37 | 8,195 | 12,808 | 12,561 |
| Semi-manufactures .. | 977 | 202 | 172 | 90 | 985 | 946 |
| Tanganyika— | | | | | | |
| Lead concentrates (Cu content) .. | 1,581 | 1,068 | 1,247 | 94 | — | — |
| Uganda— | | | | | | |
| Unwrought (a) .. | 10,967 | 11,797 | 14,713 | 12,930 | 15,539 | 15,320 |
| Canada— | | | | | | |
| Ore, matte, etc. (Cu content) .. | 27,068 | 28,634 | 42,529 | 38,298 | 85,307 | 82,973 |
| Unwrought .. | 200,569 | 198,604 | 248,273 | 237,720 | 199,146 | 191,952 |
| Scrap, slag, etc. .. | 9,899 | 5,568 | 10,291 | (d) 6,959 | (d) 7,264 | (d) 9,450 |
| Scrap alloys .. | 6,324 | 6,603 | 11,014 | 8,448 | 6,803 | 7,798 |
| Semi-manufactures .. | 12,833 | 15,080 | 18,977 | 25,108 | 25,099 | 30,590 |
| do. alloys (c) .. | 1,873 | 2,488 | 2,305 | 3,576 | 3,458 | 4,044 |
| Cyprus— | | | | | | |
| Ore and concentrates .. | 115,125 | 123,519 | 115,784 | 101,585 | 92,889 | 108,456 |
| Cupreous pyrites .. | 228,821 | 307,026 | 248,931 | 138,477 | 105,622 | 103,848 |
| Copper cement .. | 4,068 | 3,693 | 2,212 | 1,759 | 1,667 | 3,096 |
| Hong Kong— | | | | | | |
| Unwrought (a) .. | 97 | 20 | 31 | 23 | 58 | 6 |
| Scrap (a) .. | 4,815 | 6,896 | 6,712 | 7,822 | 6,648 | 6,340 |
| Semi-manufactures (a) .. | 831 | 191 | 401 | 214 | 68 | 78 |
| India— | | | | | | |
| Semi-manufactures (a) .. | 93 | 184 | (b) 326 | (b) 248 | (b) 274 | (b) 641 |
| Malaya— | | | | | | |
| Ore .. | — | 2,163 | 1,239 | 1,511 | 1,250 | 1,500 |
| Semi-manufactures (a) .. | 163 | 116 | 129 | 222 | 452 | 120 |
| Sulphate .. | 2 | 6 | 9 | 12 | 2 | 10 |
| Australia— | | | | | | |
| Ores, concentrates and dross (Cu content) .. | 7,272 | 20,095 | 36,210 | 28,012 | 21,828 | 12,145 |
| Unwrought— | | | | | | |
| Blister .. | 14,421 | 16,225 | 502 | 1,022 | — | 464 |
| Refined .. | — | 2,749 | 13,577 | 23,073 | 16,497 | 24,485 |
| Alloys .. | 18 | 100 | 45 | 77 | 208 | 83 |
| Scrap (a) .. | 558 | 5,483 | 5,195 | 12,900 | 6,833 | 7,504 |
| Semi-manufactures (a) .. | 1,967 | 1,845 | 3,334 | 4,706 | 5,787 | 7,986 |
| Fiji— | | | | | | |
| Ore .. | 983 | 97 | 47 | — | — | 20 |
| New Zealand— | | | | | | |
| Unwrought alloys .. | 40 | 161 | 33 | 170 | 8 | n.a. |
| Scrap (a) .. | 1,370 | 268 | 1,824 | 1,439 | 609 | n.a. |

*In these tables the description "unwrought" copper corresponds to item 682.1 of the Standard International Trade Classification and includes both blister and refined copper. "Semi-manufactures" corresponds to S.I.T.C. 682.2 and includes foil and powder as well as rods, wire, sheets, strip, tubes, pipes, etc.

(a) Including alloys.

(b) Years ended March 31 following that stated.

(c) Including refinery shapes.

(d) Scrap only.

EXPORTS OF COPPER, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|--|---|--|---|---|---|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| New Zealand (cont.) Semi-manufactures, alloys | 70 | 686 | 892 | 189 | 654 | n.a. |
| Irish Republic— Ore and concentrates .. Scrap (a) | n.a. 2,174 | 26,893 2,123 | 30,255 1,826 | 28,024 2,120 | 14,950 2,045 | — 2,918 |
| OTHER COUNTRIES | | | | | | |
| Austria— Unwrought do. alloys Scrap (a) Semi-manufactures (a) Sulphate | 777 189 157 1,307 1,076 | 1,301 117 129 1,605 59 | 1,229 109 126 3,121 233 | 1,312 106 97 4,825 1,262 | 1,828 598 709 4,354 1,338 | 1,369 1,155 595 6,789 373 |
| Belgium-Luxemburg E.U.— Unwrought (a) (b) .. Scrap Semi-manufactures (a) Sulphate | 133,943 2,377 43,578 17,111 | 163,387 3,387 41,893 21,670 | 169,387 2,836 59,254 20,663 | 195,223 5,819 60,810 15,941 | 206,804 8,745 56,322 12,585 | 244,379 9,739 59,419 11,624 |
| Denmark— Unwrought do. alloys Scrap (a) Semi-manufactures (a) | 205 170 2,361 46 | 173 335 2,540 239 | 272 224 2,766 357 | 5 142 2,969 699 | 27 227 5,342 712 | — 423 5,193 802 |
| Finland— Unwrought (a) Semi-manufactures (a) | 10,707 2,001 | 8,758 1,581 | 4,767 2,030 | 5,501 2,991 | 7,196 3,158 | 8,776 5,640 |
| France— Ore Matte Unwrought— Unrefined Refined Alloys Scrap do. alloys Semi-manufactures (a) Sulphate | — — 76 509 164 58 257 12,229 5,366 | — 44 3,043 1,520 6,272 119 4,876 23,532 5,013 | 984 4,373 8,753 1,822 12,915 3,345 10,737 24,051 9,670 | 675 2,658 5,956 1,554 6,719 3,203 15,188 22,309 8,237 | — 421 9,472 2,436 5,773 5,040 17,294 17,424 7,320 | — 880 9,791 2,619 4,674 5,583 27,475 18,399 4,155 |
| Germany (Federal)— Ore Unwrought— Unrefined Refined Alloys Scrap (a) Semi-manufactures (a) Sulphate | — — 1,480 63,195 418 4,519 90,997 4,875 | — — 1,104 87,433 372 6,257 105,839 4,534 | — — 548 79,528 510 6,519 68,741 4,780 | 418 45 78,997 1,046 11,230 57,414 5,491 | 472 89 114,215 1,843 14,504 63,532 4,319 | — 251 71,903 1,012 20,338 71,641 5,058 |
| Italy— Ore Unwrought (a) Scrap (a) Semi-manufactures (a) Sulphate | — 1 — 11,308 6,610 | 3,272 121 772 12,909 1,772 | 2,015 33 60 11,310 6,316 | 2,246 169 121 13,234 4,369 | 3,327 36 190 9,963 7,250 | 2,158 21 245 9,695 4,681 |
| Netherlands— Ore Unwrought do. alloys | — 795 5,734 | 722 1,480 6,414 | 4,133 849 6,468 | 6,804 264 6,009 | 263 122 5,434 | — 601 4,852 |

(a) Including alloys.

(b) Including matte.

EXPORTS OF COPPER, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|----------------|----------------|--------------------|--------------------|--------------------|--------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Netherlands (<i>cont.</i>)— | | | | | | |
| Scrap (a) | 11,694 | 14,396 | 13,190 | 14,374 | 17,338 | 19,684 |
| Semi-manufactures (a) | 13,153 | 8,719 | 6,523 | 6,555 | 7,992 | 9,314 |
| Sulphate | 27 | 18 | 27 | 50 | 36 | 26 |
| Norway— | | | | | | |
| Ore | 10,538 | 10,316 | 9,618 | 10,438 | 11,205 | 9,889 |
| Matte | 12,759 | 17,552 | 16,811 | 19,568 | 15,510 | 1,107 |
| Unwrought— | | | | | | |
| Unrefined | 16,635 | 4,003 | 4,114 | 3,987 | 4,161 | 4,488 |
| Refined | | 13,391 | 13,915 | 14,769 | 13,512 | 10,667 |
| Alloys | | 2,250 | 2,283 | 2,327 | 1,846 | 1,197 | 1,468 |
| Scrap (a) | 2,219 | 1,304 | 1,492 | 1,507 | 1,572 | 2,022 |
| Semi-manufactures (a) | 895 | 2,707 | 3,533 | 2,436 | 2,198 | 2,625 |
| Portugal— | | | | | | |
| Unwrought | 16 | 275 | 351 | 556 | 471 | 256 |
| Semi-manufactures (a) | | 90 | 90 | 69 | 62 | 68 |
| Sulphate | | 245 | 248 | 194 | 59 | 201 | 183 |
| Spain— | | | | | | |
| Unwrought (a) | 5 | 1,180 | 2,801 | 209 | 70 | 388 |
| Semi-manufactures (a) | 4 | 53 | 593 | 63 | 26 | 185 |
| Sweden— | | | | | | |
| Unwrought | 12,682 | 14,782 | 14,947 | 15,953 | 15,884 | 15,128 |
| do. alloys | 2,839 | 2,828 | 1,511 | 1,745 | 1,890 | 2,568 |
| Scrap (a) | 669 | 583 | 703 | 719 | 545 | 656 |
| Semi-manufactures (a) | 27,870 | 31,679 | 32,344 | 30,226 | 28,691 | 31,529 |
| Sulphate | — | 2 | 3 | 2 | 8 | 3 |
| Switzerland— | | | | | | |
| Unwrought (a) | 2,698 | 3,310 | 2,599 | 1,706 | 2,052 | 2,050 |
| Scrap (a) | 2,875 | 2,961 | 403 | 527 | 1,802 | 6,901 |
| Semi-manufactures (a) | 10,455 | 12,213 | 9,435 | 8,543 | 7,705 | 8,482 |
| U.S.S.R.— | | | | | | |
| Unwrought (c) | 43,100 | 57,900 | 63,400 | 59,400 | 70,200 | 70,863 |
| Semi-manufactures | 3,149 | 2,756 | 7,382 | 3,445 | 5,413 | 5,413 |
| Sulphate | 8,000 | 8,300 | 9,300 | 9,700 | 9,300 | 10,334 |
| Yugoslavia— | | | | | | |
| Matte | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,229 |
| Unwrought (a) | 21 | — | — | 100 | 843 | — |
| Semi-manufactures (a) | 3,817 | 10,859 | 12,635 | 13,163 | 13,895 | 17,523 |
| Sulphate | 133 | 776 | 6,707 | 984 | 2,953 | 2,180 |
| Algeria— | | | | | | |
| Ore | 2,436 | 797 | 410 | 1,544 | 3,516 | 3,291 |
| Scrap (a) | 1,353 | 2,095 | 2,794 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures (a) | 1,797 | 1,411 | 1,797 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Angola— | | | | | | |
| Ore | — | — | — | — | 90 | — |
| Unwrought | 1,513 | 1,584 | 1,949 | 871 | 764 | 190 |
| Congo Republic— | | | | | | |
| Unwrought— | | | | | | |
| Blister | 105,871 | 121,615 | } <i>b</i> 280,000 | <i>(b)</i> 300,000 | <i>(b)</i> 280,000 | <i>(b)</i> 260,000 |
| Refined | 130,344 | 155,801 | | | | |
| Copper-cobalt ingots | 4,274 | 5,162 | | | | |
| Morocco— | | | | | | |
| Ore | 9,898 | 4,619 | 4,738 | 4,357 | 5,372 | 6,516 |
| Scrap (a) | 586 | 1,330 | 1,407 | 1,266 | 864 | 743 |
| South Africa— | | | | | | |
| Concentrates (<i>Cu content</i>) | <i>(d)</i> 754 | <i>(d)</i> 441 | — | <i>(d)</i> 238 | <i>(d)</i> 42 | <i>(d)</i> 583 |
| Unwrought | 43,985 | 42,853 | 44,573 | 51,586 | 43,447 | 51,571 |
| South West Africa— | | | | | | |
| Ore (<i>Cu content</i>) | 827 | 2,195 | 2,153 | 4,537 | 1,440 | — |
| Lead concentrates (<i>Cu content</i>) | 27,516 | 30,154 | 19,179 | 23,587 | 21,938 | 11,492 |

(a) Including alloys.

(b) Estimated.

(c) Including wire.

(d) Including matte.

EXPORTS OF COPPER, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Cuba— | | | | | | |
| Ore | 49,692 | (c) 63,360 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Scrap | 399 | 2,189 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico— | | | | | | |
| Ore, concentrates, etc. . . | 20,143 | 3,547 | 20,655 | 3,497 | 6,912 | 2,085 |
| Unwrought— | | | | | | |
| Unrefined | 34,472 | 28,497 | 28,115 | 20,746 | 24,049 | 22,061 |
| Refined | 8,021 | 12,969 | 6,161 | 3,329 | 4,930 | 2,735 |
| Semi-manufactures (a) | 527 | 444 | 264 | 543 | 1,213 | 1,985 |
| United States— | | | | | | |
| Ores, matte, blister, etc. | | | | | | |
| <i>(Cu content)</i> | 10,246 | 2,662 | 9,920 | 3,998 | 1,710 | 1,080 |
| Unwrought | 343,632 | 141,909 | 387,288 | 385,940 | 300,468 | 278,107 |
| do. alloys | 246 | 342 | 624 | 419 | 306 | 529 |
| Scrap | 19,519 | 9,572 | 52,554 | 31,479 | 11,257 | 12,223 |
| do. alloys | 25,448 | 26,255 | 109,085 | 104,155 | 32,330 | 30,997 |
| Semi-manufactures | 8,130 | 7,895 | 8,647 | 9,519 | 9,692 | 9,337 |
| do. alloys | 4,228 | 4,453 | 4,101 | 4,641 | 6,265 | 5,771 |
| Sulphate | 6,471 | 2,386 | 13,251 | 6,764 | 1,711 | 759 |
| Argentina— | | | | | | |
| Ores | 2,705 | 2,983 | 1,383 | 1,590 | 1,681 | 2,121 |
| Matte | 246 | 224 | 241 | 209 | 206 | 17 |
| Bolivia— | | | | | | |
| Ore, etc. <i>(Cu content)</i> | 2,741 | 2,080 | 2,060 | 1,931 | 2,325 | 2,946 |
| Unwrought | 88 | 117 | 175 | 117 | — | — |
| Chile— | | | | | | |
| Ores and concentrates | 35,114 | 34,172 | 37,011 | 32,468 | 33,231 | 32,000 |
| Precipitate | 3,252 | 3,300 | 3,915 | 3,688 | 7,347 | 11,820 |
| Copper cement | 3,256 | 4,335 | 3,759 | 4,180 | 3,070 | <i>n.a.</i> |
| Unwrought— | | | | | | |
| Blister | 246,759 | 253,499 | 268,726 | 299,069 | 289,775 | 290,639 |
| Refined | 52,267 | 69,422 | 74,461 | 73,699 | 73,006 | 75,436 |
| Electrolytic | 101,236 | 146,793 | 138,770 | 143,417 | 166,381 | 166,166 |
| <i>Cu content</i> (b) | 425,217 | 501,262 | 514,130 | 534,825 | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures | 23,367 | 32,497 | 4,839 | 3,314 | 3,776 | 3,334 |
| Peru— | | | | | | |
| Ore <i>(Cu content)</i> | 12,559 | 12,918 | 18,578 | 15,313 | 14,579 | 15,648 |
| Matte, etc. <i>(do.)</i> | 642 | 1,093 | 1,092 | 1,289 | 2,889 | 2,156 |
| Precipitate <i>(do.)</i> | 1,185 | 955 | 812 | 808 | 1,476 | 1,057 |
| Unwrought <i>(do.)</i> | 38,631 | 33,198 | 144,855 | 178,215 | 152,495 | 144,205 |
| Burma— | | | | | | |
| Matte | 216 | 396 | 364 | 504 | 398 | 235 |
| Formosa— | | | | | | |
| Ore | 10,580 | 12,992 | 6,496 | 8,661 | 12,598 | 9,252 |
| Unwrought | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 4,360 | — | — |
| Japan— | | | | | | |
| Unwrought | 1,335 | 1,451 | 1,585 | 1,336 | 2,050 | 1,458 |
| Semi-manufactures (a) | 11,082 | 10,901 | 11,271 | 12,249 | 15,897 | 18,018 |
| Sulphate | 51 | 27 | 8 | 160 | 211 | 23 |
| Korea (South)— | | | | | | |
| Unwrought | 1,076 | 70 | 284 | 721 | 39 | — |
| Philippine Republic— | | | | | | |
| Ore and concentrates | 178,061 | 156,279 | 171,694 | 243,420 | 180,647 | 278,714 |
| Copper-gold-silver concentrates | 22,421 | 7,398 | 19,010 | 22,797 | 35,173 | 1,462 |
| Scrap | 184 | 581 | 497 | 2,858 | 1,706 | 878 |
| Turkey— | | | | | | |
| Ore | — | 15,887 | 747 | — | 35 | — |
| Unwrought | 12,495 | 10,874 | 17,765 | 8,051 | 14,200 | 9,885 |

(a) Including alloys.

 (b) Total metal content of above items (*not* additional) and of complex ores not shown.

(c) Including cupreus pyrites.

IMPORTS OF COPPER, ETC.*

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|---------|---------|---------|---------|---------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unwrought— | | | | | | |
| Electrolytic | 308,128 | 269,386 | 375,683 | 345,580 | 380,543 | 345,098 |
| Other refined | 51,370 | 49,324 | 53,504 | 34,790 | 30,109 | 36,616 |
| Blister | 95,878 | 95,233 | 111,961 | 140,445 | 103,984 | 99,163 |
| Alloys | 79 | 158 | 296 | 159 | 78 | 608 |
| Scrap | 438 | 575 | 2,043 | 371 | 514 | 496 |
| do. alloys | 493 | 1,105 | 4,261 | 1,591 | 1,811 | 1,643 |
| Semi-manufactures (a) | 3,423 | 3,366 | 6,323 | 4,340 | 3,917 | 4,435 |
| Malta— | | | | | | |
| Semi-manufactures .. | £7,198 | £3,732 | £12,642 | n.a. | £18,575 | £25,387 |
| Ghana— | | | | | | |
| Semi-manufactures (a) | 434 | 387 | 738 | 653 | 715 | 760 |
| Kenya— | | | | | | |
| Unwrought (a) | 1 | 1 | 1 | — | 32 | 62 |
| Semi-manufactures (a) | 117 | 127 | 158 | 205 | 164 | 202 |
| Sulphate | 14 | 54 | 68 | 49 | 25 | 38 |
| Mauritius— | | | | | | |
| Semi-manufactures (a) | 170 | 108 | 204 | 106 | 46 | 88 |
| Nigeria— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 599 | 605 | 627 | 858 | 1,776 | 2,215 |
| Rhodesia and Nyasaland— | | | | | | |
| Semi-manufactures (a) | 1,485 | 1,380 | 996 | 829 | 1,011 | 690 |
| Sierra Leone— | | | | | | |
| Semi-manufactures (a) | 68 | 83 | 55 | 97 | 142 | 49 |
| Tanganyika— | | | | | | |
| Unwrought (a) | 1 | — | 5 | 3 | — | 2 |
| Semi-manufactures (a) | 100 | 127 | 111 | 79 | 72 | 137 |
| Sulphate | 31 | 18 | 6 | — | 1 | 4 |
| Uganda— | | | | | | |
| Semi-manufactures (a) | 80 | 37 | 75 | 84 | 67 | 65 |
| Zanzibar— | | | | | | |
| Semi-manufactures (a) | 9 | 4 | 5 | 3 | 6 | 3 |
| Canada— | | | | | | |
| Unwrought | 1 | 93 | 22 | 3 | 124 | 5,846 |
| Scrap (a) | 1,613 | 3,424 | 2,781 | 3,654 | 489 | 2,995 |
| Semi-manufactures | 5,072 | 3,014 | 2,972 | 3,771 | 1,234 | 1,511 |
| do. alloys | 2,886 | 3,100 | 1,582 | 1,897 | 2,745 | 3,459 |
| Sulphate | 1,005 | 1,168 | 998 | 345 | 390 | 327 |
| Barbados— | | | | | | |
| Semi-manufactures (a) | 78 | 107 | 81 | 112 | 75 | 77 |
| Jamaica— | | | | | | |
| Semi-manufactures (a) | 202 | 400 | 255 | 246 | 135 | 116 |
| Sulphate | 2,608 | 1,479 | 1,647 | 762 | 2 | (b) 50 |
| Trinidad and Tobago— | | | | | | |
| Semi-manufactures (a) | 163 | 201 | 251 | 511 | 184 | n.a. |
| Sulphate | 12 | 31 | 25 | 28 | 16 | n.a. |
| British Guiana— | | | | | | |
| Semi-manufactures (a) | 31 | 27 | 78 | 41 | 206 | n.a. |
| Ceylon— | | | | | | |
| Unwrought (a) | 64 | 24 | 28 | 16 | 26 | 32 |
| Semi-manufactures (a) | 584 | 548 | 551 | 583 | 395 | 471 |
| Cyprus— | | | | | | |
| Semi-manufactures (a) | 51 | 90 | 142 | 121 | 87 | 68 |
| Hong Kong— | | | | | | |
| Unwrought (a) | 51 | 90 | 103 | 281 | 154 | 210 |
| Scrap (a) | 1,521 | 1,852 | 1,223 | 2,233 | 2,344 | 793 |
| Semi-manufactures (a) | 4,483 | 4,679 | 6,412 | 8,099 | 7,387 | 8,433 |

*See footnote on p.110 concerning the descriptions "unwrought" copper and "semi-manufactures" used in these tables.

(a) Including alloys.

(b) Excess of re-exports.

IMPORTS OF COPPER, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|---------|---------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| India— | | | | | | |
| Unwrought | 47,861 | 45,750 | (e) 55,892 | (e) 36,203 | (e) 68,489 | (e) 68,312 |
| do. alloys | 27 | 4 | (e) 66 | (e) 64 | (e) 152 | (e) 10 |
| Scrap (a) | 3,282 | 3,031 | (e) 6,623 | (e) 4,338 | (e) 1,478 | (e) 1,457 |
| Semi-manufactures (a) | 2,985 | 3,461 | (e) 5,747 | (e) 6,069 | (e) 5,407 | (e) 4,958 |
| Sulphate | 431 | 30 | (e) 3 | (e) 1 | (e) — | (e) — |
| Malaya— | | | | | | |
| Unwrought (a) | 91 | 23 | 64 | 63 | 51 | 73 |
| Semi-manufactures (a) | 1,079 | 1,032 | 1,920 | 2,288 | 2,736 | 2,574 |
| Sulphate | 47 | 140 | 164 | 240 | 162 | 221 |
| Pakistan— | | | | | | |
| Unwrought | 264 | 712 | 157 | 2,112 | 2,472 | 2,473 |
| Scrap | 3 | — | 19 | 262 | 146 | 124 |
| Semi-manufactures | 1,651 | 1,428 | 1,792 | 3,309 | n.a. | 5,144 |
| Sulphate | 52 | 18 | 42 | 87 | 183 | 285 |
| Sabah— | | | | | | |
| Semi-manufactures (a) | 63 | 96 | 77 | 96 | 66 | n.a. |
| Sarawak— | | | | | | |
| Semi-manufactures (a) | 23 | 59 | 57 | 205 | 94 | 86 |
| Australia (c)— | | | | | | |
| Unwrought | 1,550 | 2,342 | 1,965 | 6,746 | 5,386 | 1,238 |
| do. alloys | 33 | 10 | 48 | 26 | (b) 4 | 289 |
| Scrap (a) | 272 | 55 | 73 | 351 | 118 | 205 |
| Semi-manufactures (a) | 3,248 | 2,577 | 3,301 | 3,039 | 5,560 | 2,638 |
| Sulphate | 175 | 175 | 338 | 623 | 1,131 | 2,077 |
| Fiji— | | | | | | |
| Semi-manufactures (a) | 29 | 14 | 35 | 89 | 110 | 64 |
| New Zealand— | | | | | | |
| Unwrought (a) | 20 | 33 | 62 | 95 | 148 | 189 |
| Semi-manufactures (a) | 9,671 | 8,488 | 10,448 | 11,237 | 11,126 | 12,380 |
| Sulphate | 288 | 211 | 221 | 42 | n.a. | n.a. |
| Irish Republic— | | | | | | |
| Unwrought (a) | 99 | 200 | 111 | 230 | 196 | 126 |
| Semi-manufactures (a) | 2,708 | 3,087 | 3,913 | 4,316 | 4,339 | 5,346 |
| Sulphate | 2,272 | r 2,426 | 2,301 | 2,569 | 1,578 | 1,913 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | — | 137 | 436 | 542 | 498 | 298 |
| Unwrought— | | | | | | |
| Unrefined | 17,820 | 3,260 | 2,938 | 5,240 | 4,817 | 5,011 |
| Refined .. .. |  |  |  |  |  |  | 13,697 | 19,817 | 20,258 | 17,073 | 15,844 |
| Alloys | 82 | 162 | 515 | 104 | 129 | 334 |
| Scrap | 1,408 | 158 | 813 | 1,532 | 691 | 3,248 |
| do. alloys | 445 | 1,049 | 1,152 | 1,118 | 1,907 | 1,227 |
| Semi-manufactures (a) | 2,459 | 3,225 | 2,995 | 4,011 | 3,813 | 3,469 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 3,521 | 5,561 | 9,133 | 5,750 | 5,875 | 3,960 |
| Unwrought (a) (d) | 181,649 | 194,949 | 270,204 | 272,778 | 301,776 | 275,956 |
| Scrap | 9,463 | 15,809 | 18,909 | 19,540 | 31,559 | 35,926 |
| Semi-manufactures (a) | 3,242 | 2,909 | 4,244 | 5,886 | 6,636 | 6,936 |
| Sulphate | 33 | 82 | 74 | 78 | 121 | 126 |
| Denmark— | | | | | | |
| Unwrought | 3,938 | 4,647 | 4,928 | 3,546 | 4,566 | 3,786 |
| do. alloys | 293 | 141 | 323 | 183 | 228 | 113 |
| Scrap (a) | 57 | 224 | 72 | 279 | 105 | 17 |
| Semi-manufactures (a) | 15,125 | 17,998 | 19,189 | 22,011 | 24,832 | 21,395 |
| Sulphate | 2,415 | 2,669 | 2,248 | 3,026 | 2,286 | 2,599 |

(a) Including alloys.
(d) Including matte.

(b) Excess of re-exports.

(c) Years ended June 30 of that stated.

(e) Years ended March 31 following that stated.

IMPORTS OF COPPER, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|---------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Finland— | | | | | | |
| Unwrought (a) .. | 527 | 1,045 | 5,472 | 6,257 | 6,229 | 2,696 |
| Semi-manufactures (a) | 908 | 983 | 2,287 | 3,498 | 2,022 | 2,079 |
| Sulphate | 115 | 49 | 85 | 403 | 708 | 710 |
| France— | | | | | | |
| Unwrought— | | | | | | |
| Unrefined | 4,800 | 4,969 | 5,672 | 10,413 | 4,839 | 6,109 |
| Refined | 212,163 | 158,522 | 203,327 | 219,233 | 223,100 | 208,907 |
| Alloys | 971 | 765 | 1,656 | 907 | 2,096 | 1,925 |
| Scrap | 4,615 | 1,171 | 1,517 | 2,876 | 2,678 | 1,789 |
| do. alloys | 6,036 | 1,908 | 2,777 | 3,649 | 6,215 | 6,750 |
| Semi-manufactures (a) | 2,909 | 2,927 | 3,548 | 4,729 | 6,086 | 10,564 |
| Sulphate | 3,786 | — | 1,453 | 4,466 | 3,247 | 1,906 |
| Germany (Federal)— | | | | | | |
| Ore | 134,419 | 134,865 | 137,301 | 127,968 | 131,513 | 156,041 |
| Burnt cupreous pyrites | 1,103,666 | 1,198,628 | 1,345,843 | 1,209,333 | 1,095,231 | 979,785 |
| Matte | 10,264 | 9,562 | 8,374 | 7,979 | 7,335 | 2,320 |
| Unwrought— | | | | | | |
| Unrefined | 101,883 | 95,457 | 118,396 | 120,142 | 99,424 | 120,171 |
| Refined | 227,787 | 242,835 | 305,103 | 341,324 | 296,063 | 251,181 |
| Alloys | 27,059 | 39,269 | 36,711 | 30,555 | 36,090 | 38,831 |
| Scrap (a) | 37,324 | 34,987 | 61,385 | 33,594 | 26,605 | 36,278 |
| Semi-manufactures (a) | 19,080 | 33,880 | 21,906 | 27,204 | 19,788 | 26,078 |
| Sulphate | 376 | 676 | 425 | 592 | 542 | 541 |
| Greece— | | | | | | |
| Unwrought— | | | | | | |
| Unrefined | 1,826 | 2,726 | 3,173 | 2,082 | 4,891 | 1,080 |
| Refined | | | | 1,872 | 2,344 | 5,542 |
| Scrap | n.a. | n.a. | 1,352 | 777 | 868 | 406 |
| Sulphate | 4,840 | 6,018 | 7,601 | 5,865 | 6,127 | 3,994 |
| Hungary— | | | | | | |
| Unwrought | 12,038 | 16,172 | 18,089 | 18,616 | 18,534 | 17,279 |
| Sulphate | 14,847 | 10,679 | 4,682 | 6,216 | 7,224 | 3,809 |
| Iceland— | | | | | | |
| Semi-manufactures (a) | 230 | 302 | 239 | 253 | 283 | n.a. |
| Italy— | | | | | | |
| Unwrought— | | | | | | |
| Unrefined | 10,074 | 2,792 | 15,736 | 12,066 | 12,464 | 9,837 |
| Refined (a) | 95,193 | 108,035 | 174,462 | 183,021 | 223,834 | 210,798 |
| Scrap (a) | 8,172 | 5,232 | 16,480 | 22,987 | 23,070 | 21,524 |
| Semi-manufactures (a) | 3,099 | 3,189 | 5,659 | 5,668 | 3,668 | 12,207 |
| Sulphate | 4,026 | 4,099 | 2,165 | 2,073 | 1,390 | 1,246 |
| Netherlands— | | | | | | |
| Ore | — | 746 | 4,580 | 8,287 | — | — |
| Unwrought | 28,302 | 25,992 | 31,561 | 29,547 | 21,349 | 25,798 |
| do. alloys | 1,059 | 1,357 | 1,615 | 1,278 | 1,725 | 1,508 |
| Scrap (a) | 4,007 | 4,275 | 4,608 | 4,858 | 4,846 | 8,231 |
| Semi-manufactures (a) | 28,849 | 23,156 | 41,607 | 45,772 | 40,170 | 40,207 |
| Sulphate | 1,861 | 2,464 | 2,119 | 2,073 | 2,172 | 2,413 |
| Norway— | | | | | | |
| Copper-nickel matte .. | 48,398 | 54,159 | 60,695 | 63,328 | 59,896 | 55,559 |
| Unwrought | 5,257 | 3,428 | 4,430 | 4,247 | 5,110 | 4,587 |
| do. alloys | 1,047 | 411 | 778 | 250 | 429 | 280 |
| Scrap (a) | 377 | 168 | 330 | 318 | 95 | — |
| Semi-manufactures (a) | 13,025 | 13,852 | 15,717 | 17,727 | 18,538 | 18,288 |
| Sulphate | 294 | 291 | 424 | 343 | 398 | 269 |
| Poland— | | | | | | |
| Concentrates | n.a. | n.a. | 5,269 | 10,683 | 9,060 | 12,137 |
| Unwrought | 23,403 | 25,569 | 20,533 | 32,331 | 35,923 | 34,592 |
| Sulphate | 787 | 605 | 2,716 | 1,921 | 5,305 | 1,754 |

(a) Including alloys.

IMPORTS OF COPPER, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Portugal— | | | | | | |
| Ore and concentrates .. | 1,863 | 3,780 | 3,250 | 4,132 | 9,060 | 10 |
| Matte | 63 | 717 | 175 | 59 | 118 | 22 |
| Unwrought (a) | 11,774 | 5,078 | 7,786 | 9,929 | 6,476 | 5,294 |
| Scrap | 735 | 1,143 | 319 | 78 | 230 | 235 |
| Semi-manufactures (a) | 5,011 | 3,481 | 3,328 | 4,327 | 3,446 | 4,578 |
| Sulphate | 4,998 | 5,962 | 6,906 | 8,842 | 5,305 | 4,210 |
| Spain— | | | | | | |
| Ore | 1,123 | 2,020 | 21,459 | 49,614 | 22,547 | 17,602 |
| Unwrought (a) | 16,804 | 17,937 | 8,404 | 12,436 | 26,538 | 28,475 |
| Scrap (a) | 4,225 | 4,590 | 4,349 | 10,219 | 15,470 | 10,217 |
| Semi-manufactures (a) | 356 | 507 | 420 | 465 | 3,831 | 9,679 |
| Sulphate | 2,330 | 1,519 | 104 | 90 | 30 | 51 |
| Sweden— | | | | | | |
| Ore | 29,849 | 31,718 | 25,763 | 18,401 | 21,293 | 77,555 |
| Matte | <i>n.a.</i> | 9,344 | 7,641 | 8,163 | 9,255 | 7,231 |
| Unwrought— | | | | | | |
| Unrefined | 52,794 | 390 | 3,156 | 5,267 | 1,876 | 1,973 |
| Refined | | 53,855 | 71,123 | 65,964 | 69,143 | 63,294 |
| Alloys | 3,500 | 3,113 | 4,052 | 4,459 | 3,005 | 2,445 |
| Scrap (a) | 892 | 1,030 | 4,548 | 1,479 | 1,498 | 3,173 |
| Semi-manufactures (a) | 5,404 | 7,131 | 10,151 | 9,953 | 9,346 | 12,357 |
| Sulphate | 507 | 913 | 696 | 441 | 211 | 214 |
| Switzerland— | | | | | | |
| Unwrought | 36,036 | 30,104 | 36,888 | 51,943 | 39,635 | 37,291 |
| do. alloys | | | 524 | 1,364 | 2,117 | 2,117 | 1,010 |
| Scrap (a) | 557 | 724 | 1,371 | 493 | 425 | 222 |
| Semi-manufactures (a) | 8,407 | 10,025 | 12,614 | 21,060 | 21,123 | 16,394 |
| U.S.S.R.— | | | | | | |
| Unwrought | 92,300 | 113,900 | 104,300 | 80,900 | 104,700 | 86,610 |
| Sulphate | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 5,905 | 8,661 |
| Yugoslavia— | | | | | | |
| Unwrought | 6,278 | 2,193 | 9,562 | 10,284 | 6,999 | 5,911 |
| Semi-manufactures (a) | 261 | 199 | 479 | 620 | 549 | 591 |
| Scrap | <i>n.a.</i> | <i>n.a.</i> | 3,012 | 3,929 | 4,141 | 4,434 |
| Algeria— | | | | | | |
| Unwrought | 3,370 | 4,272 | 4,572 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures (a) | 1,439 | 1,564 | 1,552 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 5,465 | 3,787 | 2,744 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Angola— | | | | | | |
| Semi-manufactures (a) | 111 | 153 | 101 | 265 | 393 | 298 |
| Sulphate | 43 | 62 | 17 | 7 | 3 | 26 |
| Congo Republic— | | | | | | |
| Bars, sheets, wire, etc. . . | 188 | 93 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt— | | | | | | |
| Unwrought and scrap .. | 2,386 | 2,426 | 2,695 | 5,056 | 6,481 | <i>n.a.</i> |
| Semi-manufactures (a) | 1,168 | 994 | 1,050 | 982 | 619 | <i>n.a.</i> |
| Sulphate | 1,701 | 73 | 1,327 | 95 | — | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Semi-manufactures (a) | 90 | 125 | 128 | 148 | 170 | 114 |
| Morocco— | | | | | | |
| Semi-manufactures (a) | 1,631 | 1,028 | 2,201 | 1,863 | 2,122 | 3,006 |
| Sulphate | 73 | 83 | 29 | 35 | — | 10 |
| Mozambique— | | | | | | |
| Semi-manufactures (a) | 391 | 341 | 437 | 481 | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Unwrought | 23,407 | 14,093 | 22,423 | 22,948 | 24,571 | <i>n.a.</i> |
| do. alloys | 74 | 91 | 106 | 70 | 39 | <i>n.a.</i> |
| Semi-manufactures (a) | 3,437 | 3,108 | 1,359 | 1,210 | 2,121 | <i>n.a.</i> |
| Sudan— | | | | | | |
| Unwrought | 90 | 55 | — | 1 | — | 125 |
| Semi-manufactures .. | 740 | 91 | 152 | 223 | 589 | 271 |
| Sulphate | 436 | 642 | 600 | 447 | 255 | 1 |

(a) Including alloys.

IMPORTS OF COPPER, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Tunisia— | | | | | | |
| Semi-manufactures (a) | 301 | 381 | 359 | 507 | 337 | <i>n.a.</i> |
| Sulphate | 666 | 699 | 684 | 620 | 91 | 346 |
| Costa Rica— | | | | | | |
| Semi-manufactures (a) | 78 | 109 | 103 | 131 | 212 | 241 |
| Sulphate | 1,392 | 1,393 | 6,430 | 9,811 | 157 | 11 |
| Cuba— | | | | | | |
| Semi-manufactures (a) | 2,343 | 3,816 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Dominican Republic— | | | | | | |
| Sulphate | <i>n.a.</i> | 278 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Guatemala— | | | | | | |
| Semi-manufactures (a) | 562 | 136 | 137 | 81 | 106 | <i>n.a.</i> |
| Sulphate | (b) 2,843 | 5 | 1,137 | 408 | 19 | <i>n.a.</i> |
| Honduras— | | | | | | |
| Sulphate | 1,019 | 17 | 3,755 | 296 | 45 | 34 |
| Mexico— | | | | | | |
| Unwrought (a) | 78 | 37 | 81 | 15 | 28 | 21 |
| Semi-manufactures (a) | 343 | 302 | 232 | 276 | 214 | 735 |
| Sulphate | 1 | 1 | 1 | 2 | 5 | — |
| Panama Republic— | | | | | | |
| Sulphate | 1,198 | 1,382 | 2,443 | 2,504 | <i>n.a.</i> | <i>n.a.</i> |
| United States (c)— | | | | | | |
| <i>Cu content of—</i> | | | | | | |
| Ore and concentrates | 81,069 | 8,356 | 21,819 | 21,875 | 2,074 | 10,266 |
| Matte, precipitate, etc. | 4,398 | 6,351 | 165 | 85 | 19 | 2,500 |
| Unwrought— | | | | | | |
| Blister | 123,779 | 182 | 434 | 5,294 | 999 | 106,456 |
| Refined | 111,276 | 211,879 | 152,698 | 77,863 | 116,540 | 109,954 |
| Scrap | 5,223 | 2,664 | 1,639 | 1,467 | 3,434 | 1,960 |
| do. alloys | 3,751 | 1,122 | 276 | 348 | 1,151 | 844 |
| Semi-manufactures .. | 37,647 | 48,382 | 41,490 | 19,160 | 17,251 | <i>n.a.</i> |
| do. alloys | 21,773 | 28,267 | 24,549 | 21,061 | 23,389 | <i>n.a.</i> |
| Sulphate | 181 | 515 | 983 | 285 | 74 | <i>n.a.</i> |
| Argentina— | | | | | | |
| Unwrought | 33,450 | 19,631 | 21,338 | 29,316 | 17,177 | 15,647 |
| Brazil— | | | | | | |
| Ore | — | — | 168 | — | — | — |
| Unwrought (a) | 25,808 | 19,902 | 28,774 | 35,598 | 41,447 | 47,448 |
| Semi-manufactures (a) | 1,201 | 291 | 608 | 307 | 374 | 231 |
| Sulphate | 4,456 | 2,553 | 4,328 | 3,142 | 4,653 | 4,081 |
| Colombia— | | | | | | |
| Unwrought | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 63 | 162 | 365 |
| Semi-manufactures (a) | 1,779 | 2,546 | 3,022 | 4,378 | 4,148 | 4,403 |
| Sulphate | 2,366 | 11 | 683 | 104 | 3 | 50 |
| Peru— | | | | | | |
| Semi-manufactures (a) | 627 | 610 | 665 | 894 | 1,136 | 773 |
| Sulphate | 258 | 125 | 265 | 312 | 188 | 225 |
| Uruguay— | | | | | | |
| Semi-manufactures (a) | 183 | 514 | 501 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Including alloys.

(b) Including carbonate.

(c) The figures shown are imports for consumption. According to the U.S. Bureau of Mines, general imports which also include material entering the country under bond were as follows (long tons Cu content):

| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|----------------------|---------|---------|---------|---------|---------|---------|
| Ore and concentrates | 78,051 | 64,858 | 67,427 | 40,882 | 38,319 | 43,427 |
| Matte | 4,623 | 7,990 | 4,508 | 1,434 | 566 | 666 |
| Unwrought— | | | | | | |
| Blister | 239,448 | 240,221 | 266,404 | 302,847 | 296,148 | 329,519 |
| Refined | 114,700 | 191,123 | 127,419 | 59,692 | 88,232 | 106,397 |
| Scrap | 6,304 | 5,531 | 2,406 | 3,778 | 4,279 | 2,610 |

IMPORTS OF COPPER, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|---------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Venezuela— | | | | | | |
| Semi-manufactures (a) | <i>n.a.</i> | 7,300 | 7,136 | 5,892 | 5,094 | 5,857 |
| Sulphate | 92 | 122 | 102 | 106 | 303 | 223 |
| Burma— | | | | | | |
| Semi-manufactures (a) | 444 | 618 | 423 | 306 | <i>n.a.</i> | 374 |
| Formosa— | | | | | | |
| Unwrought (a) .. . | 133 | 311 | 1,727 | 1,243 | 2,405 | 2,250 |
| Semi-manufactures (a) | 929 | 975 | 1,685 | 1,829 | 1,102 | 917 |
| Indonesia— | | | | | | |
| Semi-manufactures (a) | 1,839 | 818 | 1,721 | 2,996 | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 237 | 253 | 312 | 1,332 | <i>n.a.</i> | <i>n.a.</i> |
| Iran (b)— | | | | | | |
| Unwrought (a) .. . | 1,229 | 902 | 276 | 357 | <i>n.a.</i> | <i>n.a.</i> |
| Scrap | 435 | 824 | 870 | 873 | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures (a) | 3,357 | 3,250 | 2,515 | 2,805 | <i>n.a.</i> | <i>n.a.</i> |
| Iraq— | | | | | | |
| Semi-manufactures (a) | 1,210 | 1,066 | 1,083 | 881 | 1,745 | <i>n.a.</i> |
| Japan— | | | | | | |
| Ore and concentrates .. | 208,576 | 330,574 | 62,305 | 427,423 | 514,230 | 556,140 |
| Matte | 14 | 6 | 1,571 | 5,392 | 35,435 | 34,542 |
| Unwrought | 9,721 | 14,183 | 58,420 | 102,634 | 36,158 | 55,321 |
| do. alloys | 295 | 121 | 167 | 65 | 206 | 165 |
| Scrap | 2,669 | 1,444 | 7,755 | 10,336 | 7,812 | 17,079 |
| do. alloys | 30,983 | 61,294 | 108,400 | 134,198 | 74,953 | 64,463 |
| Semi-manufactures (a) | 1,529 | 2,342 | 2,471 | 983 | 1,428 | 1,255 |
| Sulphate | 2 | — | — | 304 | 1,142 | — |
| Jordan— | | | | | | |
| Semi-manufactures (a) | 128 | <i>n.a.</i> | 87 | 114 | 158 | 188 |
| Lebanon— | | | | | | |
| Semi-manufactures (a) | 436 | 594 | 425 | 750 | 524 | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Semi-manufactures (a) | 3,509 | 3,307 | 3,771 | 3,976 | 4,622 | 3,427 |
| Sulphate | 173 | 80 | 139 | <i>n.a.</i> | <i>n.a.</i> | 109 |
| Thailand— | | | | | | |
| Unwrought (a) .. . | 87 | 58 | 210 | 7 | 215 | 155 |
| Semi-manufactures (a) | 1,135 | 1,062 | 1,193 | 1,198 | 1,802 | 2,134 |
| Turkey— | | | | | | |
| Semi-manufactures (a) | 573 | 609 | 483 | 423 | 104 | 418 |
| Sulphate | 342 | 2,097 | 330 | 857 | 1,540 | 34 |

(a) Including alloys.

(b) Years ended March 20 of year following that stated.

DIAMONDS
PRODUCTION OF DIAMONDS†

Metric carats

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|------------------------|-------------------|------------------------|-------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Basutoland | 6,664 | 8,713 | 95 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ghana (b) | 3,131,695 | 3,076,072 | 3,273,000 | 3,214,000 | 3,210,060 | 2,677,800 |
| Sierra Leone | ^a 1,490,037 | 1,290,964 | 1,909,180 | 2,295,279 | 1,637,402 | (a) 1,738,547 |
| Tanganyika | 521,064 | 643,277 | 548,376 | 691,668 | 660,029 | 590,949 |
| British Guiana | 33,091 | 62,328 | 101,004 | 112,679 | 100,145 | 99,748 |
| India | 1,540 | 682 | 1,159 | 1,313 | 1,131 | 1,432 |
| Australia | 158 | 37 | 6 | — | — | — |
| TOTAL | 5,184,249 | 5,082,073 | 5,833,000 | 6,315,000 | 5,609,000 | 5,108,000 |
| OTHER COUNTRIES | | | | | | |
| Angola— | | | | | | |
| Gem | 593,833 | 610,733 | 642,551 | 750,769 | 762,395 | 788,406 |
| Industrial | 407,403 | 404,955 | 414,276 | 396,669 | 318,709 | 295,165 |
| Congo Republic— | | | | | | |
| Gem | 669,329 | 658,909 | 407,000 | 132,000 | — | } 14,764,000 |
| Industrial | 16,004,145 | 14,196,261 | 13,046,563 | 18,011,000 | 14,656,000 | |
| Central African Republic | 85,697 | 86,571 | 69,641 | 111,484 | 265,417 | 402,186 |
| Ivory Coast | 164,315 | 187,950 | 199,120 | 549,330 | 283,911 | 179,660 |
| Guinea | 116,000 | (a) 657,000 | ^a 1,116,000 | (c) 1,200,000 | (c) 350,000 | 50,000 |
| South Africa | 2,702,250 | 2,838,332 | 3,141,463 | 3,787,862 | 3,917,891 | 4,375,572 |
| South West Africa | 903,576 | 930,659 | 935,382 | 905,815 | 1,027,233 | 1,194,630 |
| Venezuela | 90,004 | 94,986 | 70,867 | 134,176 | 176,493 | 69,674 |
| TOTAL* | 22,000,000 | 20,900,000 | 20,300,000 | 26,000,000 | 22,000,000 | 22,000,000 |
| WORLD'S TOTAL* | 27,200,000 | 26,000,000 | 26,100,000 | 32,000,000 | 28,000,000 | 28,000,000 |

†For values see next page.

*Including an estimate for diamonds produced in Brazil. Diamonds are also known to have been produced in the U.S.S.R., Liberia and Indonesia but no statistics are available.

Note—Estimated production of synthetic diamond in the United States was as follows (metric carats): 1958—1,300,000; 1959—1,500,000; 1960—2,000,000; 1961—2,500,000; 1962—3,000,000; 1963—3,200,000.

(a) Exports.

(b) Production was shared by Companies and African diggers as follows:

| | | <i>Companies</i> | <i>African diggers</i> |
|---------|-----------|------------------|------------------------|
| 1958 .. | 1,279,043 | 1,852,652 | |
| 1959 .. | 1,335,614 | 1,740,458 | |
| 1960 .. | 1,853,000 | 1,419,843 | |
| 1961 .. | 1,966,000 | 1,247,667 | |
| 1962 .. | 2,266,185 | 943,875 | |
| 1963 .. | 2,119,400 | 558,400 | |

(c) Estimated.

PRODUCTION OF DIAMONDS†

£ sterling

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|----------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Basutoland (c) | 65,000 | 63,000 | 1,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ghana (b) | 8,273,000 | 8,446,000 | 9,782,000 | 8,050,000 | 7,162,000 | 5,886,000 |
| Sierra Leone | <i>a</i> 7,183,787 | <i>b</i> 7,292,000 | <i>b</i> 15,306,000 | <i>b</i> 17,922,000 | <i>b</i> 10,060,000 | <i>a</i> 16,163,671 |
| Tanganyika (b) | 4,464,000 | 5,275,000 | 4,773,000 | 5,836,000 | 5,508,000 | 5,040,000 |
| British Guiana | 291,270 | 644,445 | 1,083,899 | 967,170 | (<i>b</i>) 800,000 | (<i>c</i>) 800,000 |
| India | 32,000 | 17,000 | 39,700 | 64,000 | 28,100 | 38,900 |
| Australia | 1,572 | 118 | 20 | — | — | — |
| TOTAL | 20,311,000 | 20,738,000 | 30,986,000 | 32,840,000 | 24,000,000 | 28,000,000 |
| OTHER COUNTRIES | | | | | | |
| Angola | 7,134,000 | 7,382,000 | 6,624,000 | <i>b</i> 7,420,000 | <i>b</i> 7,602,000 | <i>b</i> 8,020,000 |
| Congo Republic— | | | | | | |
| Gem (<i>b</i>) | 1,791,000 | 1,751,000 | 806,000 | <i>n.a.</i> | — | <i>n.a.</i> |
| Industrial (<i>b</i>) | 12,766,000 | 11,249,000 | 9,282,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Central African Republic | (<i>b</i>) 487,000 | (<i>b</i>) 458,000 | (<i>b</i>) 509,000 | 612,000 | <i>b</i> 1,571,000 | 3,600,000 |
| Ivory Coast (<i>b</i>) | 718,000 | 442,000 | 500,000 | 1,207,000 | 551,000 | 350,000 |
| Guinea (<i>b</i>) | 366,000 | <i>a</i> 1,858,000 | <i>a</i> 3,600,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South Africa (<i>c</i>) | 15,473,000 | 14,974,000 | 16,903,000 | 18,968,000 | 17,942,000 | 18,636,000 |
| South West Africa (<i>c</i>) .. | 16,525,000 | 16,342,000 | 15,573,000 | 17,435,000 | 18,635,000 | 18,417,000 |
| Venezuela (<i>b</i>) | 570,000 | 715,000 | 558,000 | 1,200,000 | 1,965,000 | 953,000 |
| TOTAL* | 59,000,000 | 58,000,000 | 57,000,000 | 66,000,000 | 62,000,000 | 63,000,000 |
| WORLD'S TOTAL* .. | 79,000,000 | 80,000,000 | 88,000,000 | 99,000,000 | 86,000,000 | 91,000,000 |

†For quantities in metric carats see previous page.

*Including an estimate for diamonds produced in Brazil.

(a) Exports.

(b) Estimated on export value (f.o.b.).

(c) Estimated.

SALES OF DIAMONDS

Sales effected through the Central Selling Organisation of the Diamond Corporation Ltd. were as follows:

| | | | | (£ sterling) | |
|------------|----|----|-------------|-------------------|--------------|
| | | | <i>Gem</i> | <i>Industrial</i> | <i>Total</i> |
| 1958 | .. | .. | 49,420,695 | 16,122,691 | 65,543,386 |
| 1959 | .. | .. | 63,033,187 | 28,102,756 | 91,135,943 |
| 1960 | .. | .. | 63,450,929 | 26,249,454 | 89,700,383 |
| 1961 | .. | .. | 79,349,763 | 16,308,370 | 95,658,133 |
| 1962 | .. | .. | <i>n.a.</i> | <i>n.a.</i> | 96,271,340 |
| 1963 | .. | .. | <i>n.a.</i> | <i>n.a.</i> | 115,978,441 |
| 1964 | .. | .. | <i>n.a.</i> | <i>n.a.</i> | 133,186,049 |

EXPORTS OF DIAMONDS

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Industrial diamonds £ | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 28,386 |
| Ghana— | | | | | | |
| Industrial diamonds Ct. | 3,280,970 | 3,116,571 | 3,291,976 | 2,854,134 | 3,327,506 | 1,513,740 |
| £ | 8,661,512 | 8,659,162 | 9,838,547 | 7,148,511 | 7,424,285 | 3,327,307 |
| Sierra Leone .. Ct. | 1,490,037 | 1,205,302 | 2,054,735 | 2,045,150 | 1,157,520 | 1,738,547 |
| £ | 7,183,787 | 6,808,568 | c16,473,273 | c15,969,057 | c 7,108,862 | c16,163,671 |
| Tanganyika— | | | | | | |
| Gem diamonds .. Ct. | 231,312 | 250,176 | 258,370 | 339,982 | 323,978 | 275,958 |
| £ | 3,436,889 | 3,506,623 | 3,644,877 | 4,803,374 | 4,510,045 | 4,173,247 |
| Industrial diamonds Ct. | 284,141 | 304,494 | 278,203 | 344,873 | 323,200 | 312,753 |
| £ | 978,166 | 1,041,114 | 977,065 | 976,704 | 891,912 | 848,698 |
| British Guiana .. Ct. | 31,935 | 62,644 | 94,782 | 124,622 | 93,880 | <i>n.a.</i> |
| £ | 290,367 | 630,575 | 990,772 | 1,069,634 | 772,233 | <i>n.a.</i> |
| Hong Kong— | | | | | | |
| Cut and polished Ct. | <i>n.a.</i> | 34,531 | 56,578 | 53,838 | 65,056 | 93,278 |
| £ | 1,205,231 | 1,760,903 | 2,613,485 | 3,128,138 | 4,053,603 | 5,924,469 |
| Industrial .. £ | 1,940 | 5,889 | — | 57 | 3,500 | 3,211 |
| India— | | | | | | |
| Gem diamonds £ | r 3,856 | 4,909 | (b) 263 | (b) 6,028 | (b) 519 | (b) 613 |
| Malaya— | | | | | | |
| Cut and polished £ | 43,305 | 52,035 | 51,190 | 81,330 | 93,633 | 123,006 |
| Australia (a)— | | | | | | |
| Gem diamonds Ct. | 165 | — | 480 | 422 | 4 | 7 |
| £ | 1,312 | — | 3,286 | 1,122 | 146 | 2,764 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Cut and polished Ct. | 761,785 | 949,921 | 1,082,159 | 1,087,704 | 1,183,562 | 1,347,032 |
| £ | 28,863,065 | 35,893,793 | 41,343,531 | 44,540,637 | 48,942,384 | 56,868,240 |
| Industrial, rough and bort .. Ct. | 3,087,066 | 4,930,275 | 4,577,608 | 6,640,444 | 6,764,984 | 9,018,333 |
| £ | 12,318,793 | 19,563,436 | 17,244,881 | 22,746,722 | 20,487,001 | 24,042,133 |
| France— | | | | | | |
| Uncut .. £ | 243,465 | 287,468 | 350,755 | 433,261 | 548,619 | 514,358 |
| Cut .. £ | 1,198,417 | 1,185,461 | 1,455,000 | 1,388,633 | 1,003,052 | 1,083,090 |
| Industrial diamonds £ | 44,385 | 46,447 | 59,508 | 16,201 | 41,497 | 35,277 |
| Dust .. £ | 85 | 8,500 | 18,707 | 16,086 | 44,767 | 41,108 |
| Netherlands .. Ct. | 981,934 | 1,529,897 | 1,541,182 | 1,874,833 | 958,519 | 1,463,794 |
| £ | 9,213,000 | 13,771,000 | 16,012,000 | 16,293,000 | 7,954,000 | 9,233,929 |
| Dust .. Ct. | <i>n.a.</i> | <i>n.a.</i> | 516,418 | 721,431 | 655,214 | 671,432 |
| £ | <i>n.a.</i> | <i>n.a.</i> | 528,000 | 729,000 | 665,000 | 668,948 |
| Sweden— | | | | | | |
| Industrial diamonds £ | 96,961 | 73,090 | 67,409 | 54,400 | 57,500 | 64,938 |
| Angola .. Ct. | 962,336 | 1,025,796 | 933,646 | 1,276,573 | 985,776 | 1,293,243 |
| £ | 6,884,943 | 7,436,467 | 6,182,777 | 8,254,996 | 6,931,325 | 9,571,554 |
| Congo Republic— | | | | | | |
| Gem diamonds .. Ct. | 713,805 | 660,594 | 451,679 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| £ | 1,483,744 | 1,427,626 | 894,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Industrial diamonds Ct. | 14,343,402 | 15,292,924 | 9,904,766 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| £ | 10,571,279 | 10,862,308 | 7,047,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Central African Republic— | | | | | | |
| Ct. | 104,868 | 89,758 | 83,642 | 98,361 | 175,267 | <i>n.a.</i> |
| £ | 596,000 | 475,000 | 611,000 | 543,738 | 1,039,244 | <i>n.a.</i> |
| Guinea .. Ct. | 120,000 | 657,000 | 1,116,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| £ | 379,000 | 1,858,000 | 3,600,000 | 2,800,000 | <i>n.a.</i> | <i>n.a.</i> |
| Ivory Coast .. Ct. | 165,910 | 230,930 | 197,805 | 531,390 | 415,910 | 213,507 |
| £ | 725,000 | 543,000 | 497,000 | 1,168,000 | 807,000 | 213,507 |
| Liberia .. Ct. | 868,575 | 638,440 | 976,437 | 1,095,632 | 905,000 | 748,000 |
| £ | 805,500 | 754,500 | 818,000 | 794,000 | <i>n.a.</i> | <i>n.a.</i> |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

(c) Method of valuation revised and figure not, therefore, strictly comparable with those for previous years.

EXPORTS OF DIAMONDS (cont.)

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| South Africa (a)— | | | | | | |
| Uncut Ct. | 1,336,403 | 1,677,633 | 1,596,982 | 1,818,244 | 1,743,794 | 1,475,231 |
| £ | 20,572,157 | 26,272,792 | 23,858,284 | 29,623,940 | 25,198,054 | n.a. |
| Cut and polished Ct. | 117,420 | 136,243 | 129,545 | 138,718 | 132,968 | 124,118 |
| £ | 10,110,481 | 11,745,220 | 11,115,174 | 12,280,549 | 11,395,195 | n.a. |
| United States— | | | | | | |
| Uncut Ct. | 14,016 | 23,058 | 21,967 | 31,315 | 22,543 | 28,663 |
| £ | 170,013 | 216,015 | 295,273 | 547,587 | 563,552 | 791,556 |
| Cut Ct. | 6,841 | 18,497 | 12,228 | 33,337 | 30,005 | 68,939 |
| £ | 780,114 | 1,227,409 | 1,883,566 | 4,003,891 | 4,940,386 | 11,791,063 |
| Industrial diamonds Ct. | 96,014 | 178,595 | 306,331 | 475,211 | 715,042 | 1,068,239 |
| £ | 191,012 | 300,302 | 461,600 | 650,851 | 807,423 | 1,179,434 |
| Dust Ct. | 123,194 | 172,787 | 321,373 | 490,327 | 828,611 | 1,095,737 |
| £ | 134,636 | 156,562 | 300,584 | 484,491 | 791,906 | 1,065,309 |
| Brazil Ct. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Venezuela .. Ct. | 72,889 | 82,936 | 58,287 | 57,277 | 82,189 | 49,583 |
| £ | 462,000 | 624,000 | 459,000 | 521,000 | 915,000 | 678,000 |
| Israel— | | | | | | |
| Polished.. .. Ct. | 342,136 | 477,617 | 627,163 | 738,975 | 975,576 | 1,152,787 |
| £ | 12,234,113 | 16,701,758 | 21,735,184 | 25,106,727 | 31,804,487 | 41,421,821 |
| Industrial .. Ct. | 3,866 | 74,112 | 66,984 | 75,434 | 96,284 | n.a. |
| £ | 30,493 | 181,723 | 214,907 | 247,997 | 279,167 | n.a. |
| Dust Ct. | 15,537 | 17,701 | 2,020 | 6,963 | 5,291 | n.a. |
| £ | 2,859 | 6,942 | 472 | 7,566 | 4,879 | n.a. |

(a) In addition synthetic diamonds were exported as follows:

| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------|------|------|------|------|---------|------|
| Ct. | — | — | — | n.a. | 998,519 | n.a. |
| £ | — | — | — | n.a. | 550,494 | n.a. |

IMPORTS OF DIAMONDS

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|-------------|-------------|------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom Ct. | 21,830,104 | 22,245,187 | 17,654,895 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| (b) £ | 57,284,672 | 62,473,773 | 64,976,439 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malta— | | | | | | |
| Rough diamonds £ | — | — | — | <i>n.a.</i> | 31,346 | 69,968 |
| Cut and polished £ | 2,038 | 1,219 | 487 | 236 | 1,515 | 2,283 |
| Zanzibar Ct. | — | — | 6 | 49 | — | 112 |
| £ | — | — | 220 | 5,523 | 59 | <i>n.a.</i> |
| Canada— | | | | | | |
| Unset Ct. | 53,948 | 57,009 | 55,803 | 52,992 | 55,865 | 57,166 |
| £ | 2,889,611 | 3,879,443 | 2,839,772 | 2,775,652 | 2,690,080 | 2,642,916 |
| Dust, bort, etc... Ct. | 99,346 | 490,724 | 125,083 | 324,388 | 997,396 | 999,454 |
| £ | 152,019 | 926,074 | 176,906 | 566,808 | 1,764,130 | 1,704,873 |
| Bermuda £ | (a) 186,949 | (a) 11,818 | 41,887 | (a) 148,071 | (a) 31,582 | <i>n.a.</i> |
| Ceylon— | | | | | | |
| Cut and polished Ct. | — | 460 | 26,582 | 363 | — | — |
| £ | — | 1,362 | 165,644 | 21,302 | — | — |
| Hong Kong— | | | | | | |
| Gem diamonds .. Ct. | <i>n.a.</i> | 234,349 | 286,113 | 321,087 | 371,846 | 426,203 |
| £ | 6,111,582 | 9,028,340 | 11,570,752 | 14,254,352 | 16,919,835 | 18,602,678 |
| Industrial diamonds £ | 660 | 8,445 | 2,088 | 7,300 | 1,057 | 1,516 |
| India— | | | | | | |
| Gem diamonds .. £ | 66,683 | 48,470 | (c) 49,796 | (c) 56,620 | (c) 89,321 | (c) 116,315 |
| Industrial and bort £ | 109 | 17,100 | (c) 68,777 | (c) 103,568 | (c) 32,279 | (c) 39,516 |
| Malaya— | | | | | | |
| Gem diamonds £ | 326,476 | 376,134 | 372,127 | 265,043 | 219,599 | 496,503 |
| Australia (d)— | | | | | | |
| Industrial diamonds Ct. | 177,893 | 185,720 | 313,175 | 283,895 | 217,759 | 260,400 |
| £ | 313,852 | 382,810 | 431,983 | 365,770 | 326,921 | 375,285 |
| Other diamonds Ct. | 16,195 | 14,224 | 17,708 | 17,506 | 10,760 | 20,370 |
| £ | 732,240 | 674,198 | 893,442 | 779,469 | 784,045 | 903,575 |
| New Zealand— | | | | | | |
| Industrial diamonds £(N.Z.) | 985 | 2,788 | 9,837 | 5,370 | 11,458 | <i>n.a.</i> |
| Other diamonds £(N.Z.) | 147,530 | 151,106 | 220,899 | 205,771 | 179,432 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Rough diamonds Ct. | 3,412,135 | 4,491,677 | 4,334,642 | 3,615,331 | 3,880,889 | 4,652,817 |
| £ | 25,839,832 | 36,849,213 | 36,941,788 | 35,678,869 | 36,237,817 | 40,490,058 |
| Cut diamonds .. Ct. | 90,759 | 161,523 | 301,490 | 256,641 | 245,103 | 404,554 |
| £ | 5,711,800 | 9,142,770 | 15,099,970 | 14,143,737 | 14,689,707 | 23,868,326 |
| Industrial, rough and bort Ct. | 3,057,280 | 5,699,477 | 6,273,589 | 8,597,046 | 8,038,843 | 8,706,554 |
| £ | 6,542,242 | 12,886,902 | 12,726,377 | 17,740,487 | 13,824,796 | 14,763,283 |
| France— | | | | | | |
| Uncut £ | 2,578,858 | 2,399,472 | 2,755,656 | 2,131,579 | 2,604,433 | 2,273,907 |
| Cut and polished £ | 1,882,849 | 2,130,968 | 2,493,600 | 2,688,875 | 3,121,584 | 4,115,598 |
| Industrial diamonds £ | 5,661 | 6,186 | 7,917 | 13,573 | 6,977 | 3,790 |
| Dust £ | 503,155 | 428,092 | 725,792 | 624,421 | 744,041 | 904,300 |
| Netherlands .. Ct. | 1,169,044 | 1,841,155 | 63,179 | <i>n.a.</i> | 1,304,671 | 1,826,812 |
| £ | 9,517,000 | 12,356,000 | 1,004,000 | <i>n.a.</i> | 7,934,000 | 8,398,214 |
| Dust Ct. | <i>n.a.</i> | <i>n.a.</i> | 45,393 | — | 506,539 | 539,315 |
| £ | <i>n.a.</i> | <i>n.a.</i> | 48,000 | — | 476,000 | 485,913 |

(a) Excess of re-exports.

(b) Declared imports represent a very small proportion of actual imports. These figures, therefore, represent exports of rough diamonds from Ghana, Sierra Leone, Tanganyika, British Guiana, Angola, Congo Republic, South Africa and South West Africa to the United Kingdom as recorded by those countries. In the case of South Africa, figures represent diamonds of known South African origin only and exclude re-exports of imported diamonds. No figures are available as to the quantities re-exported from the United Kingdom.

(c) Years ended March 31 following that stated.

(d) Years ended June 30 of that stated.

IMPORTS OF DIAMONDS (cont.)

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------------|------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Norway Ct. | <i>n.a.</i> | 700 | <i>n.a.</i> | 2,000 | 12,765 | 4,980 |
| | £ 2,536 | 3,872 | 2,446 | 750 | 2,216 | 1,085 |
| Sweden— | | | | | | |
| Industrial diamonds £ | 345,873 | 314,384 | 486,079 | 319,600 | 293,900 | 389,982 |
| South Africa— | | | | | | |
| Rough diamonds .. | (a) | (a) | (a) | (a) | (a) | (a) |
| Cut and polished Ct. | 356 | 650 | 803 | 971 | 446 | <i>n.a.</i> |
| | £ 11,088 | 18,664 | 29,749 | 30,916 | 18,453 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Uncut Ct. | 12,180 | 16,230 | 25,475 | 4,975 | 5,460 | 3,040 |
| | £ 101,796 | 101,418 | 76,172 | 56,856 | 54,813 | 51,311 |
| Industrial diamonds Ct. | 81,600 | 152,075 | 133,785 | 189,400 | 114,555 | 102,585 |
| | £ 4,495 | 26,051 | 97,862 | 75,593 | 87,402 | 116,147 |
| United States— | | | | | | |
| Uncut Ct. | 1,929,808 | 1,578,170 | 1,365,529 | 2,274,923 | 1,420,443 | 1,749,641 |
| | £ 25,823,132 | 33,552,700 | 31,145,300 | 40,953,502 | 36,457,710 | 46,382,143 |
| Cut and polished Ct. | 718,422 | 916,824 | 801,945 | 839,150 | 982,278 | 1,017,620 |
| | £ 24,223,488 | 30,735,249 | 27,771,132 | 28,073,222 | 31,739,585 | 33,563,214 |
| Industrial diamonds Ct. | 9,500,632 | 12,605,782 | 12,024,853 | 13,462,739 | 7,725,194 | 9,551,542 |
| | £ 13,379,252 | 21,699,108 | 17,358,490 | 23,696,181 | 13,868,802 | 15,646,013 |
| Dust Ct. | 568,921 | 489,436 | 1,121,241 | 746,707 | 4,555,949 | 2,295,486 |
| | £ 540,985 | 587,592 | 1,088,732 | 784,214 | 4,295,036 | 2,164,991 |
| Bort, manufactured Ct. | 752 | 2,504 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| | £ 34,559 | 61,805 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Argentina— | | | | | | |
| Industrial diamonds Ct. | <i>n.a.</i> | 25,000 | 315,000 | 3,171,000 | 17,895,000 | 1,430,000 |
| | £ <i>n.a.</i> | 900 | 3,700 | 16,400 | 22,400 | 14,400 |
| Dust Ct. | <i>n.a.</i> | 15,000 | 10,000 | 5,000 | 10,000 | 2,775 |
| | £ <i>n.a.</i> | 900 | 500 | 500 | 400 | 700 |
| Israel— | | | | | | |
| Rough diamonds Ct. | 777,275 | 1,322,523 | 1,510,388 | 1,644,905 | 2,154,656 | 2,962,000 |
| | £ 8,954,492 | 14,528,233 | 17,609,079 | 18,360,248 | 25,795,620 | 35,782,000 |
| Industrial diamonds Ct. | 26,111 | 31,222 | 23,885 | 215 | <i>n.a.</i> | <i>n.a.</i> |
| | £ 65,757 | 54,098 | 75,615 | 1,154 | <i>n.a.</i> | <i>n.a.</i> |
| Bort Ct. | 32,058 | 17,622 | 27,487 | 11,504 | <i>n.a.</i> | <i>n.a.</i> |
| | £ 33,412 | 17,738 | 25,399 | 10,268 | <i>n.a.</i> | <i>n.a.</i> |
| Dust Ct. | 6,318 | 7,790 | 3,383 | 24,836 | <i>n.a.</i> | <i>n.a.</i> |
| | £ 6,466 | 7,092 | 2,036 | 3,932 | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Industrial diamonds Ct. | 154,410 | 190,880 | 358,870 | 254,010 | 266,420 | 341,720 |
| | £ 674,000 | 780,000 | 1,081,000 | 1,013,000 | 1,031,601 | 1,407,000 |

(a) Total imports and re-exports were as follows:

| | Total imports | | Re-exports | |
|------|---------------|-------------|-------------|-------------|
| | Carats | £ | Carats | £ |
| 1958 | 16,881,479 | 12,326,528 | 11,961,930 | 18,346,577 |
| 1959 | 14,983,836 | 11,595,714 | 16,384,742 | 24,323,797 |
| 1960 | 15,591,198 | 12,843,624 | 17,335,315 | 25,469,252 |
| 1961 | 17,121,816 | 12,836,498 | 19,226,908 | 34,674,533 |
| 1962 | 16,046,826 | 12,535,491 | 16,644,518 | 28,578,832 |
| 1963 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

DIATOMACEOUS EARTH
PRODUCTION OF DIATOMACEOUS EARTH

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-------------|-------------|------------|------------|------------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 25,138 | (b) 17,000 | 14,780 | 22,250 | 20,011 | 14,237 |
| Kenya | 3,475 | 3,608 | 3,385 | 3,158 | 2,863 | 3,283 |
| Southern Rhodesia (f) .. | — | 132 | 146 | 365 | 378 | 269 |
| Canada (a) | 24 | 4 | 39 | 191 | 188 | 287 |
| Australia | 4,240 | 5,089 | 4,659 | r 5,417 | 7,312 | 5,133 |
| New Zealand | 5,657 | 7,278 | 6,243 | 3,536 | 1,874 | 1,603 |
| OTHER COUNTRIES | | | | | | |
| Austria | 3,648 | 4,011 | 3,957 | 5,351 | 4,119 | 3,874 |
| Denmark— | | | | | | |
| Diatomaceous earth (b) | 7,800 | 9,700 | 9,400 | 12,000 | 11,000 | n.a. |
| Moler (b) | 140,000 | 120,000 | 140,000 | 150,000 | 160,000 | 150,000 |
| Finland | 2,067 | 1,357 | 1,800 | 700 | 1,181 | (e) 1,200 |
| France (f) | 99,954 | 100,734 | 125,418 | 105,740 | 125,083 | 77,200 |
| Germany (Federal) .. r | 61,074 | r 49,800 | r 45,700 | r 64,500 | 60,490 | 42,250 |
| Iceland | 787 | (e) 790 | n.a. | n.a. | n.a. | n.a. |
| Italy | 44,489 | 50,981 | 46,329 | 56,295 | n.a. | n.a. |
| Portugal (f) | 1,034 | 1,852 | 1,046 | 756 | 1,427 | 1,845 |
| Sweden | 1,125 | 682 | 421 | 654 | n.a. | n.a. |
| Yugoslavia (e) | 3,900 | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 |
| Algeria | 26,000 | 25,903 | 21,957 | 31,440 | 26,995 | 17,369 |
| Egypt | 354 | 394 | 719 | 296 | 50 | (e) 50 |
| Mozambique | 54 | — | 94 | 354 | — | — |
| South Africa | 321 | 354 | 309 | 122 | 578 | 196 |
| Costa Rica | 1,969 | 2,165 | 2,165 | 640 | 738 | (e) 1,800 |
| Guatemala | 18,920 | — | — | — | — | — |
| Nicaragua | — | 1,685 | 2,008 | 2,657 | 1,262 | (e) 1,200 |
| United States | (c) 401,589 | (c) 401,589 | (d)430,537 | (d)430,537 | (d)430,537 | n.a. |
| Argentina | 4,054 | 4,312 | 104 | 1,148 | 161 | (e) 900 |
| Colombia | 196 | 295 | 393 | 295 | 150 | 2,200 |
| Peru | 104 | 227 | 1,006 | 1,829 | 1,450 | (e) 1,400 |
| Korea (South) | 462 | 1,665 | 2,400 | 1,776 | 677 | 1,667 |

Diatomaceous earth is known to have been produced in Hungary, Norway, Roumania, Spain, U.S.S.R. Brazil and Japan.

(a) Shipments.

(b) Estimated.

(c) Average annual production 1957—1959.

(d) Average annual production 1960—1962.

(e) United States Bureau of Mines' estimate.

(f) Including tripoli.

EXPORTS OF DIATOMACEOUS EARTH*

Long tons

| Exporting Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|--------|--------|--------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya | 1,415 | 942 | 882 | 1,185 | 1,210 | 1,929 |
| OTHER COUNTRIES | | | | | | |
| Austria | <i>n.a.</i> | 159 | 125 | 176 | 101 | 161 |
| Belgium-Luxemburg E.U. | 139 | 470 | 899 | 792 | 354 | 797 |
| Denmark— | | | | | | |
| Diatomaceous earth .. | 6,437 | 11,070 | 12,539 | 12,459 | 9,837 | 9,413 |
| Moler | 91,314 | 78,396 | 86,091 | 91,602 | 92,388 | 81,648 |
| Moler bricks | 22,128 | 21,308 | 28,111 | 29,885 | 32,467 | 33,740 |
| Finland | — | — | 62 | 79 | 125 | 99 |
| France | 2,156 | 2,842 | 8,184 | 2,977 | 14,434 | 12,001 |
| Germany (Federal) .. | 2,106 | 2,220 | 2,942 | 3,955 | 3,747 | 3,582 |
| Italy | 2,599 | 1,963 | 3,146 | 4,472 | 2,902 | 1,311 |
| Netherlands | 41 | 35 | 253 | 78 | 107 | 111 |
| Norway | — | — | 1 | 3 | 2 | 1 |
| Portugal | 54 | 133 | 112 | 305 | 283 | 275 |
| Sweden | 69 | 62 | 45 | 70 | 26 | 32 |
| Yugoslavia | 1 | 503 | 1,280 | 3,365 | 8,966 | 5,108 |
| Algeria | 23,376 | 22,552 | 23,557 | 15,000 | 16,076 | 12,951 |
| Chile | 28 | — | 12 | 5 | 5 | <i>n.a.</i> |
| Japan | 82 | 77 | 155 | 139 | 221 | 153 |
| Korea (South) | 684 | 10 | — | — | <i>n.a.</i> | — |

*In addition to the exports shown here there is a large export of diatomaceous earth from the United States for which no official figures are available.

IMPORTS OF DIATOMACEOUS EARTH

Long ton

| Importing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-----------|--------|---------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) .. | 59,562 | 62,674 | 58,231 | 62,633 | 63,608 | 53,620 |
| Canada | 24,337 | 24,339 | 25,884 | 25,781 | 23,302 | 23,761 |
| India | 765 | 1,266 | (d) 695 | (d) 1,241 | (d) 1,291 | (d) 1,067 |
| Australia (b) .. | 3,204 | 4,116 | 3,914 | 4,543 | 4,317 | 4,259 |
| New Zealand .. | 1,815 | 1,235 | 1,391 | 1,499 | 1,593 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria | n.a. | 2,110 | 1,449 | 1,250 | 1,398 | 1,422 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 2,535 | 3,457 | 4,098 | 3,450 | 4,414 | 6,353 |
| Denmark | 486 | 773 | 959 | 1,454 | 1,091 | 1,371 |
| Finland | 330 | 328 | 351 | 1,162 | 2,130 | 1,245 |
| France | 13,981 | 13,555 | 13,278 | 12,351 | 10,500 | 8,822 |
| Germany (Federal) .. | 55,782 | 48,685 | 59,292 | 61,541 | 74,089 | 61,656 |
| Iceland | 736 | 4 | 503 | 495 | 3 | n.a. |
| Italy | 1,033 | 1,096 | 3,089 | 8,721 | 2,468 | 1,637 |
| Netherlands | 7,837 | 7,669 | 7,624 | 5,830 | 7,456 | 6,544 |
| Norway | 3,353 | 2,882 | 3,264 | 5,154 | 5,834 | 3,789 |
| Portugal | 521 | 720 | 932 | 1,357 | 641 | 848 |
| Sweden | 2,824 | 4,197 | 4,671 | 5,371 | 5,081 | 7,291 |
| Switzerland | n.a. | n.a. | 3,356 | 2,791 | 3,077 | 2,340 |
| Yugoslavia | 3 | 12 | 20 | 104 | 49 | 147 |
| Algeria | 165 | 196 | 147 | n.a. | n.a. | n.a. |
| Angola | n.a. | n.a. | n.a. | 27 | 70 | 87 |
| Egypt | 1,349 | 3,266 | 1,910 | 1,791 | 1,839 | n.a. |
| Morocco | 313 | 685 | 643 | 456 | 457 | 730 |
| South Africa | 788 | 637 | 1,054 | 2,501 | 2,382 | n.a. |
| Costa Rica | 7 | 37 | 39 | 77 | 14 | 379 |
| Cuba | 2,775 | 1,364 | n.a. | n.a. | n.a. | n.a. |
| Guatemala | 81 | 89 | 78 | 88 | 115 | n.a. |
| Honduras | 97 | 79 | 68 | 81 | 95 | 75 |
| Mexico (c) | 3,202 | 1,218 | 1,068 | 1,165 | 3,025 | 1,208 |
| Salvador | 33 | 47 | 180 | 116 | 235 | 332 |
| Brazil | 816 | 743 | 1,029 | 1,719 | 1,103 | 1,653 |
| Chile (c) | 169 | 165 | 75 | n.a. | n.a. | n.a. |
| Colombia | 773 | 986 | 1,193 | 1,035 | 1,417 | 856 |
| Peru (c) | 827 | 1,255 | 819 | 846 | 906 | 908 |
| Venezuela | (c) 1,525 | 2,079 | 1,759 | 2,313 | 2,731 | 1,931 |
| Israel | n.a. | n.a. | 176 | 410 | 827 | 527 |
| Japan | 2,778 | 3,377 | 5,174 | 6,147 | 820 | 637 |
| Lebanon | 198 | 249 | 62 | 41 | 162 | n.a. |
| Thailand | 10 | — | 191 | 25 | — | 5 |
| Turkey | — | 9 | 4 | 7 | 11 | 28 |

(a) Including the following amounts imported in bulk from Denmark :

| | |
|--------------|------------------|
| 1958 | 37,930 long tons |
| 1959 | 37,963 " " |
| 1960 | 35,359 " " |
| 1961 | 43,110 " " |
| 1962 | 41,759 " " |
| 1963 | 34,605 " " |

(b) Years ended June 30 of that stated.

(c) Including tripoli, etc.

(d) Years ended March 31 following that stated.

FELDSPAR
(see also Nepheline Syenite)
PRODUCTION OF FELDSPAR

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|--------------------|--------------------|--------------------|--------------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| China stone | 47,826 | 45,821 | 47,186 | 49,432 | 51,661 | 54,945 |
| Kenya | 26 | — | — | 1 | — | — |
| Southern Rhodesia | 400 | — | — | — | — | — |
| Canada | 18,203 | 16,029 | 12,377 | 9,381 | 8,923 | 7,640 |
| Ceylon | <i>n.a.</i> | <i>n.a.</i> | 32 | 106 | 56 | 109 |
| Hong Kong | 1,653 | 1,716 | 2,511 | 1,206 | 937 | 1,680 |
| India | 8,432 | 9,740 | 10,395 | <i>r</i> 8,930 | 18,917 | 20,602 |
| Pakistan | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 55 | <i>n.a.</i> |
| Australia (a) | 7,016 | 6,750 | 8,414 | 8,209 | 8,513 | 8,842 |
| OTHER COUNTRIES | | | | | | |
| Austria | 2,613 | 3,445 | 4,573 | 3,907 | 4,976 | 2,077 |
| Finland | <i>r</i> 11,969 | <i>r</i> 9,114 | 9,158 | 15,000 | 14,822 | 12,795 |
| France | 84,000 | 79,200 | 74,000 | 92,000 | 119,000 | 180,000 |
| Germany (Federal) (b) | <i>r</i> 164,302 | <i>r</i> 175,352 | <i>r</i> 264,203 | <i>r</i> 265,449 | 269,769 | 273,664 |
| Italy | 55,523 | 59,989 | 85,076 | 93,203 | 91,126 | 100,211 |
| Norway— | | | | | | |
| Unground | 46,000 | 60,000 | 65,000 | (e) 64,000 | (e) 54,000 | (e) 50,000 |
| Ground | 17,914 | 17,331 | 20,000 | (e) 22,000 | (e) 20,000 | (e) 20,000 |
| Portugal | 544 | 837 | 1,699 | 2,892 | 3,674 | 396 |
| Spain | 5,199 | 10,722 | 11,924 | 8,194 | 8,267 | (c) 8,300 |
| Sweden (d)— | | | | | | |
| Unground | 22,235 | 25,984 | 29,985 | 30,523 | <i>n.a.</i> | <i>n.a.</i> |
| Ground | 20,549 | 20,177 | 24,532 | 25,344 | <i>n.a.</i> | <i>n.a.</i> |
| U.S.S.R. (c) | 175,000 | 185,000 | 195,000 | 205,000 | 205,000 | 210,000 |
| Yugoslavia | 12,466 | 19,309 | 13,780 | 20,215 | (c) 29,500 | 28,995 |
| Egypt | — | 492 | 354 | — | — | — |
| Eritrea | 413 | 1,476 | 984 | 2,953 | 425 | (c) 450 |
| Malagasy Republic | — | — | — | 13 | — | — |
| Mozambique | — | 89 | — | — | — | — |
| South Africa | 7,708 | 10,447 | 15,600 | 23,390 | 28,210 | 41,372 |
| South West Africa | — | — | — | 88 | 464 | 2,196 |
| United States (d) | 469,738 | 548,390 | 502,380 | 496,808 | 492,476 | 548,954 |
| Argentina | 4,221 | 4,922 | 8,418 | 11,474 | 4,853 | (c) 4,900 |
| Chile | 984 | 1,476 | 1,095 | 2,280 | 1,138 | (c) 1,180 |
| Colombia | 3,937 | 14,763 | 15,000 | 15,000 | 15,000 | 12,500 |
| Peru | — | — | 236 | 992 | 287 | 309 |
| Uruguay | 267 | 352 | 713 | 877 | 692 | 282 |
| Japan | 44,507 | 60,196 | 91,453 | 50,986 | 46,991 | 53,339 |
| Philippine Republic | 74 | 1,684 | 3,895 | 14,526 | 15,325 | 6,564 |
| TOTAL* | <i>r</i> 1,200,000 | <i>r</i> 1,400,000 | <i>r</i> 1,500,000 | <i>r</i> 1,500,000 | 1,600,000 | 1,700,000 |

*Excluding feldspar known to have been produced in Czechoslovakia, Roumania, Brazil, China and Vietnam.

(a) Including china stone.

(b) Including feldspathic sand obtained as a by-product of china clay washing.

(c) United States Bureau of Mines' estimate.

(d) Sold or used by producers.

(e) Estimated.

EXPORTS OF FELDSPAR

Long ton

| Exporting Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------|--------|------------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | 8,889 | 6,743 | 2,842 | 2,345 | 3,302 | 2,930 |
| India | 235 | 420 | (c) 1,619 | (c) 1,492 | (c) 710 | (c) 2,076 |
| Australia (b) | — | 10 | — | — | — | — |
| OTHER COUNTRIES | | | | | | |
| Austria | 35 | (a) 249 | (a) 274 | (a) 344 | (a) 2,245 | (a) 553 |
| Belgium-Luxemburg E.U. | — | — | — | — | — | 222 |
| Finland | 8,485 | 4,982 | 7,164 | 8,208 | 10,999 | 7,821 |
| France (a) | 12,460 | 13,321 | 10,147 | 10,487 | 13,451 | 19,172 |
| Germany (Federal) (a) | 7,075 | 8,706 | 11,557 | 13,393 | 11,144 | 11,759 |
| Italy | 8,756 | 13,614 | 17,305 | 16,391 | 16,737 | 19,126 |
| Netherlands | 4,556 | 6,045 | (a) 7,110 | (a) 2,251 | (a) 2,290 | (a) 4,201 |
| Norway— | | | | | | |
| Crude | 28,234 | 33,892 | 42,950 | 44,688 | 35,972 | 35,282 |
| Ground | 15,106 | 15,205 | 19,229 | 16,308 | 14,140 | 15,345 |
| Sweden | 32,739 | (a) 35,774 | (a) 37,587 | (a) 38,449 | (a) 30,580 | (a) 25,816 |
| Yugoslavia | 4,908 | 8,743 | 8,851 | 10,593 | 18,451 | 16,336 |
| South Africa | — | 756 | 2,389 | 4,774 | 7,682 | 10,298 |
| South-West Africa | — | — | — | 88 | 470 | 874 |
| Japan | 932 | 955 | 1,291 | 1,653 | 1,765 | 1,729 |

(a) May include some leucite and nephelite.

(c) Years ended March 31 following that stated

(b) Years ended June 30 of that stated.

IMPORTS OF FELDSPAR

Long ton

| Importing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|------------------------------------|--------|-----------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 29,323 | 29,964 | 37,118 | 38,023 | 36,586 | 36,298 |
| Canada | 1,018 | 1,037 | 1,195 | 1,537 | 1,697 | 2,322 |
| New Zealand | 796 | 1,050 | 766 | 443 | (a) 1,486 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria | 1,959 | (b) 2,197 | (b) 2,696 | (b) 4,390 | (b) 4,311 | (b) 5,952 |
| Belgium-Luxemburg E.U. (b) | n.a. | n.a. | 27,226 | 31,067 | 31,701 | 25,406 |
| Denmark | 3,819 | (b) 4,006 | (b) 5,009 | (b) 4,576 | (b) 5,483 | (b) 6,193 |
| Finland | 3 | 780 | (b) 231 | (b) 395 | (b) 648 | (b) 1,064 |
| France (b) | 3,954 | 3,506 | 6,482 | 7,347 | 9,865 | 9,237 |
| Germany (Federal) (b) | 20,924 | 24,574 | 30,277 | 28,164 | 32,337 | 37,265 |
| Italy | 3,943 | 4,879 | 7,857 | 8,218 | 9,525 | 11,260 |
| Netherlands | 20,232 | 24,673 | (b) 25,365 | (b) 20,814 | (b) 19,618 | (b) 28,456 |
| Poland | 5,167 | 3,735 | 4,203 | 8,961 | n.a. | 7,366 |
| Sweden | 7 | (b) 111 | (b) 151 | (b) 240 | (b) 873 | (b) 313 |
| Algeria (b) | 694 | 415 | 738 | n.a. | n.a. | n.a. |
| Congo Republic (a) | 158 | 193 | n.a. | n.a. | n.a. | n.a. |
| Morocco (b) | 316 | 278 | 360 | 251 | 217 | 69 |
| Mexico | 2,783 | 4,156 | 3,662 | 1,911 | 1,270 | 1,346 |
| United States | 6,657 | 5,205 | 7,024 | 2,553 | 3,330 | 3,074 |
| Colombia (a) | 140 | 147 | 424 | 243 | 297 | 509 |
| Venezuela | 2,078 | 3,378 | 3,102 | 4,798 | 6,492 | 4,927 |
| Israel | 847 | 1,438 | 1,042 | 2,044 | 1,909 | 1,639 |
| Japan | 3 | — | 1,390 | 1,108 | 2,543 | 2,666 |
| Vietnam (South) | n.a. | 20 | 156 | 126 | 88 | n.a. |

(a) Including fluorspar.

(b) May include some leucite and nephelite.

FLUORSPAR
PRODUCTION OF FLUORSPAR

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) .. | 77,505 | 83,105 | 97,543 | 85,396 | 71,744 | 87,099 |
| Southern Rhodesia .. | 4 | 9 | 17 | — | 18 | 306 |
| Canada | £565,652 | £686,947 | £705,903 | £701,046 | £623,083 | £663,620 |
| India | — | — | — | — | 647 | 697 |
| Australia | 930 | 471 | 7 | n.a. | — | 15 |
| OTHER COUNTRIES | | | | | | |
| France | 95,628 | 98,594 | 133,344 | 191,907 | 210,000 | 221,000 |
| Germany— | | | | | | |
| Federal Republic .. | r 122,364 | r 121,389 | r 128,102 | r 119,210 | 104,100 | 102,921 |
| East (b) | 64,000 | r 60,000 | r 70,000 | r 70,000 | 70,000 | 70,000 |
| Italy | 145,461 | 155,439 | 159,783 | 154,091 | 153,102 | 122,529 |
| Spain | 89,056 | 87,784 | 109,266 | 144,602 | 147,640 | 150,394 |
| Sweden (c) | 2,846 | 2,674 | 2,868 | r 3,162 | 3,400 | 2,900 |
| U.S.S.R. (b) | 160,000 | 170,000 | 190,000 | 210,000 | 210,000 | 210,000 |
| Morocco | — | — | — | 776 | 487 | 6,250 |
| South Africa | 43,081 | 62,783 | 101,384 | 85,591 | 99,717 | 51,572 |
| South West Africa .. | 4 | 126 | — | — | 214 | 429 |
| Mexico | (e) 277,201 | (e) 304,631 | 361,150 | 392,220 | 494,325 | 474,012 |
| United States (d) .. | 285,279 | 165,260 | 205,162 | 176,209 | 183,952 | 178,431 |
| Argentina | 12,731 | 16,062 | 12,275 | 9,915 | 8,907 | (b) 9,000 |
| Burma | 320 | n.a. | n.a. | n.a. | n.a. | n.a. |
| China (b) | 145,000 | 200,000 | 245,000 | r 200,000 | 200,000 | 200,000 |
| Japan | 5,419 | 5,075 | 9,025 | 14,577 | 15,286 | 20,569 |
| Korea (South) | 1,594 | 6,025 | 18,602 | 27,491 | 32,449 | 39,157 |
| Mongolia | (b) 33,000 | (b) 33,000 | 39,700 | 37,400 | (b) 39,000 | (b) 52,000 |
| Thailand | — | — | 3,405 | 4,680 | 10,541 | 28,768 |
| Turkey | 79 | 66 | 321 | 37 | 572 | 642 |
| TOTAL | 1,600,000 | 1,600,000 | 1,900,000 | 2,000,000 | 2,100,000 | 2,100,000 |

Fluorspar is also known to have been produced in Belgium, Bulgaria and North Korea.

(a) Including fluorspar recovered from old lead and zinc mine dumps.

(b) United States Bureau of Mines' estimate.

(c) Sales.

(d) Shipments from mine.

(e) Exports.

EXPORTS OF FLUORSPAR

Long ton

| Exporting Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|---------|---------|---------|---------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | 6 | 3,370 | 9,207 | 1,829 | 4 | 2,688 |
| OTHER COUNTRIES | | | | | | |
| France | 4,801 | 13,136 | 18,104 | 37,705 | 43,471 | 45,836 |
| Germany (Federal) .. | 14,412 | 15,658 | 17,650 | 20,959 | 14,109 | 11,415 |
| Italy | 81,521 | 119,197 | 71,604 | 66,010 | 48,341 | 37,664 |
| Norway | — | 32 | — | — | — | — |
| Spain | 64,071 | 62,157 | 100,060 | 99,900 | 86,611 | 85,238 |
| Sweden | 241 | 311 | 280 | 343 | 474 | 148 |
| Morocco | 30 | 127 | 59 | 229 | <i>n.a.</i> | 1,499 |
| South Africa | 30,308 | 43,916 | 99,543 | 76,469 | 69,810 | 57,156 |
| South-West Africa .. | 34 | — | — | — | 91 | — |
| Mexico | 277,201 | 304,631 | 344,446 | 407,903 | 460,908 | 492,368 |
| United States | 3,012 | 1,022 | 409 | 301 | 1,168 | 1,073 |
| Argentina | 781 | 854 | 271 | 826 | 569 | 549 |
| Bolivia | — | — | — | — | <i>n.a.</i> | <i>n.a.</i> |
| Korea (South) | 11,607 | 18,065 | 28,115 | 32,856 | 23,238 | 31,392 |

IMPORTS OF FLUORSPAR

Long ton

| Importing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | 27,149 | 21,239 | (c) 53,279 | (c) 29,177 | (c) 60,578 | (c) 59,625 |
| India | 5,330 | 12,298 | (c) 3,760 | (c) 8,001 | (c) 7,157 | (c) 10,377 |
| Australia (a) | 401 | 1,347 | 3,701 | 2,137 | 2,692 | 7,585 |
| OTHER COUNTRIES | | | | | | |
| Austria | 9,420 | 11,070 | 14,763 | 12,444 | 8,010 | 8,307 |
| Belgium-Luxemburg E.U. | <i>n.a.</i> | <i>n.a.</i> | 8,157 | 6,819 | 6,339 | 6,328 |
| Denmark | 934 | 637 | 917 | 642 | 569 | 456 |
| Finland | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 5,867 | 4,802 | 2,905 |
| France | 5,590 | 707 | 2,659 | 502 | 224 | 76 |
| Germany (Federal) .. | 1,422 | 3,733 | 14,606 | 69,245 | 64,581 | 46,642 |
| Italy | 886 | 59 | 210 | 7,370 | 7,998 | 9,778 |
| Netherlands | 6,300 | 5,734 | 9,755 | 7,148 | 10,937 | 8,702 |
| Norway | 978 | 1,828 | 1,837 | 2,724 | 1,512 | 1,534 |
| Poland | 21,400 | 21,100 | 21,800 | 26,100 | <i>n.a.</i> | 22,046 |
| Portugal | 159 | 198 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sweden | 8,412 | 8,370 | 12,270 | 13,196 | 14,097 | 10,698 |
| U.S.S.R. | 127,600 | 108,100 | 74,100 | 74,800 | 78,900 | 89,464 |
| Yugoslavia | 1,810 | 1,230 | 2,373 | 3,057 | 3,418 | 3,026 |
| Algeria | 104 | 156 | 96 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Congo Republic (b) .. | 158 | 193 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico | — | 4 | 2 | — | — | 50 |
| United States | 350,146 | 496,206 | 476,804 | 451,571 | 532,044 | 495,646 |
| Brazil | 281 | 831 | 310 | 639 | 543 | 443 |
| Colombia (b) | 140 | 147 | 424 | 243 | 297 | 509 |
| Venezuela | 540 | 149 | 103 | 166 | 542 | 382 |
| Israel | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 361 | 756 |
| Japan | 36,156 | 70,625 | 99,019 | 123,857 | 100,629 | 126,856 |

(a) Years ended June 30 of that stated. (c) Years ended March 31 following that stated.

(b) Including felspar.

FULLER'S EARTH
(see also Bentonite)
PRODUCTION OF FULLER'S EARTH

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-------------|-------------|---------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| India | (b) 13,500 | (b) 14,000 | 11,211 | (b) 7,000 | (b) 16,000 | (b) 39,000 |
| Pakistan | <i>n.a.</i> | <i>n.a.</i> | 98 | 10,793 | 8,882 | <i>n.a.</i> |
| Australia | 120 | 136 | 90 | r 192 | 392 | 76 |
| OTHER COUNTRIES | | | | | | |
| Algeria | 136,088 | 117,386 | 100,419 | 114,554 | 37,820 | 80,319 |
| Morocco | 15,642 | 22,031 | 37,077 | 37,993 | 32,124 | 36,777 |
| South Africa | 1,759 | 312 | (c) 511 | 707 | 934 | (c) 445 |
| United States (a) | 319,538 | 365,734 | 364,576 | 376,947 | 366,062 | 430,194 |
| Iran (d) | 1,585 | 1,506 | 1,800 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

Fuller's earth is also produced in the United Kingdom, France, Japan and Turkey.

(a) Sold or used by producers.

(c) Sales.

(b) Estimated.

(d) Years ended March 20 of year following that stated.

EXPORTS OF FULLER'S EARTH*

Long tons

| Exporting Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------|-------|-------|--------|--------|--------|-------------|
| OTHER COUNTRIES | | | | | | |
| Morocco | 6,789 | 6,589 | 25,412 | 27,148 | 25,897 | 28,867 |
| United States (a) | 6,626 | 8,871 | 10,746 | 280 | 240 | <i>n.a.</i> |

*Statistics of exports of Fuller's earth are not generally separately recorded in official trade returns.

(a) As recorded by producers.

IMPORTS OF FULLER'S EARTH

Long tons

| Importing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-------------|-------------|-----------|-----------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | (£58,625) | (£59,009) | (£69,069) | (£55,302) | (£57,827) | (£46,660) |
| Ceylon | 51 | 136 | 94 | 123 | 147 | 211 |
| India | 298 | 628 | (b) 331 | (b) 403 | (b) 120 | (b) 129 |
| Australia (a) | 200 | 177 | 318 | — | — | — |
| New Zealand | 226 | 127 | 274 | 260 | <i>n.a.</i> | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| South Africa | 928 | 1,063 | 1,244 | 745 | 977 | <i>n.a.</i> |
| Chile | 153 | 796 | 252 | 1,292 | 942 | <i>n.a.</i> |
| Peru | 610 | 450 | 963 | 1,782 | 1,964 | 2,186 |
| Venezuela | 263 | 380 | 279 | 596 | 501 | 439 |
| Burma | 505 | 959 | 855 | 928 | 978 | 48 |
| Israel | <i>n.a.</i> | <i>n.a.</i> | 1,161 | 1,334 | 2,376 | 3,666 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

GOLD
PRODUCTION OF GOLD
(Metal content)

Fine troy ounces

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Bechuanaland Protectorate | 215 | 198 | 203 | 261 | 288 | 142 |
| Ghana | 852,838 | 913,141 | r 878,800 | r 833,800 | 888,700 | 920,895 |
| Kenya | 7,753 | 9,145 | 8,646 | 12,299 | 9,327 | 10,193 |
| Nigeria | 644 | 848 | 779 | 543 | 329 | 252 |
| Northern Rhodesia | 3,729 | 4,685 | 6,300 | r 4,192 | 3,625 | 4,960 |
| Southern Rhodesia | 554,838 | 566,883 | 562,702 | 570,095 | 544,647 | 566,278 |
| Sierra Leone | — | — | — | 19 | 26 | n.a. |
| Swaziland | — | — | 806 | 1,325 | 2,214 | 2,092 |
| Tanganyika | (a) 67,777 | (a) 96,802 | (a)106,711 | (a)100,425 | 104,383 | 100,399 |
| Uganda (b) | 278 | 334 | 650 | 383 | 236 | 47 |
| Canada | 4,571,347 | 4,483,416 | 4,628,911 | 4,473,699 | 4,178,396 | 4,011,003 |
| British Guiana | 16,503 | 3,164 | 2,170 | 1,562 | 1,747 | 2,613 |
| India | 170,090 | 165,400 | 160,600 | 156,500 | 163,300 | 138,400 |
| Malaya (c) | 21,400 | 25,400 | 19,700 | 11,900 | 6,600 | 8,700 |
| Sarawak | 864 | 2,450 | 3,326 | 4,132 | 2,885 | 2,773 |
| Australia | 1,103,980 | 1,085,104 | 1,086,709 | 1,076,292 | 1,068,837 | 1,022,965 |
| Fiji | 86,720 | 72,565 | 72,203 | 83,417 | 87,354 | 109,000 |
| New Guinea and Papua | 43,812 | 46,820 | 45,150 | 41,820 | 39,052 | 43,599 |
| New Zealand | 24,981 | 36,758 | 33,326 | 28,294 | 21,742 | 14,206 |
| TOTAL | 7,528,000 | 7,513,000 | 7,618,000 | 7,401,000 | 7,124,000 | 6,959,000 |
| OTHER COUNTRIES | | | | | | |
| Finland | 22,152 | 23,374 | 20,351 | 20,609 | 15,239 | 20,416 |
| France | 35,560 | 42,150 | 46,040 | 48,680 | 51,090 | 55,620 |
| Germany (Federal) | 2,485 | 1,929 | 1,283 | 2,186 | 1,704 | (d) 2,000 |
| Greece | 6,940 | 4,730 | 2,900 | — | — | — |
| Italy | 4,802 | 3,261 | 3,310 | 600 | — | — |
| Portugal | 17,742 | 20,800 | 21,900 | 22,400 | 21,900 | 21,900 |
| Spain | 14,200 | 15,200 | 14,000 | 8,200 | 6,700 | (d) 7,600 |
| Sweden | 127,600 | 103,000 | 94,070 | r 86,870 | 128,600 | 117,700 |
| Yugoslavia | 55,364 | 59,640 | 63,980 | 67,195 | 70,507 | 74,043 |
| Angola | 26 | 42 | 42 | 48 | 77 | 37 |
| Cameroun | 2,009 | 1,045 | 416 | 537 | 580 | 1,400 |
| Central African Republic | 850 | 495 | 300 | 80 | 100 | 100 |
| Congo (Republic of) | 5,530 | 4,630 | 3,670 | 3,389 | 3,790 | 3,000 |
| Congo Republic | 352,280 | 347,970 | 314,100 | 233,700 | 203,700 | 214,000 |
| Egypt | 1,812 | 2,486 | 1,000 | (d) 1,000 | (d) 1,000 | (d) 1,000 |
| Eritrea | 6,430 | 16,718 | 5,144 | 5,529 | 2,315 | (d) 2,300 |
| Ethiopia | 36,369 | 41,439 | r 40,915 | r 41,500 | 25,700 | (d) 25,000 |
| Gabon | 15,200 | 16,200 | 17,700 | 15,300 | 16,200 | 35,700 |
| Liberia | (d) 400 | 1,401 | 1,036 | 2,088 | 2,184 | (d) 2,100 |
| Malagasy Republic | 720 | 200 | 300 | 350 | 325 | 900 |
| Morocco | — | — | 104 | 136 | — | — |
| Mozambique | 695 | 295 | 225 | 105 | 91 | 29 |
| Rwanda and Burundi | 3,860 | 3,100 | 1,566 | 817 | 30 | n.a. |
| South Africa | 17,656,447 | 20,065,515 | 21,383,019 | 22,941,561 | 25,491,993 | 27,431,956 |
| South-West Africa | — | — | — | — | 183 | 3 |
| Sudan | 1,571 | 1,419 | 2,116 | 1,266 | 932 | 877 |

(a) Including gold in lead concentrates exported amounting to 11,951 ounces in 1958, 10,391 ounces in 1959, 8,963 ounces in 1960 and 521 ounces in 1961.

(b) Exports.

(c) Estimated

(d) United States Bureau of Mines' estimate.

PRODUCTION OF GOLD (cont.)

Fine troy ounces

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Upper Volta | 3,100 | 3,400 | 930 | (b) 16,000 | 39,770 | 44,790 |
| Costa Rica (b) | 300 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Cuba (e) | 804 | 615 | 348 | — | — | 61 |
| Dominican Republic | 780 | 513 | (e) 308 | — | — | — |
| Guatemala (c) | 370 | — | — | — | (e) 8 | — |
| Honduras | 1,714 | (e) 2,798 | (e) 2,172 | (e) 1,685 | (e) 2,132 | (e) 2,474 |
| Mexico | 332,250 | 313,662 | r 300,300 | 268,678 | 236,800 | 237,900 |
| Nicaragua | 214,882 | 217,849 | 210,200 | 226,250 | 221,984 | 204,769 |
| Salvador | 2,372 | 2,393 | 1,100 | — | — | — |
| United States | 1,739,249 | 1,602,931 | 1,666,772 | 1,548,270 | 1,542,511 | 1,454,010 |
| Argentina | 1,830 | 1,231 | 3,504 | 2,270 | 960 | 480 |
| Bolivia (d) | 19,115 | 35,246 | 45,457 | 81,216 | 35,052 | 153,033 |
| Brazil (a) | 116,190 | 112,332 | 118,891 | 118,955 | 119,875 | n.a. |
| Chile | 111,000 | 78,640 | 57,320 | 52,500 | 65,000 | 77,300 |
| Colombia | 371,715 | 397,929 | 433,947 | 401,060 | 396,827 | 324,518 |
| Ecuador | 19,445 | 18,568 | 15,209 | 15,210 | 20,591 | 21,041 |
| French Guiana | 18,000 | 15,000 | 18,900 | 7,900 | 5,300 | 7,000 |
| Peru | 159,127 | 150,299 | 141,001 | 137,418 | 122,985 | 94,369 |
| Surinam | 4,258 | 5,826 | 4,932 | 4,010 | 2,604 | 3,537 |
| Venezuela | 75,976 | 53,740 | 46,868 | 30,071 | 28,774 | 26,947 |
| Burma | 190 | 212 | 304 | 194 | (c) 200 | (c) 200 |
| Cambodia | 322 | 4,823 | 4,180 | 4,180 | 965 | 6,687 |
| Formosa | 21,200 | 13,500 | 15,700 | r 17,600 | 24,000 | 31,700 |
| Japan | 260,630 | 261,547 | 261,496 | 294,534 | 287,000 | 262,000 |
| Korea (South) | r 73,180 | 65,680 | 65,810 | r 84,110 | 106,500 | 90,090 |
| Philippine Republic | 422,833 | 402,615 | 410,618 | 423,983 | 423,394 | 376,006 |
| TOTAL* | 22,400,000 | 24,500,000 | 25,900,000 | 27,200,000 | 29,700,000 | 31,600,000 |
| WORLD'S TOTAL* (excl. U.S.S.R.) | 29,900,000 | 32,000,000 | 33,500,000 | 34,600,000 | 36,800,000 | 38,500,000 |

*In view of the wide divergences in estimates of the production of gold in the U.S.S.R. (ranging from 2-18 million ounces) figures for that country have been omitted. The United States Bureau of Mines has estimated the production at 10-12 million ounces in recent years.

(d) Mined gold only.

(d) Exports.

(b) Estimated.

(e) Imports into the United States.

(c) United States Bureau of Mines' estimate.

TOTAL EXPORTS OF GOLD*
(Metal content)

Fine troy ounces

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bullion, refined | 10,738,067 | 21,691,400 | 21,462,066 | 24,604,143 | 28,965,803 | 18,985,458 |
| Coin | 564,000 | 345,207 | 350,165 | 868,860 | 694,102 | 865,340 |
| Ghana— | | | | | | |
| Bullion | 851,433 | 902,595 | 893,113 | 852,619 | 945,829 | 910,367 |
| Kenya— | | | | | | |
| Bullion | 7,753 | 9,054 | 8,645 | 12,100 | 8,917 | 8,868 |
| Rhodesia and Nyasaland— | | | | | | |
| Concentrates, etc.* .. . | 1,100 | 2,200 | 1,900 | 1,500 | 1,400 | 1,200 |
| Bullion | 542,747 | 557,422 | 556,178 | 565,169 | 548,999 | 557,271 |
| Tanganyika— | | | | | | |
| Concentrates | 11,951 | 10,391 | 8,963 | 521 | — | — |
| Bullion, refined .. . | 56,299 | 85,403 | 98,024 | 99,574 | 101,597 | 102,519 |
| Uganda— | | | | | | |
| Bullion | 278 | 334 | 650 | 383 | 236* | 47* |
| Canada— | | | | | | |
| Bullion— | | | | | | |
| Unrefined | <i>n.a.</i> | <i>n.a.</i> | 96,986 | 75,796 | 60,812 | 76,131 |
| Refined | <i>n.a.</i> | <i>n.a.</i> | 6,125,624 | 3,658,605 | 2,769,243 | 2,305,337 |
| Coin* | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 60 | 39,200 | 47,700 |
| British Guiana— | | | | | | |
| Bullion | 10,163 | 654 | — | 1 | <i>n.a.</i> | <i>n.a.</i> |
| India— | | | | | | |
| Bullion | 1,568 | 298 | (b) — | (b) 1 | — | <i>n.a.</i> |
| Malaya— | | | | | | |
| Bullion | 10,023 | 18,256 | 4,559 | 278 | 2,211 | <i>n.a.</i> |
| Hong Kong— | | | | | | |
| Bullion | 1,239,000 | 1,444,000 | 1,366,000 | 980,000 | 987,000 | 1,176,000 |
| Sarawak— | | | | | | |
| Bullion | 188 | 23 | — | — | — | — |
| Australia (a)— | | | | | | |
| Ores, etc. | 23,787 | 16,025 | 25,085 | 28,930 | 42,195 | 47,305 |
| Bullion, refined.. .. . | 405,307 | 203,096 | 653,097 | 2,552,869 | 573,106 | 394,950 |
| do. unrefined .. . | — | — | — | — | 7 | 16,018 |
| Fiji— | | | | | | |
| Bullion | 81,120 | 70,719 | 71,677 | 95,349 | 84,926 | 111,260 |
| New Guinea (a)— | | | | | | |
| Bullion | 54,542 | 47,153 | 40,321 | 43,363 | 45,910 | 42,576 |
| New Zealand*— | | | | | | |
| Auriferous quartz, etc. | — | — | 6 | — | — | <i>n.a.</i> |
| Beaten, rolled or drawn | 18,000 | 29,000 | 25,000 | 22,000 | 16,000 | <i>n.a.</i> |
| Papua (a)— | | | | | | |
| Bullion | 454 | 410 | 128 | 75 | 19 | 48 |
| Solomon Islands— | | | | | | |
| Bullion | 5 | 108 | 14 | 59 | 457 | 240 |
| Irish Republic*— | | | | | | |
| Bullion | 2,000 | 1,300 | 600 | 1,500 | 5,200 | 5,300 |

*Some countries record trade in gold by value or by the gross weight of bullion only. In such cases the weight has been obtained by dividing the value by the official annual average price of gold per fine ounce but in no case has any account been taken of the premium. Countries or items for which this conversion has been effected are marked with an asterisk.

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

EXPORTS OF GOLD (cont.)

Fine troy ounces

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|-------------|------------|------------|-----------|
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bullion and scrap .. | 268,000* | 216,000* | 215,000 | 40,000* | 79,000* | 51,000 |
| Coin | 363,000 | 270,000 | 170,000 | 186,000 | 235,000 | 289,000 |
| France— | | | | | | |
| Bullion and scrap .. | 3,197,000 | 709,000 | 644,000 | 1,011,000 | 632,000* | 691,000 |
| Coin | 34,000 | 42,000 | 57,000 | 18,000 | — | 57,000 |
| Beaten, rolled or drawn | 41,000* | 102,000* | 42,000* | 49,000* | 30,000* | 32,000 |
| Germany (Federal)— | | | | | | |
| Bullion | 105,000 | 101,000 | 112,000 | 127,000 | 157,000 | 204,000 |
| Netherlands— | | | | | | |
| Bullion, etc. | 155,000* | 27,000* | 51,000* | 77,000* | 76,000 | 13,000* |
| Coin | 33,000 | 48,000 | 4,000 | 5,000 | 400 | — |
| Sweden*— | | | | | | |
| Bullion | 37,000 | 37,000 | 49,000 | 49,000 | 52,000 | 54,000 |
| Switzerland— | | | | | | |
| Bullion | 225,000* | 267,000 | 294,000 | 244,000 | 272,000 | 377,000 |
| Cameroun— | | | | | | |
| Bullion | 12,000 | 700 | 300 | 600 | 700* | 1,600 |
| Congo Republic— | | | | | | |
| Bullion | 332,000 | 317,000* | (a) 300,000 | n.a. | n.a. | n.a. |
| Equatorial African Community— | | | | | | |
| Bullion | 24,000 | 17,000* | 20,000 | 16,000* | 14,000* | 33,000 |
| Mozambique— | | | | | | |
| Bullion | 1,000 | 184,000 | — | 376,000 | 90,000 | 29,000 |
| South Africa— | | | | | | |
| Ore and concentrates* .. | 7,600 | 7,200 | 800 | 640 | 1,393 | n.a. |
| Bullion | 17,774,000 | 19,387,000 | 22,836,000 | 19,505,000 | 19,390,000 | n.a. |
| Sudan*— | | | | | | |
| Bullion | 2,000 | 1,300 | 2,000 | 400 | 600 | — |
| Upper Volta— | | | | | | |
| Bullion | — | — | 1,000 | 7,000 | 28,000 | 45,000 |
| Honduras— | | | | | | |
| Ore and base bullion .. | 2,484 | 3,061 | 2,286 | 2,310 | 10,819 | 3,044 |
| Mexico— | | | | | | |
| Bullion | 645,000 | 44,500 | 625,000 | 614,000 | 36,000 | n.a. |
| Nicaragua— | | | | | | |
| Bullion | 208,398 | 208,805 | 198,189 | 210,748 | 221,325 | 203,386 |
| Salvador— | | | | | | |
| Bullion, etc. | 2,000 | 2,000 | 1,000 | — | — | — |
| United States— | | | | | | |
| Ore and base bullion .. | 26,929 | 20,498 | 9,196 | 13,717 | 22,724 | 30,107 |
| Refined bullion | 859,042 | 29,104 | 37,676 | 22,132,692 | 10,861,510 | 5,789,826 |
| Argentina— | | | | | | |
| Bullion and coin | 1,433,000 | 4,500 | 9,000 | — | — | — |
| Bolivia— | | | | | | |
| Ore | 17,172 | 31,986 | 24,388 | 258 | 430 | 336 |
| Bullion | 1,943 | 3,260 | 21,069 | 80,958 | 34,622 | 152,697 |
| Chile— | | | | | | |
| Ores and concentrates | 58,151 | 55,585 | 49,014 | 48,043 | n.a. | n.a. |
| Colombia— | | | | | | |
| Bullion | — | — | — | — | n.a. | n.a. |
| Ecuador— | | | | | | |
| Concentrates* | 20,000 | 22,000 | 18,000 | 15,000 | 20,000 | n.a. |
| French Guiana— | | | | | | |
| Bullion | 16,000 | 16,000* | 18,000* | 8,000* | 5,500* | n.a. |
| Peru— | | | | | | |
| Ores, concentrates, etc. | 52,913 | 92,620 | 57,325 | 54,416 | 58,902 | 40,197 |
| Bullion | 278,433 | 21,300 | 35,295 | 18,946 | 12,497 | 3,658 |
| Venezuela— | | | | | | |
| Bullion* | 7,000 | — | 3,007,000 | — | — | — |

(a) Estimated.

EXPORTS OF GOLD (cont.)

Fine troy ounces

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Philippine Republic— | | | | | | |
| Ore and base bullion (a) | 59,459 | 33,793 | 67,553 | 80,507 | 47,673 | 56,138 |
| Refined bullion (a) .. | 272,930 | 223,762 | 286,298 | 466,782 | 298,229 | 291,045 |
| Lebanon— | | | | | | |
| Coin | 42,000 | 56,000 | n.a. | n.a. | n.a. | n.a. |

(a) Imports into the United States.

TOTAL IMPORTS OF GOLD*

(Metal content)

Fine troy ounces

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | |
|-----------------------------------|------------|------------|------------|------------|------------|------------|-------|
| COMMONWEALTH COUNTRIES | | | | | | | |
| United Kingdom— | | | | | | | |
| Ore, etc.* | 45,000 | 31,500 | 49,800 | 49,700 | 59,300 | 70 | |
| Bullion— | | | | | | | |
| Unrefined | 1,542,497 | 1,594,956 | 1,559,520 | 1,521,129 | 1,539,964 | 1,675,865 | |
| Refined | 22,460,998 | 26,005,116 | 24,956,264 | 49,265,267 | 32,542,211 | 32,622,702 | |
| Coin | 436,000 | 211,629 | 4,361 | 9,980 | 500,348 | 382,260 | |
| Malta*— | | | | | | | |
| Bullion and coin .. | 8,000 | 7,600 | 8,600 | 8,300 | 6,300 | 7,000 | |
| Ghana— | | | | | | | |
| Bullion | } | — | 1,412 | 160,190 | 1,425 | 7,034 | |
| Partly worked | | | — | | 1,499 | — | 1,094 |
| Coin | | | — | | 1,060 | — | — |
| Kenya— | | | | | | | |
| Bullion | 96 | 110 | 123 | 294 | 398 | 634 | |
| Nigeria— | | | | | | | |
| Bullion and coin .. | 331 | — | 20 | — | — | — | |
| Rhodesia and Nyasaland* | | | | | | | |
| Concentrates | 600 | 900 | 1,700 | r 2,400 | 3,900 | 2,800 | |
| Tanganyika— | | | | | | | |
| Bullion | — | — | — | — | — | 1,269 | |
| Uganda— | | | | | | | |
| Bullion | 367 | 444 | 563 | 240 | — | 1,152 | |
| Zanzibar*— | | | | | | | |
| Bullion | 700 | 1,100 | 1,100 | 1,100 | 2,300 | 1,900 | |
| Canada— | | | | | | | |
| Bullion | n.a. | n.a. | 147,166 | 122,222 | 80,436 | 119,803 | |
| Coin* | n.a. | n.a. | 38,000 | 213,000 | 50,000 | 520,000 | |
| Jamaica*— | | | | | | | |
| Bullion and coin .. | 170 | 100 | 25 | — | 200 | n.a. | |
| Trinidad and Tobago— | | | | | | | |
| Bullion | 6,215 | 6,981 | 6,000 | 6,600 | 7,349 | n.a. | |
| Ceylon*— | | | | | | | |
| Bullion | 45 | 11,250 | 11,000 | 11,000 | 11,000 | 11,200 | |
| Partly worked | — | — | 23 | — | — | — | |
| Cyprus— | | | | | | | |
| Bullion | 3,281 | 5,060 | 4,223 | 5,918 | 7,182 | 10,219 | |
| Hong Kong— | | | | | | | |
| Bullion | 1,236,000 | 1,450,000 | 1,403,000 | 986,000 | 969,000 | 1,179,000 | |
| India— | | | | | | | |
| Bullion | 36,515 | 20,606 | (c) 26,231 | (c) 43,973 | n.a. | n.a. | |
| Coin | 306 | 142 | (c) 978 | (c) 467 | n.a. | n.a. | |
| Malaya— | | | | | | | |
| Bullion | 978 | 145 | 1,974 | 503 | 376 | 57,377 | |
| Sarawak— | | | | | | | |
| Bullion (b) | 4,000 | 14,700 | 188,000 | 230,000 | 29,000 | 24,000 | |
| Australia (a)— | | | | | | | |
| Bullion | 169,119 | 139,305 | 161,222 | r 141,138 | 135,715 | 155,595 | |
| Fiji— | | | | | | | |
| Bullion | 245 | 212 | 232* | 589* | 287* | 196* | |
| New Zealand— | | | | | | | |
| Bullion | 3,484 | 3,485 | 5,915 | 4,816 | 3,598 | n.a. | |
| Beaten, rolled or drawn | 220 | 189 | 148 | 181 | 6,662 | n.a. | |
| Irish Republic*— | | | | | | | |
| Bullion | 490 | 720 | 1,330 | 4,380 | 1,300 | 4,800 | |

*See note on page 136.

(a) Years ended June 30 of that stated.

(c) Years ended March 31 following that stated.

(b) Including coin and partly worked.

IMPORTS OF GOLD (cont.)

Fine troy ounces

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Bullion | 47,000 | 61,000 | 536,000 | 743,000* | 963,000* | 211,000 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bullion, scrap, etc. .. | 1,579,000 | 665,000* | 613,000* | 558,000* | 284,000* | 293,000 |
| Coin | 141,000 | 154,000 | 312,000 | 240,000 | 260,000 | 309,000 |
| Finland— | | | | | | |
| Bullion and scrap .. | 1,000 | 300 | — | <i>n.a.</i> | <i>n.a.</i> | 800 |
| France— | | | | | | |
| Bullion and scrap .. | 2,674,000 | 1,740,000 | 3,800,000 | 6,428,000 | 2,569,000* | 10,011,000 |
| Coin | 15,000 | 5,000 | 13,000 | 24,000 | 6,000 | 9,000 |
| Beaten, rolled or drawn | 3,000* | 3,000 | 6,000 | 6,000* | 8,000 | 12,000 |
| Germany (Federal)— | | | | | | |
| Bullion | 1,484,000 | 1,432,000 | 1,945,000 | 2,408,000 | 2,898,000 | 2,174,000 |
| Coin | 43,000 | 34,000 | 80,000 | 171,000 | 253,000 | 83,000 |
| Italy— | | | | | | |
| Bullion and scrap .. | 815,000* | 10,492,000 | 10,049,000 | 1,476,000* | <i>n.a.</i> | 2,472,000 |
| Netherlands— | | | | | | |
| Bullion | 160,000* | 94,000 | 159,000 | 186,000 | 188,000 | 146,000* |
| Coin | 2,000 | 400 | 100* | 300 | — | — |
| Norway— | | | | | | |
| Bullion | <i>n.a.</i> | 10,000 | 11,000 | 17,000 | 18,000 | 16,000 |
| Sheets and rolled | 12,000 | 2,000* | 1,000* | 1,500* | 1,500* | 3,000* |
| Sweden— | | | | | | |
| Bullion* | 8,000 | 4,000 | 9,000 | 52,000 | 354,000 | 158,000 |
| Switzerland— | | | | | | |
| Bullion | 31,000 | 34,000 | 43,000 | 58,000 | 46,000 | 64,000 |
| Algeria— | | | | | | |
| Beaten, rolled or drawn | 20,000* | 17,000* | 17,000* | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt— | | | | | | |
| Bullion | 400 | 700 | 1,000 | 1,000 | — | <i>n.a.</i> |
| Mozambique— | | | | | | |
| Bullion | 111,000 | 111,000 | — | 110,000 | <i>n.a.</i> | <i>n.a.</i> |
| Sudan— | | | | | | |
| Bullion | 1,694 | 1,086 | 1,617 | 666 | — | — |
| Mexico— | | | | | | |
| Bullion | 1,000 | 859,000 | 573,000 | 1,000 | <i>n.a.</i> | <i>n.a.</i> |
| United States— | | | | | | |
| Ore and base bullion .. | 1,099,484 | 444,416 | 460,579 | 456,139 | 382,468 | 313,280 |
| Refined bullion .. | 7,020,242 | 8,040,528 | 8,861,716 | 1,159,320 | 3,929,718 | 967,339 |
| Coin* | 24,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Brazil— | | | | | | |
| Bullion | 700 | 200 | 500 | 200 | 400 | 600 |
| Formosa— | | | | | | |
| Bullion | 6,000 | 42,000 | 11,000 | 69,000 | 71,000* | <i>n.a.</i> |
| Lebanon— | | | | | | |
| Bullion and scrap .. | 340,000 | 1,052,000 | 1,139,000 | 1,924,000 | 2,449,956 | <i>n.a.</i> |
| Coin | 134,000 | 130,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Bullion | 25,693 | 24,953 | 2,876 | — | <i>n.a.</i> | <i>n.a.</i> |
| Syria— | | | | | | |
| Bullion and scrap (a) .. | 348,000 | 56,000 | 18,000 | 643 | <i>n.a.</i> | <i>n.a.</i> |

(a) Gross weight.

GRAPHITE
PRODUCTION OF GRAPHITE

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya | 660 | 567 | 994 | — | — | — |
| Tanganyika (a) | — | 25 | 24 | — | — | — |
| Canada | — | — | — | 1 | — | 2 |
| Ceylon | 5,637 | (c) 7,872 | (c) 9,024 | (c) 8,942 | (c) 8,630 | (c) 8,343 |
| Hong Kong— | | | | | | |
| 80% fixed carbon | 1,934 | 1,925 | 2,624 | 1,208 | 351 | 537 |
| 50% fixed carbon | 1,351 | 1,358 | 1,175 | 458 | 454 | 259 |
| OTHER COUNTRIES | | | | | | |
| Austria (a) | 20,820 | 61,110 | 86,646 | 79,692 | 87,872 | 98,016 |
| Germany (Federal) | r 10,728 | r 11,051 | 11,393 | r 11,694 | 11,727 | 12,609 |
| Italy | 3,922 | 3,086 | 3,659 | 4,005 | 3,306 | 1,682 |
| Norway | 4,399 | 4,818 | 5,883 | 5,625 | 6,449 | 7,470 |
| Spain | 364 | 408 | 257 | 271 | — | — |
| Sweden (a) | 530 | — | — | — | — | — |
| U.S.S.R. (b) | 45,000 | 45,000 | 45,000 | 50,000 | 55,000 | 55,000 |
| Malagasy Republic— | | | | | | |
| Flake | 4,930 | 5,164 | 6,950 | 7,645 | } 16,203 | { 8,986 |
| Powder | 7,058 | 6,096 | 7,266 | 7,063 |  |  | 9,954 |
| Morocco | — | 122 | — | — | — | — |
| South Africa | 781 | 551 | 798 | 860 | 1,168 | 599 |
| Mexico | 19,254 | 27,397 | 33,774 | 17,720 | 28,565 | 29,522 |
| Argentina | 469 | 495 | 480 | 776 | 467 | 205 |
| Brazil | 1,181 | 1,191 | 1,279 | 1,428 | 1,486 | 5,929 |
| China (b) | 30,000 | 40,000 | 40,000 | 40,000 | 40,000 | 40,000 |
| Formosa | 817 | 554 | 490 | 787 | (b) 800 | (b) 800 |
| Japan— | | | | | | |
| Flake | 2,062 | 3,171 | 3,425 | 2,952 | 2,982 | 2,501 |
| Amorphous | 1,346 | 805 | 1,021 | 473 | 421 | 450 |
| Korea (South)— | | | | | | |
| Flake | 143 | 149 | 689 | 1,205 | 1,197 | 1,663 |
| Amorphous | 92,541 | 81,142 | 90,184 | 87,091 | 180,975 | 332,647 |
| Korea (North) (b) | 40,000 | 50,000 | r 60,000 | r 64,000 | 64,000 | 69,000 |
| TOTAL* | 310,000 | 360,000 | 420,000 | 400,000 | 530,000 | 700,000 |

*An allowance has been made for graphite produced in India, Czechoslovakia and the United States.

(a) Crude.

(b) United States Bureau of Mines' estimate.

(c) Exports.

EXPORTS OF GRAPHITE

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|--------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Crucibles | 2,392 | 2,525 | 2,815 | 3,272 | 2,964 | 2,644 |
| Kenya | 508 | 584 | 601 | 131 | 81 | — |
| Tanganyika (crude) | — | 25 | 25 | — | — | — |
| Ceylon | 5,662 | 7,872 | 9,024 | 8,942 | 8,630 | 8,286 |
| Hong Kong | 2,172 | 3,705 | 7,856 | 2,704 | 1,626 | 172 |
| India | 6 | 5 | (c) 18 | (c) 16 | (c) 19 | (c) 14 |
| Australia (a) | 3 | 4 | 16 | 7 | 3 | 10 |
| OTHER COUNTRIES | | | | | | |
| Austria | 14,445 | 16,153 | 18,120 | 19,701 | 17,938 | 19,212 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 60 | 26 | 25 | 96 | 41 | 13 |
| Denmark | 1 | — | 2 | 8 | 4 | 3 |
| France | 673 | 630 | 1,138 | 1,146 | 1,166 | 1,738 |
| Germany (Federal) | 4,719 | 5,574 | 5,872 | 5,345 | 6,531 | 6,454 |
| Italy | 1,449 | 1,238 | 1,565 | 1,668 | 1,588 | 1,492 |
| Netherlands | (b) 2,438 | (b) 1,806 | 498 | 86 | 153 | 3 |
| Norway | 4,257 | 4,395 | 5,329 | 6,080 | 6,550 | 6,996 |
| Sweden | — | 26 | — | 49 | 26 | 35 |
| U.S.S.R. | 3,700 | 4,700 | 3,700 | 4,400 | 5,100 | 6,299 |
| Algeria | 231 | 259 | 104 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malagasy Republic | 10,924 | 10,843 | 15,574 | 14,654 | 16,203 | 15,547 |
| Morocco | — | — | 30 | 19 | — | — |
| South Africa | 81 | 73 | 25 | 37 | 18 | — |
| Mexico | 17,239 | 23,179 | 34,385 | 17,359 | 29,741 | 29,418 |
| United States | 1,041 | 1,222 | 1,657 | 1,391 | 1,035 | 803 |
| Japan | 488 | 787 | 616 | 619 | 3,248 | 414 |
| Korea (South) | 67,373 | 43,943 | 54,558 | 56,543 | 46,631 | 46,667 |

(a) Years ended June 30 of that stated.

(c) Years ended March 31 following that stated.

(b) Including artificial graphite.

IMPORTS OF GRAPHITE

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|--------------------|--------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Natural | 4,737 | 6,129 | 9,509 | 9,380 | 8,732 | 7,963 |
| Artificial | 3,870 | 1,077 | 280 | 382 | 262 | 205 |
| Mauritius— | | | | | | |
| Crucibles | 2 | 1 | 2 | 1 | — | <i>n.a.</i> |
| Rhodesia and Nyasaland | 108 | 54 | 26 | 52 | 47 | 40 |
| Canada— | | | | | | |
| Unground | (£19,494) | (£23,797) | (£27,836) | (£16,714) | (£19,525) | (£28,805) |
| Ground, including manufactures | (£333,050) | (£362,918) | (£332,999) | (£332,955) | (£455,912) | (£779,409) |
| Crucibles | (£60,826) | (£83,347) | (£86,819) | (£76,008) | (£85,142) | (£94,108) |
| Hong Kong | 681 | 1,286 | 5,747 | 3,073 | 211 | 182 |
| India— | | | | | | |
| Graphite | 626 | 1,060 | ^(a) 1,777 | ^(a) 1,415 | ^(a) 2,285 | ^(a) 1,051 |
| Crucibles | (£202,603) | (£149,358) | ^a (£212,812) | ^a (£235,554) | ^a (£185,635) | ^a (£171,540) |
| Malaya | 76 | 93 | 129 | 150 | 198 | 212 |
| Pakistan— | | | | | | |
| Graphite | 132 | 249 | 771 | 300 | 391 | 441 |
| Crucibles | — | 65 | 63 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Australia (b) .. | 816 | 944 | 987 | 1,039 | 836 | 1,223 |
| New Zealand .. . | 54 | 44 | 54 | 108 | 34 | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Graphite | 1,293 | 131 | 212 | 164 | 216 | 141 |
| Crucibles, etc. .. | 185 | 194 | 193 | 195 | 167 | 160 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 2,174 | 2,606 | 1,338 | 1,236 | 906 | 870 |
| Denmark— | | | | | | |
| Graphite | 578 | 475 | 502 | 401 | 574 | 364 |
| Crucibles | 119 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Finland | 262 | 472 | 474 | 220 | 322 | 326 |
| France | 4,197 | 3,874 | 5,065 | 5,137 | 4,778 | 5,014 |
| Germany (Federal) .. | 12,323 | 11,528 | 16,950 | 16,340 | 14,227 | 13,109 |
| Greece | 111 | 156 | 249 | 163 | 240 | 257 |
| Iceland | 20 | 20 | 10 | 15 | 11 | <i>n.a.</i> |
| Italy | 5,004 | 5,688 | 7,082 | 8,923 | 8,768 | 10,203 |
| Netherlands | ^(c) 900 | ^(c) 814 | 854 | 399 | 390 | 386 |
| Norway— | | | | | | |
| Graphite | 185 | 83 | 300 | 602 | 413 | 245 |
| Crucibles, etc. .. | 87 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Poland | 6,416 | 6,589 | 7,044 | 8,025 | <i>n.a.</i> | 9,781 |
| Portugal | 80 | 124 | 91 | 118 | 112 | 104 |
| Sweden | 1,087 | 736 | 844 | 854 | 819 | 909 |
| Switzerland | <i>n.a.</i> | <i>n.a.</i> | 672 | 684 | 646 | 658 |
| Yugoslavia | 658 | 800 | 1,170 | 1,154 | 1,208 | 1,102 |
| Algeria | 8 | 9 | 22 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Congo Republic .. | 5 | 2 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt | 329 | 614 | 315 | 112 | 328 | <i>n.a.</i> |
| Morocco | 19 | 15 | 29 | 20 | 19 | 21 |
| Mozambique | 3 | 1 | 3 | 1 | <i>n.a.</i> | <i>n.a.</i> |
| South Africa .. . | 390 | 162 | 346 | 281 | 554 | — |
| Sudan | 1 | — | 3 | 3 | — | 10 |
| Tunisia | 1 | 1 | 2 | 4 | — | — |
| Mexico— | | | | | | |
| Graphite | 198 | 155 | 247 | 146 | 82 | 60 |
| Crucibles | 193 | 174 | 304 | 264 | 215 | 229 |

(a) Years ended March 31 following that stated.

(c) Including artificial graphite.

(b) Years ended June 30 of that stated.

IMPORTS OF GRAPHITE (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------|--------|--------|--------|--------|--------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States (a) .. | 24,144 | 33,074 | 42,981 | 26,398 | 31,151 | 46,263 |
| Argentina | 248 | 310 | 71 | 124 | 119 | 207 |
| Brazil— | | | | | | |
| Graphite | 60 | 154 | 261 | 197 | 189 | 3 |
| Crucibles | 232 | 271 | 343 | 323 | 372 | 456 |
| Chile | 72 | 66 | 67 | 128 | 59 | n.a. |
| Colombia (b) | 81 | 77 | 192 | 76 | 39 | 45 |
| Peru (b) | 83 | 57 | 64 | 59 | 50 | 37 |
| Uruguay | — | 13 | 22 | n.a. | n.a. | n.a. |
| Venezuela | 254 | 212 | 98 | 58 | 143 | 88 |
| Burma | 96 | 47 | 452 | 54 | 75 | n.a. |
| For.nosa | 1,293 | 841 | 1,021 | 980 | 1,545 | 1,823 |
| Indonesia (b) | 174 | 265 | 279 | 505 | n.a. | n.a. |
| Israel— | | | | | | |
| Crucibles | 60 | 39 | 24 | n.a. | 25 | n.a. |
| Lebanon (b) | 6 | 29 | 35 | 31 | 19 | n.a. |
| Japan | 81,877 | 47,854 | 61,974 | 67,302 | 65,256 | 60,330 |
| Philippine Republic | 108 | 66 | 121 | 140 | 270 | 74 |
| Syria (b) | 16 | 27 | n.a. | n.a. | n.a. | n.a. |
| Thailand | 671 | 780 | 790 | 611 | 452 | 490 |
| Turkey— | | | | | | |
| Graphite | 24 | 63 | 109 | 79 | 78 | 105 |
| Crucibles, etc. | 111 | 208 | 103 | 44 | 106 | 140 |

(a) In addition the following amounts of artificial graphite were imported :

| Year | | | Long tons |
|------|----|----|-----------|
| 1958 | .. | .. | 22 |
| 1959 | .. | .. | 5 |
| 1960 | .. | .. | 166 |
| 1961 | .. | .. | 163 |
| 1962 | .. | .. | 4,142 |
| 1963 | .. | .. | 329 |

(b) Including artificial graphite.

GYPSUM
PRODUCTION OF GYPSUM

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Gypsum | 1,486,800 | 1,586,400 | 1,732,800 | 1,888,700 | 1,966,600 | 1,990,800 |
| Anhydrite | 1,764,400 | 1,801,400 | 1,862,200 | 1,842,200 | 2,032,300 | 2,077,500 |
| Kenya | 10,905 | 13,117 | 16,863 | 19,768 | 26,420 | 20,401 |
| Tanganyika | 9,145 | 6,745 | 4,564 | 1,306 | 1,965 | 1,847 |
| Canada (a) | 3,550,637 | 5,342,272 | 4,547,466 | 4,517,641 | f 4,761,437 | f 5,296,104 |
| Jamaica | 575,739 | 468,154 | 245,832 | 223,045 | 225,307 | 228,303 |
| Trinidad | 2,777 | 4,850 | 6,467 | 2,804 | 3,587 | 2,958 |
| Ceylon | 136 | 6 | n.a. | — | — | — |
| Cyprus (b) | 139,000 | 280,000 | 200,000 | 130,000 | 140,000 | 120,000 |
| India | 781,846 | 846,139 | r 981,690 | 851,911 | 1,102,907 | 1,168,768 |
| Pakistan | 66,095 | r 84,952 | 89,541 | r 100,478 | 179,305 | 194,578 |
| Australia | 504,938 | 516,791 | 580,878 | 609,907 | 630,910 | 687,319 |
| Irish Republic | 105,687 | 135,312 | 178,200 | 164,426 | 173,593 | 195,379 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Gypsum | 415,612 | 414,880 | 440,656 | 468,989 | 483,704 | 421,546 |
| Anhydrite | 117,816 | 139,775 | 211,455 | 200,372 | 189,631 | 153,845 |
| Belgium | 42,896 | — | — | — | — | (e) 118,000 |
| Bulgaria | 80,000 | 110,000 | 120,000 | r 133,000 | 115,000 | 367,000 |
| Czechoslovakia | 247,000 | 285,000 | 325,000 | 350,000 | 367,000 | 367,000 |
| France (a) | 3,612,800 | 3,684,162 | 3,716,979 | 3,774,506 | 3,933,861 | 4,200,000 |
| Germany (Federal)— | | | | | | |
| Gypsum (c) | 830,732 | 995,503 | 1,029,277 | 1,173,689 | 1,095,387 | 1,120,340 |
| Anhydrite | 1,541 | 4,118 | 18,292 | 15,218 | 96,215 | 57,414 |
| Germany (East) (d) | 219,000 | 249,000 | 253,000 | 250,000 | 266,000 | 250,000 |
| Greece | 21,564 | 2,000 | n.a. | n.a. | n.a. | n.a. |
| Italy (including alabaster) | 1,222,179 | 1,952,719 | r 1,874,671 | 2,048,260 | n.a. | n.a. |
| Luxemburg | 9,990 | 9,621 | 8,320 | 9,278 | 8,030 | 6,639 |
| Poland | (e) 345,000 | (e) 462,000 | (e) 512,000 | 461,000 | 540,000 | (e) 541,000 |
| Portugal | 42,684 | 53,400 | 60,664 | 70,813 | 71,118 | 59,141 |
| Spain— | | | | | | |
| Gypsum (b) | 2,211,000 | 2,477,000 | 2,413,000 | 2,966,000 | 3,455,000 | n.a. |
| Anhydrite (b) | 47,000 | 156,000 | 35,000 | 38,000 | 46,000 | n.a. |
| Switzerland | 88,000 | (e) 98,000 | (e) 98,000 | (e) 98,000 | (e) 98,000 | (e) 98,000 |
| U.S.S.R. (e) | 6,299,000 | 6,496,000 | 6,888,000 | 7,000,000 | 7,388,000 | 7,871,000 |
| Yugoslavia | 75,000 | 91,000 | r 122,000 | r 96,000 | (e) 98,000 | 139,000 |
| Algeria | 125,041 | 169,100 | 173,774 | n.a. | n.a. | n.a. |
| Angola | 4,557 | 13,000 | (e) 12,000 | 11,298 | 16,047 | n.a. |
| Congo Republic | (e) 10,000 | — | — | — | — | — |
| Egypt | 521,000 | 515,000 | 394,000 | 455,000 | 460,000 | (e) 460,000 |
| South Africa | 228,217 | 199,751 | 192,692 | 170,624 | 188,970 | 184,504 |
| Sudan | — | — | — | 1,561 | 7,384 | 4,450 |
| Tunisia | 16,300 | 6,000 | 13,570 | 16,000 | 16,000 | 18,000 |
| Dominican Republic | 75,206 | 155,999 | 319,572 | 403,000 | (e) 430,000 | (e) 430,000 |
| Guatemala | 15,000 | 18,000 | 14,000 | 12,000 | (e) 10,000 | (e) 10,000 |
| Mexico | 733,000 | 815,000 | 778,000 | 765,000 | 782,000 | 1,080,000 |
| Nicaragua | — | — | — | — | 4,000 | 3,000 |
| United States | 8,613,285 | 9,700,000 | 8,772,000 | 8,482,000 | 8,901,000 | 9,275,000 |
| Argentina | 174,762 | 113,000 | (e) 110,000 | (e) 110,000 | (a) 211,594 | (a) 139,334 |
| Brazil | 128,022 | 180,137 | 101,473 | r 153,571 | 106,372 | 118,021 |
| Chile | (e) 49,000 | 78,000 | 40,000 | 79,000 | (e) 113,000 | 104,000 |
| Colombia | 49,000 | 70,000 | 70,000 | 75,000 | 82,000 | 100,000 |
| Peru | 62,000 | 54,000 | 62,000 | 62,000 | 60,000 | (e) 64,000 |
| Venezuela | n.a. | (e) 65,000 | (e) 57,000 | (e) 59,000 | (e) 62,000 | 63,000 |

(a) Including anhydrite.

(b) Estimated.

(c) Excluding a small production in Rheinland-Pfalz.

(d) Crude estimated on production of calcined.

(e) United States Bureau of Mines' estimate.

(f) Producers' shipments.

PRODUCTION OF GYPSUM (cont.)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Burma | — | 1,925 | 1,035 | 840 | (a) 1,000 | (a) 1,000 |
| Formosa | 9,943 | 10,178 | 10,461 | 11,746 | 16,028 | 26,168 |
| Israel (a) | 35,000 | 60,000 | 60,000 | r 80,000 | 80,000 | 80,000 |
| Japan | 471,069 | 532,097 | 722,949 | 713,106 | 783,000 | 770,000 |
| Jordan | — | — | — | 7,000 | 9,000 | (a) 9,000 |
| Philippine Republic | 1,508 | 1,739 | 8,934 | 8,271 | 14,225 | 30,209 |
| Thailand | 5,600 | 3,400 | 13,000 | 11,850 | 21,000 | 23,512 |
| Turkey | n.a. | n.a. | 60,000 | 60,000 | 140,000 | 180,000 |
| TOTAL* | 36,000,000 | 41,000,000 | 40,000,000 | 41,000,000 | 44,000,000 | 46,000,000 |

*Excluding gypsum known to have been produced in Roumania, Cuba, China and many other countries. Also excluded is production of "Juss" (an impure sandy gypsum) in Iraq, recently amounting to over 300,000 tons annually.

(a) Estimated.

EXPORTS OF GYPSUM

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Calcined | 11,576 | 9,179 | 11,147 | 12,762 | 7,516 | 6,723 |
| Tanganyika | 9,152 | 6,758 | 4,350 | 280 | 2,165 | 1,864 |
| Canada— | | | | | | |
| Crude | 2,587,705 | 4,329,086 | 3,815,775 | 3,410,129 | 3,716,962 | 4,199,212 |
| Calcined | 14 | 333 | 29 | — | — | — |
| Jamaica | 587,759 | 370,905 | 207,682 | 82,886 | 256,786 | 134,492 |
| Cyprus— | | | | | | |
| Crude | 27,067 | 52,304 | 107,560 | 24,437 | 35,099 | 54,279 |
| Calcined | 2,722 | 1,538 | 2,144 | 1,830 | 1,919 | 1,616 |
| India | 1,385 | 756 | (b) — | (b) — | (b) — | (b) — |
| Malaya— | | | | | | |
| Crude and calcined .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 489 | 351 |
| Australia (a)— | | | | | | |
| Crude | 70,900 | 58,717 | 84,110 | 89,960 | 94,008 | 157,375 |
| Calcined | 5,709 | 2,118 | 2,337 | 3,388 | 4,008 | 351 |
| Irish Republic— | | | | | | |
| Crude | 38,590 | 64,978 | 87,056 | 82,131 | 85,262 | 94,399 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Crude | 26,167 | 25,175 | 27,169 | 32,552 | 38,399 | 48,157 |
| Calcined | 57 | 486 | 888 | 1,266 | 838 | 745 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | 510 | 6 | 116 | 563 | 238 | 617 |
| Calcined | 9,871 | 12,493 | 12,835 | 13,095 | 13,891 | 13,647 |
| Denmark— | | | | | | |
| Crude and calcined .. | 14 | 13 | 30 | 19 | 27 | 20 |
| France— | | | | | | |
| Crude | 389,875 | 432,459 | 493,079 | 550,593 | 553,907 | 513,583 |
| Calcined | 65,957 | 74,672 | 93,440 | 109,120 | 119,517 | 124,327 |
| Germany (Federal)— | | | | | | |
| Crude and calcined .. | 142,932 | 147,262 | 197,395 | 175,975 | 184,008 | 187,466 |
| Germany (East)— | | | | | | |
| Calcined | 35,059 | 33,204 | 34,961 | 37,210 | 35,251 | 36,460 |
| Italy— | | | | | | |
| Crude | 2,021 | 6,765 | 1,325 | 889 | 422 | 1,497 |
| Calcined | 517 | 4,248 | 8,084 | 6,929 | 6,649 | 7,722 |
| Netherlands— | | | | | | |
| Calcined | 4,071 | 3,641 | 257 | 332 | 148 | 167 |
| Portugal— | | | | | | |
| Crude | 884 | 628 | 636 | 369 | 146 | 194 |
| Calcined | — | — | 166 | 57 | 78 | 106 |
| Spain— | | | | | | |
| Crude and calcined .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 4,552 | 4,694 | 4,654 |
| Sweden— | | | | | | |
| Calcined | 307 | 205 | 98 | 145 | 109 | 215 |
| Switzerland— | | | | | | |
| Ground and calcined .. | 63 | 95 | 157 | 104 | 62 | 75 |
| Yugoslavia— | | | | | | |
| Crude | — | 9,511 | 88 | — | — | — |
| Ground and calcined .. | 1,559 | 2,441 | 1,178 | 216 | — | — |
| Algeria | — | 1 | 1 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Angola— | | | | | | |
| Crude | 3,918 | 3,005 | 8,473 | 8,286 | 6,651 | 2,968 |
| Egypt— | | | | | | |
| Crude and ground .. | 12,509 | 22,564 | 23,456 | 42,213 | } 53,769 | <i>n.a.</i> |
| Calcined | 25,105 | 9,970 | 16,713 | 11,290 | | |

(a) Years ended June 30 of that stated. (b) Years ended March 31 following that stated.

EXPORTS OF GYPSUM (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|---------|---------|---------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Morocco— | | | | | | |
| Crude | 26,188 | 22,691 | 14,661 | 30,490 | 22,098 | 16,581 |
| Calcined | 2,412 | 697 | 61 | 668 | 922 | 1,870 |
| South Africa | 47,529 | 34,450 | 30,684 | 22,779 | 16,429 | 13,298 |
| Dominican Republic .. | 51,435 | 130,471 | 332,840 | 374,802 | n.a. | n.a. |
| Mexico— | | | | | | |
| Crude | 545,054 | 772,398 | 656,530 | 700,667 | 628,768 | 1,043,436 |
| Calcined | 74 | 3 | 28 | 5 | 6 | 6 |
| United States— | | | | | | |
| Crude and calcined .. | 25,783 | 12,778 | 15,182 | 17,744 | 17,531 | 15,000 |
| Argentina | 33 | 1,006 | 3,059 | 945 | 3,899 | 8,237 |
| Venezuela | 2,608 | — | — | — | 1 | 5,571 |
| Iran (a)— | | | | | | |
| Crude | 5,884 | 1,376 | 579 | n.a. | n.a. | n.a. |
| Calcined | — | 2,637 | 3,826 | n.a. | n.a. | n.a. |
| Japan— | | | | | | |
| Crude | 204 | 169 | 355 | 87 | 4,704 | 6,978 |
| Calcined | 362 | 357 | 432 | 272 | 589 | 405 |
| Syria | 6,892 | 12,136 | n.a. | 5,764 | n.a. | n.a. |

(a) Years ended March 20 following that stated.

IMPORTS OF GYPSUM

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|---------|---------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Crude, including | | | | | | } 139,864 |
| alabaster | 78,544 | 102,418 | 141,059 | 146,319 | 131,579 | |
| Calcined | 842 | 945 | 726 | 1,072 | 1,251 | |
| Nigeria— | | | | | | |
| Crude | 4,595 | 9,659 | 13,028 | 21,384 | 33,539 | n.a. |
| Rhodesia and Nyasaland— | | | | | | |
| Crude and calcined .. | 38,999 | 30,839 | 28,166 | 23,469 | 19,044 | 15,130 |
| Bermuda— | | | | | | |
| Calcined | 352 | 672 | 593 | 517 | 396 | n.a. |
| Canada— | | | | | | |
| Crude and ground .. | 96,462 | 105,205 | 53,581 | 59,000 | 62,453 | 66,632 |
| Calcined | 28,384 | 15,855 | 11,155 | 8,545 | 6,296 | 7,484 |
| India— | | | | | | |
| Crude | 4,918 | 1,101 | (a) 825 | (a) 287 | (a) 32,418 | (a) 41,627 |
| Calcined | 101 | 29 | (a) 175 | (a) 115 | (a) 10 | (a) 10 |
| Malaya— | | | | | | |
| Crude and calcined .. | n.a. | n.a. | n.a. | n.a. | 23,600 | 26,752 |
| New Zealand— | | | | | | |
| Crude | 58,595 | 57,662 | 65,363 | 76,524 | 85,800 | 80,104 |
| Calcined | 14,819 | 11,180 | 14,708 | 16,566 | 4,103 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Crude | 6,856 | 14,376 | 11,772 | 9,234 | 14,301 | 179 |
| Calcined | 1,796 | 1,125 | 2,187 | 3,523 | 3,456 | 4,409 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | 231,288 | 262,467 | 270,638 | 303,534 | 305,245 | 305,399 |
| Calcined | 40,052 | 34,943 | 36,759 | 40,683 | 43,649 | 45,797 |
| Denmark— | | | | | | |
| Crude | 34,261 | 44,773 | 48,137 | 56,765 | 59,038 | 50,029 |
| Calcined | 7,132 | 5,991 | 5,710 | 5,797 | 6,289 | 6,332 |
| Finland— | | | | | | |
| Crude | 37,883 | 63,099 | 58,914 | 68,664 | 59,135 | 79,206 |
| Calcined | 29,083 | 29,939 | 35,887 | 37,494 | 36,702 | 41,658 |
| France— | | | | | | |
| Crude | 3,362 | 10,097 | 17,106 | 15,503 | 18,006 | 13,478 |
| Calcined | 1,017 | 2,702 | 3,194 | 2,511 | 2,490 | 3,383 |
| Germany (Federal)— | | | | | | |
| Crude and calcined .. | 19,295 | 38,679 | 53,475 | 58,563 | 64,668 | 72,813 |
| Greece— | | | | | | |
| Calcined | 185 | 125 | 188 | 129 | 174 | 207 |
| Iceland | 32 | 5,488 | 3,465 | 4,549 | 900 | n.a. |
| Italy— | | | | | | |
| Crude | 32 | 4 | 110 | 46 | 34 | 66 |
| Calcined | 117 | 301 | 338 | 544 | 362 | 481 |
| Netherlands— | | | | | | |
| Crude | 59,952 | 63,524 | 92,316 | 84,084 | 89,903 | 99,870 |
| Calcined | 43,795 | 44,651 | 48,114 | 45,705 | 48,213 | 50,983 |
| Ground | 1,372 | 622 | (b) | (b) | (b) | (b) |
| Norway— | | | | | | |
| Crude | 36,824 | 39,996 | 42,970 | 53,584 | 49,252 | 52,056 |
| Calcined | 4,779 | 5,996 | 4,382 | 4,000 | 4,461 | 4,408 |
| Portugal— | | | | | | |
| Crude | 9,350 | 9,517 | 10,875 | 10,146 | 12,598 | 11,161 |
| Calcined | 22 | 21 | 17 | 14 | 5 | 9 |
| Sweden— | | | | | | |
| Crude | 126,716 | 133,813 | 180,185 | 184,334 | 242,181 | 204,283 |
| Calcined | 19,792 | 19,465 | 20,519 | 21,716 | 23,054 | 23,784 |

(a) Years ended March 31 following that stated.

(b) Included with crude and calcined.

IMPORTS OF GYPSUM (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Switzerland— | | | | | | |
| Crude | <i>n.a.</i> | <i>n.a.</i> | 9,263 | 14,954 | 16,628 | 21,424 |
| Ground and calcined .. | 632 | 1,633 | 7,168 | 8,153 | 5,593 | 4,441 |
| Algeria— | | | | | | |
| Crude | 39 | 2,854 | 2,264 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Calcined | 6,328 | 9,938 | 11,167 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Angola— | | | | | | |
| Crude and calcined .. | 662 | 443 | 690 | 258 | 185 | 87 |
| Congo Republic— | | | | | | |
| Crude and calcined .. | 10,459 | 9,146 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt— | | | | | | |
| Calcined | 17 | 146 | 8 | — | — | <i>n.a.</i> |
| Malagasy Republic .. | 86 | 3,140 | 83 | 1,634 | 1,125 | 2,159 |
| Morocco | 42 | 28 | 63 | 12 | 48 | — |
| Mozambique— | | | | | | |
| Crude | 9,012 | 10,355 | 12,508 | 8,729 | <i>n.a.</i> | <i>n.a.</i> |
| Calcined | 115 | 73 | 134 | 182 | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Crude and calcined .. | 1,556 | 1,945 | 2,580 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sudan | 356 | 318 | 717 | 194 | 201 | 395 |
| Tunisia— | | | | | | |
| Crude | — | — | 1 | — | — | <i>n.a.</i> |
| Calcined | 131 | 171 | 228 | 272 | 290 | <i>n.a.</i> |
| Costa Rica | 79 | 128 | 121 | 116 | 155 | 160 |
| Cuba | 4,323 | 2,307 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Honduras— | | | | | | |
| Calcined | 101 | 8 | 10 | 58 | 2 | 16 |
| Mexico— | | | | | | |
| Crude | 1,029 | 19 | 148 | 1 | 88 | 75 |
| Panama Republic .. | 2,254 | 3,256 | 3,450 | 6,053 | <i>n.a.</i> | <i>n.a.</i> |
| Salvador— | | | | | | |
| Crude | 2,564 | 846 | 1,429 | 1,445 | 1,382 | 998 |
| Calcined | 30 | 34 | 337 | 41 | 35 | 49 |
| United States— | | | | | | |
| Crude | 3,613,392 | 5,474,665 | 4,733,236 | 4,434,876 | 4,840,068 | 4,902,052 |
| Ground and calcined .. | 703 | 915 | 1,035 | 1,006 | 1,589 | 202 |
| Argentina— | | | | | | |
| Crude | 32 | 27 | 24 | 146 | 22 | 47 |
| Brazil— | | | | | | |
| Crude | 13 | 26 | 22 | 23 | 31 | 39 |
| Colombia— | | | | | | |
| Crude | 11,072 | 17,884 | 24,743 | 2,491 | 3,467 | 1 |
| Calcined | 362 | 411 | 616 | 504 | 586 | 463 |
| Peru— | | | | | | |
| Crude and calcined .. | 58 | 88 | 76 | 168 | 69 | 23 |
| Uruguay— | | | | | | |
| Crude and ground .. | 20,529 | 33,174 | 9,283 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 122 | 121 | 75 | 85 | 37 | 57 |
| Formosa | <i>n.a.</i> | <i>n.a.</i> | 24,325 | 24,822 | 35,423 | 22,263 |
| Indonesia— | | | | | | |
| Crude | 364 | 5,586 | 9,843 | 9,897 | <i>n.a.</i> | <i>n.a.</i> |
| Calcined | 88 | 53 | 309 | 205 | <i>n.a.</i> | <i>n.a.</i> |
| Israel— | | | | | | |
| Crude | — | 16 | 79 | 10 | — | — |
| Calcined | 94 | 75 | 7 | 120 | 46 | 70 |
| Japan | 26,981 | 22,997 | 75,620 | 53,745 | 78,411 | 106,601 |
| Korea (South) | 4,925 | 8,564 | 18,035 | 20,862 | 21,744 | 29,499 |
| Lebanon | 27,282 | 42,248 | 45,144 | 18,197 | 30,988 | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Crude | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 35,031 | 39,225 | 19,790 |
| Calcined | 534 | 675 | 611 | | | |
| Syria | 23 | 12 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Thailand— | | | | | | |
| Crude | 546 | 208 | 163 | 196 | 30 | 89 |
| Vietnam (South) .. | 448 | 415 | 633 | 780 | <i>n.a.</i> | <i>n.a.</i> |

IODINE
PRODUCTION OF IODINE

Lb. avdp.

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------|-----------|-----------|-----------|-----------|-------------|-----------|
| Italy | 33,270 | 33,131 | 27,712 | 27,661 | <i>n.a.</i> | — |
| Chile | 2,904,469 | 2,780,525 | 2,407,463 | 5,406,587 | 5,166,000 | 4,753,000 |
| Indonesia.. .. | 589 | 785 | 7,923 | 6,931 | <i>n.a.</i> | 9,642 |
| Japan | 1,600,000 | 1,726,000 | 2,094,000 | 2,469,152 | 3,106,000 | 3,117,870 |

Iodine is also produced in the U.S.S.R. and the United States.

EXPORTS OF IODINE

Lb. avdp

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 111,903 | 115,936 | 127,694 | 47,634 | 45,780 | 36,053 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | 1,300 | 9,900 | 2,200 | 19,600 | 700 | 16,535 |
| Resublimed | 30,900 | 38,100 | 35,500 | 51,100 | 65,900 | 65,036 |
| France— | | | | | | |
| Resublimed | 13,400 | 39,200 | 40,100 | 9,900 | 7,000 | 15,432 |
| Germany (Federal) .. | 39,500 | 60,600 | 78,500 | 57,100 | 43,700 | 38,140 |
| Netherlands— | | | | | | |
| Crude | } 18,000 | } 26,000 | { — | <i>n.a.</i> | 7,000 | 2,205 |
| Resublimed | | | | 35,000 | 18,000 | 4,000 | 4,409 |
| Chile | 2,996,505 | 2,932,831 | 3,800,758 | 5,021,193 | 5,021,741 | <i>n.a.</i> |
| Japan— | | | | | | |
| Crude | } 1,233,327 | } 1,041,735 | } 1,285,883 | } 1,538,002 | } 1,925,766 | } 2,486,664 |
| Resublimed .. .. |  |  |  |  |  |  | 28,671 | 8,483 | 50,138 | 31,700 |

IMPORTS OF IODINE

Lb. avdp.

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 857,731 | 889,278 | 1,206,763 | 987,422 | 1,167,163 | 813,775 |
| Canada— | | | | | | |
| Crude | 80,694 | 111,812 | 83,035 | 243,935 | 150,558 | 240,292 |
| India | 39,419 | 162,646 | (a) 175,409 | (a) 163,925 | (a) 224,673 | (a) 143,029 |
| Australia (b)— | | | | | | |
| Crude | 9,300 | 13,700 | 11,400 | 10,000 | 6,700 | 4,900 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | 101,600 | 208,600 | 144,600 | 147,300 | 179,700 | 257,941 |
| Resublimed | 700 | 2,600 | 5,100 | 400 | 700 | 1,323 |
| Denmark | 2,200 | 1,100 | 14,800 | 2,000 | 7,000 | 2,205 |
| France— | | | | | | |
| Crude | 248,000 | 288,600 | 361,800 | 325,800 | 313,000 | 354,944 |
| Germany (Federal) .. | 474,700 | 661,600 | 734,100 | 618,400 | 701,500 | 690,047 |
| Greece | 4,850 | 3,512 | 3,607 | 7,103 | 7,663 | 4,850 |
| Italy— | | | | | | |
| Crude | 9,628 | 22,992 | 26,729 | 53,572 | 106,924 | 79,587 |
| Resublimed | 21,502 | 19,568 | 3,336 | 22,267 | 45,636 | 64,816 |
| Netherlands | <i>n.a.</i> | <i>n.a.</i> | 29,120 | <i>n.a.</i> | 13,440 | 15,432 |
| Portugal— | | | | | | |
| Crude | 3,441 | 4,738 | 2,000 | 3,500 | 4,900 | 4,630 |
| Resublimed | | | 4,000 | 2,600 | 1,500 | 3,968 |
| Spain— | | | | | | |
| Crude | 44,137 | 46,835 | 11,035 | 12,857 | 41,910 | 31,526 |
| Resublimed | 4 | — | — | 664 | 1,764 | 5,320 |
| Sweden | 11,000 | 11,000 | 11,000 | 13,000 | 7,000 | 11,000 |
| Morocco— | | | | | | |
| Resublimed | 492 | 456 | 622 | 1,393 | 648 | 712 |
| Costa Rica | <i>n.a.</i> | 558 | 434 | 333 | 791 | 351 |
| Mexico | 15,644 | 19,861 | 18,647 | 15,130 | 21,905 | 25,554 |
| United States— | | | | | | |
| Crude | 1,560,937 | 1,466,238 | 1,893,958 | 3,016,641 | 3,025,711 | 3,336,000 |
| Resublimed | — | 441 | 110 | 220 | 9,050 | <i>n.a.</i> |
| Argentina— | | | | | | |
| Crude | 11,191 | 50,446 | 17,688 | 59,470 | 48,596 | 33,116 |
| Resublimed | <i>n.a.</i> | 19,096 | 23,087 | 16,431 | 12,337 | 14,826 |
| Brazil | 8,682 | 38,233 | 24,630 | 23,041 | 35,784 | 23,343 |
| Colombia | 4,969 | 6,285 | 6,744 | 4,048 | 4,786 | 6,788 |
| Peru— | | | | | | |
| Crude | 220 | 2,191 | 1,246 | 1,552 | 1,387 | 115 |
| Resublimed | 1,219 | 1,248 | 1,385 | 2,363 | 1,204 | 1,556 |
| Venezuela | 2,937 | 51,943 | 2,357 | 6,028 | 6,065 | 9,841 |
| Turkey | 2,372 | 8,935 | 4,336 | 4,160 | 6,206 | 6,640 |

(a) Years ended March 31 following that stated.

(b) Years ended June 30 of that stated.

**IRON AND STEEL
PRODUCTION OF IRON ORE***
(including Manganiferous Iron Ore)

Long tons

| Producing Country | ORE | | | | | | | | | | | Estimated Iron Content | | | |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------------|-------------------|-------------------|-------------------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1961 | 1962 | 1963 |
| COMMONWEALTH COUNTRIES | | | | | | | | | | | | | | | |
| United Kingdom (e) ... | 14,612,400 | 14,869,500 | 17,087,400 | 16,518,000 | 15,277,100 | 14,912,000 | 3,945,000 | 4,163,000 | 4,614,000 | 4,460,000 | 4,125,000 | 4,026,000 | 4,460,000 | 4,125,000 | 4,026,000 |
| Sierra Leone (f) ... | 1,421,516 | 1,503,275 | 1,540,445 | 1,757,853 | 1,984,025 | 1,953,651 | 900,000 | 968,000 | 993,000 | 1,132,000 | 1,281,000 | 1,281,000 | 1,132,000 | 1,281,000 | 1,281,000 |
| Southern Rhodesia ... | 142,416 | 127,679 | 155,952 | 181,868 | 608,845 | 645,025 | 84,000 | 75,000 | 92,000 | 225,000 | 359,000 | 359,000 | 225,000 | 359,000 | 359,000 |
| Canada ... | 14,041,360 | 21,864,576 | 19,241,812 | 18,117,681 | 24,428,282 | 27,352,320 | 7,723,000 | 12,020,000 | 10,583,000 | 9,998,000 | 13,436,000 | 15,044,000 | 9,998,000 | 13,436,000 | 15,044,000 |
| Hong Kong ... | 105,125 | 119,893 | 117,043 | 111,537 | 111,537 | 111,537 | 59,000 | 67,000 | 66,000 | 66,000 | 63,000 | 63,000 | 66,000 | 63,000 | 63,000 |
| India ... | 6,032,896 | 7,855,757 | 10,514,563 | 12,075,779 | 13,150,643 | 14,600,956 | 3,680,000 | 4,870,000 | 6,410,000 | 7,370,000 | 8,020,000 | 8,960,000 | 7,370,000 | 8,020,000 | 8,960,000 |
| Goa ... | 2,888,556 | 3,025,269 | 5,764,000 | 6,294,000 | 6,033,000 | 5,000,000 | 1,755,000 | 1,755,000 | 3,343,000 | 3,651,000 | 3,489,000 | 3,000,000 | 3,651,000 | 3,489,000 | 3,000,000 |
| Malaya ... | 2,795,261 | 3,760,684 | 5,640,258 | 6,753,520 | 6,507,302 | 7,264,543 | 1,565,000 | 2,106,000 | 3,159,000 | 3,771,000 | 3,644,000 | 4,068,000 | 3,771,000 | 3,644,000 | 4,068,000 |
| Pakistan ... | 8,097 | 2,250 | 5,421 | 4,004 | 4,004 | 5,421 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Australia ... | 3,917,424 | 4,140,693 | 4,355,464 | 5,342,041 | 4,843,494 | 5,514,562 | 2,539,000 | 2,700,000 | 2,814,000 | 3,434,000 | 3,119,000 | 3,557,000 | 3,434,000 | 3,119,000 | 3,557,000 |
| Fiji ... | 2,977 | 11,692 | 24,000 | 10,280 | 6,229 | 1,062 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| New Zealand (b) ... | 1,533 | 1,505 | 1,999 | 1,745 | 1,501 | 3,074 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| TOTAL ... | 45,970,000 | 57,283,000 | 64,448,000 | 67,414,000 | 72,951,000 | 77,000,000 | 17,725,000 | 18,077,000 | 19,768,000 | 19,492,000 | 19,369,000 | 16,968,000 | 19,492,000 | 19,369,000 | 16,968,000 |
| OTHER COUNTRIES | | | | | | | | | | | | | | | |
| Albania ... | 88,000 | 173,000 | 251,000 | 352,000 | 420,000 | 295,000 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Austria ... | 3,356,519 | 3,328,928 | 3,485,630 | 3,634,379 | 3,692,152 | 3,675,420 | 1,053,000 | 1,045,000 | 1,830,000 | 1,136,000 | 1,145,000 | 1,161,000 | 1,136,000 | 1,145,000 | 1,161,000 |
| Belgium ... | 122,000 | 140,000 | 158,300 | 113,400 | 79,100 | 94,000 | 43,000 | 49,000 | 55,000 | 40,000 | 28,000 | 33,000 | 40,000 | 28,000 | 33,000 |
| Bulgaria ... | 288,000 | 367,000 | 405,000 | 411,000 | 625,000 | 645,000 | 180,000 | 227,000 | 250,000 | 255,000 | 390,000 | 400,000 | 255,000 | 390,000 | 400,000 |
| Czechoslovakia ... | 212,000 | 2,921,000 | 3,071,000 | 3,422,000 | 3,422,000 | 3,354,000 | 880,000 | 880,000 | 920,000 | 970,000 | 1,030,000 | 1,010,000 | 970,000 | 1,030,000 | 1,010,000 |
| Finland (c) ... | 58,533,462 | 59,975,714 | 65,960,692 | 280,000 | 292,000 | 360,000 | 138,000 | 146,000 | 175,000 | 182,000 | 190,000 | 234,000 | 182,000 | 190,000 | 234,000 |
| France ... | 12,441,806 | 12,756,289 | 13,328,555 | 12,878,578 | 11,250,510 | 8,454,152 | 4,067,000 | 4,209,000 | 4,486,000 | 4,353,000 | 3,838,000 | 3,074,000 | 4,353,000 | 3,838,000 | 3,074,000 |
| Germany— | 1,482,000 | 1,574,000 | 1,616,000 | 1,617,000 | 1,616,000 | 1,635,000 | 440,000 | 470,000 | 480,000 | 485,000 | 485,000 | 491,000 | 485,000 | 485,000 | 491,000 |
| Eastern ... | 328,044 | 153,371 | 292,496 | 287,182 | 197,403 | 35,000 | 168,000 | 179,000 | 150,000 | 147,000 | 100,000 | 18,000 | 147,000 | 100,000 | 18,000 |
| Greece ... | 365,229 | 432,085 | 507,932 | 595,035 | 670,738 | 721,000 | 113,000 | 134,000 | 150,000 | 184,000 | 208,000 | 223,000 | 184,000 | 208,000 | 223,000 |
| Hungary ... | 1,280,479 | 1,217,465 | 1,241,861 | 1,215,995 | 1,132,875 | 989,964 | 640,000 | 610,000 | 609,000 | 610,000 | 570,000 | 490,000 | 610,000 | 570,000 | 490,000 |
| Luxembourg ... | 6,533,160 | 6,406,000 | 6,867,107 | 7,340,152 | 6,404,404 | 6,879,912 | 1,861,000 | 1,817,000 | 1,965,000 | 2,000,000 | 1,741,000 | 1,868,000 | 2,000,000 | 1,741,000 | 1,868,000 |
| Norway ... | 1,575,604 | 1,521,612 | 1,643,243 | 1,643,480 | 1,906,913 | 1,966,992 | 1,001,000 | 976,000 | 1,039,000 | 1,044,000 | 1,218,000 | 1,268,000 | 1,044,000 | 1,218,000 | 1,268,000 |
| Poland ... | 2,136,800 | 1,982,000 | 2,148,000 | 2,348,000 | 2,398,000 | 2,568,000 | 730,000 | 770,000 | 800,000 | 800,000 | 820,000 | 870,000 | 800,000 | 820,000 | 870,000 |
| Portugal ... | 228,466 | 241,350 | 297,000 | 245,000 | 258,000 | 258,000 | 114,233 | 120,572 | 149,000 | 123,000 | 129,000 | 129,000 | 123,000 | 129,000 | 129,000 |
| Roumania ... | 731,472 | 1,046,937 | 1,437,015 | 1,709,659 | 1,714,107 | 2,250,000 | 390,000 | 470,000 | 656,000 | 770,000 | 770,000 | 1,010,000 | 770,000 | 770,000 | 1,010,000 |
| Spain ... | 4,953,969 | 4,536,400 | 5,548,476 | 5,967,595 | 5,669,812 | 5,236,000 | 2,427,000 | 2,448,000 | 2,753,000 | 2,803,000 | 2,812,000 | 2,600,000 | 2,803,000 | 2,812,000 | 2,600,000 |
| Sweden ... | 18,022,913 | 18,061,046 | 21,347,054 | 23,220,408 | 22,170,364 | 23,264,000 | 10,853,000 | 11,011,000 | 12,780,000 | 14,046,000 | 13,509,000 | 14,000,000 | 14,046,000 | 13,509,000 | 14,000,000 |
| Switzerland (d) ... | 77,000 | 59,000 | 123,000 | 85,000 | 103,000 | 94,000 | 30,000 | 30,000 | 50,000 | 30,000 | 40,000 | 40,000 | 30,000 | 40,000 | 40,000 |
| U.S.S.R. ... | 87,413,000 | 92,899,000 | 104,858,000 | 115,775,000 | 126,079,000 | 135,304,000 | 52,400,000 | 55,700,000 | 62,900,000 | 69,500,000 | 75,600,000 | 81,200,000 | 69,500,000 | 75,600,000 | 81,200,000 |

* For detailed figures see page 155.

(e) In addition bog ore and iron ore (not used for smelting) are produced.

(b) Used mainly or entirely for purposes other than iron production.

(c) Concentrates.

(d) Estimated.

(e) Marketable production.

(f) Exports.

DETAILS OF PRODUCTION OF IRON ORE IN CERTAIN COUNTRIES

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|------------|------------|------------|------------|------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Hematite | 453,100 | 447,900 | 434,900 | 414,000 | 378,200 | 393,900 |
| Jurassic ironstones— | | | | | | |
| Lower lias | 4,691,000 | 4,764,000 | 5,411,600 | 5,547,800 | 5,516,000 | 5,268,900 |
| Middle lias | 2,628,300 | 2,137,900 | 2,551,100 | 2,061,000 | 1,507,700 | 1,392,000 |
| Inferior oolite | 6,840,000 | 7,519,700 | 8,656,500 | 8,495,200 | 7,875,200 | 7,857,200 |
| Sierra Leone (c)— | | | | | | |
| Lump | 117,605 | 52,440 | 16,650 | 40 | — | — |
| Concentrates | 1,141,571 | 1,398,180 | 1,442,140 | 1,625,703 | 1,875,822 | 1,814,687 |
| Fines | 161,730 | 51,920 | 80,790 | 131,095 | 106,696 | 138,189 |
| Ferromax | 657 | 735 | 865 | 1,015 | 507 | 775 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Phosphoric | 55,027,947 | 56,331,078 | 61,734,641 | 61,415,340 | 61,436,403 | 53,507,000 |
| Medium phosphoric | 3,180,114 | 3,301,552 | 3,804,362 | 3,845,260 | 3,624,684 | 3,361,000 |
| Non-phosphoric | 325,401 | 343,084 | 367,689 | 293,759 | 192,993 | 101,000 |
| Italy— | | | | | | |
| Iron ore | 1,272,010 | 1,217,465 | 1,241,482 | 1,215,995 | 1,132,875 | 989,964 |
| Manganiferous iron ore | 8,469 | — | — | — | — | — |
| Luxemburg— | | | | | | |
| Siliceous iron ore | 2,934,770 | 2,785,000 | 3,218,654 | 3,361,895 | 3,081,546 | 3,343,640 |
| Calcareous iron ore | 3,292,407 | 3,259,000 | 3,333,523 | 3,584,754 | 2,883,330 | 3,103,315 |
| Ferruginous limestone | 305,983 | 362,000 | 314,930 | 393,503 | 439,528 | 432,957 |
| Portugal— | | | | | | |
| Hematite | 133,018 | 150,227 | 189,000 | 105,000 | 69,000 | 58,000 |
| Magnetite | 95,448 | 87,678 | 108,000 | 125,000 | 160,000 | 162,000 |
| Limonite | — | 3,445 | — | 2,000 | — | — |
| Manganiferous iron ore | — | — | — | 13,000 | 29,000 | 38,000 |
| Sweden— | | | | | | |
| Manganiferous iron ore | 61,000 | 68,000 | 92,000 | 75,000 | 138,000 | <i>n.a.</i> |
| Other iron ore | 17,962,000 | 17,993,000 | 21,255,000 | 23,145,000 | 22,032,000 | <i>n.a.</i> |
| By phosphorus content (a) | | | | | | |
| Under 0.006% | 867,596 | 759,414 | 1,334,918 | 1,365,794 | 1,491,971 | <i>n.a.</i> |
| 0.006% to under 0.04% | 2,408,765 | 2,007,354 | 2,739,281 | 2,953,101 | 2,302,191 | <i>n.a.</i> |
| 0.04% to under 0.1% | 353,240 | 494,494 | 768,128 | 1,030,981 | 1,607,100 | <i>n.a.</i> |
| 0.1% to under 0.7% | 7,689,223 | 5,901,942 | 6,795,149 | 7,322,106 | 6,020,284 | <i>n.a.</i> |
| 0.7% to under 1% | — | 1,157,401 | 1,392,311 | 1,445,544 | 1,395,855 | <i>n.a.</i> |
| 1% and over | 6,704,089 | 7,740,441 | 8,317,267 | 9,102,882 | 9,352,963 | <i>n.a.</i> |
| United States— | | | | | | |
| Ore containing less than 5% Mn— | | | | | | |
| Hematite (b) | 50,931,000 | 44,236,000 | 68,147,000 | 50,883,000 | 46,863,000 | 46,509,000 |
| Magnetite (b) | 12,183,000 | 12,867,000 | 18,205,000 | 18,295,000 | 20,788,000 | 23,891,000 |
| Limonite | 3,843,000 | 2,381,000 | 1,641,000 | 1,473,000 | 3,599,000 | 2,443,000 |
| Pyrite cinder and sinter | 739,000 | 791,000 | 791,000 | 678,000 | 579,000 | 756,000 |
| Ore containing 5 to under 10% Mn | 386,473 | 273,541 | 506,551 | 95,855 | 129,979 | 136,569 |

(a) Calculated on a basis of 50% Fe content.

(b) A small quantity of hematite is included with magnetite, and a small quantity of magnetite with hematite.

(c) Exports.

EXPORTS OF IRON ORE
(including Manganiferous Iron Ore)

Long tons

| Exporting Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-------------|-------------|--------------|--------------|--------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 708 | 974 | 563 | 555 | 364 | 482 |
| Rhodesia and Nyasaland | — | — | 649 | 14,506 | 118,557 | 207,239 |
| Sierra Leone | 1,421,563 | 1,503,275 | 1,540,445 | 1,757,853 | 1,983,025 | 1,953,651 |
| Canada | 12,391,314 | 18,552,487 | 16,942,140 | 14,868,166 | 21,645,758 | 23,854,973 |
| Hong Kong | 108,492 | 124,152 | 122,472 | 127,390 | 118,632 | 119,826 |
| India | 1,866,342 | 2,471,454 | (b)3,140,124 | (b)3,313,077 | (b)3,737,436 | } 89,712,220 |
| Goa | 2,466,767 | 3,627,863 | 5,562,820 | 6,425,000 | 5,195,255 | |
| Malaya | 2,591,374 | 3,747,709 | 5,500,173 | 6,425,552 | 6,441,107 | 6,581,755 |
| Australia (e)— | | | | | | |
| Burnt pyrites | n.a. | n.a. | n.a. | 508,546 | 171,661 | 118,337 |
| Fiji | — | 6,925 | 21,994 | 8,906 | 7,339 | 1,227 |
| Irish Republic— | | | | | | |
| Burnt pyrites | 25,809 | 17,003 | 30,434 | 17,366 | 12,576 | 1,639 |
| OTHER COUNTRIES | | | | | | |
| Austria | 48,245 | 48,698 | 19,704 | 9,862 | 30 | 39 |
| Belgium-Luxemburg E.U.— | | | | | | |
| Iron ore | 109,713 | 121,645 | 126,649 | 186,897 | 232,968 | 271,060 |
| Burnt pyrites | 149,709 | 220,824 | 311,009 | 233,943 | 199,509 | 210,810 |
| Denmark— | | | | | | |
| Bog ore (a) | 99,840 | 77,395 | 63,196 | 56,022 | 67,689 | 50,169 |
| Burnt pyrites | 98,753 | 96,650 | 96,835 | 94,727 | 93,310 | 84,264 |
| Finland— | | | | | | |
| Iron ore | 206,436 | 210,643 | 282,755 | 219,331 | 171,626 | 85,674 |
| Burnt pyrites | 95,293 | 121,055 | 120,821 | 204,172 | 169,218 | 163,855 |
| France— | | | | | | |
| Iron ore | 15,041,047 | 19,697,439 | 26,726,549 | 25,446,172 | 25,277,522 | 20,869,283 |
| Burnt pyrites | 281,161 | 360,063 | 497,461 | 395,713 | 355,744 | 338,289 |
| Germany (Federal)— | | | | | | |
| Iron ore | (d) 325,839 | (d) 289,904 | (d) 239,774 | 253,621 | 277,833 | 281,577 |
| Burnt pyrites | 1,011 | 9,028 | 17,661 | 4,968 | 4,436 | 2,566 |
| Greece— | | | | | | |
| Iron ore | 267,174 | 159,453 | 301,364 | 270,466 | 243,811 | 93,389 |
| Burnt pyrites | n.a. | n.a. | 39,238 | 41,653 | 24,357 | 42,488 |
| Italy— | | | | | | |
| Iron ore | 12,988 | 2,428 | 7,366 | 25,813 | 238 | 43 |
| Burnt pyrites | 434,799 | 436,371 | 706,707 | 664,308 | 602,502 | 645,669 |
| Netherlands— | | | | | | |
| Iron ore | 390 | 425 | 7,811 | 9,366 | 11,070 | 6,652 |
| Burnt iron pyrites | 183,521 | 195,706 | 435,932 | 225,388 | 120,076 | 125,148 |
| Norway— | | | | | | |
| Iron ore | 1,140,922 | 924,823 | 1,173,143 | 1,119,787 | 1,248,534 | 1,203,570 |
| Burnt pyrites | 63,405 | 76,254 | 115,829 | 70,550 | 78,067 | 70,598 |
| Portugal— | | | | | | |
| Iron ore | 185,158 | 189,125 | 234,152 | 93,540 | 97,937 | 71,771 |
| Burnt pyrites | 130,628 | 230,658 | 254,946 | 102,675 | 28,909 | 15,403 |
| Spain | 2,122,403 | 1,769,293 | (c)3,123,329 | (c)2,822,961 | (c)1,873,512 | (c)1,904,347 |
| Sweden— | | | | | | |
| Iron ore | 14,576,000 | 15,224,177 | 19,500,385 | 19,930,000 | 19,090,000 | 19,936,000 |
| Burnt pyrites | 123,212 | 146,345 | 168,140 | 178,000 | 197,000 | 227,000 |
| Switzerland | 62,948 | 48,760 | (c) 120,867 | (c) 60,314 | (c) 74,253 | (c) 88,509 |
| U.S.S.R.— | | | | | | |
| Iron ore | 11,730,800 | 13,233,600 | 14,942,200 | 16,025,800 | 18,636,000 | 20,460,667 |
| Burnt pyrites | n.a. | n.a. | 652,529 | 870,038 | 768,665 | 999,954 |
| Yugoslavia— | | | | | | |
| Iron ore | 156,962 | 17,779 | 88,932 | 121,753 | 100,334 | 151,547 |
| Burnt pyrites | 49,713 | 19,840 | — | — | — | — |

(a) Used for purposes other than iron making.

(b) Years ended March 31 following that stated.

(c) Including burnt pyrites.

(d) Including ferruginous manganese ore.

(e) Years ended June 30th of that stated.

EXPORTS OF IRON ORE (cont.)

Long tons

| Exporting Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Algeria— | | | | | | |
| Iron ore | 2,286,737 | 1,991,343 | 3,517,342 | 2,736,684 | 2,097,344 | 1,928,060 |
| Burnt pyrites | 5,487 | 2,000 | 10,338 | 31,953 | 34,144 | 32,381 |
| Angola | 219,460 | 322,055 | 537,180 | 486,678 | 438,944 | 645,183 |
| Egypt | 10,574 | 11,682 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Guinea | 328,549 | 186,031 | 715,413 | 509,959 | 685,000 | 551,000 |
| Liberia | 2,034,501 | 2,664,960 | 2,915,686 | 2,791,829 | 3,741,059 | 6,453,000 |
| Morocco— | | | | | | |
| Iron ore | 1,278,579 | 695,005 | 798,129 | 1,879,282 | 1,130,303 | 1,061,784 |
| Burnt pyrites | 12,255 | 9,698 | 1,087 | 17,423 | 23,241 | 19,547 |
| South Africa | 7,706 | 166,208 | 466,911 | 558,135 | 732,216 | 731,325 |
| Tunisia | 992,661 | 820,175 | 1,024,366 | 885,158 | 702,301 | 755,771 |
| Cuba | 4,716 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Dominican Republic | 20,678 | 50,424 | 99,546 | 12 | — | <i>n.a.</i> |
| Mexico | 220,050 | 114,120 | 153,355 | 120,829 | 144,733 | 1,095 |
| United States | 3,573,000 | 2,967,000 | 5,273,000 | 4,916,173 | 5,897,667 | 6,812,793 |
| Brazil | 2,786,412 | 3,925,454 | 5,157,051 | 6,182,424 | 7,529,034 | 8,137,174 |
| Chile | 3,580,523 | 4,193,300 | 5,109,168 | 6,099,440 | 7,131,117 | 7,281,342 |
| Peru | 2,470,195 | 3,267,400 | 5,088,840 | 5,484,569 | 5,067,878 | 5,657,870 |
| Venezuela | 15,325,626 | 17,104,257 | 19,014,669 | 14,334,747 | 13,075,372 | 12,124,597 |
| Iran (<i>a</i>) | 19,756 | 6,786 | 32,735 | 21,208 | <i>n.a.</i> | <i>n.a.</i> |
| Korea (South) | 185,668 | 198,217 | 230,388 | 436,809 | 358,245 | 540,966 |
| Lebanon | 21,406 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Iron ore | 1,039,674 | 1,258,347 | 1,217,550 | 1,289,210 | 1,313,820 | 1,450,668 |
| Burnt pyrites | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 7,578 | 11,220 | 8,169 |
| Turkey | 262,212 | 131,262 | 301,013 | 250,210 | 168,930 | 11,909 |
| New Caledonia | 306,537 | 283,649 | 272,834 | 253,322 | 289,779 | 289,502 |

(a) Years ended March 20 following that stated.

IMPORTS OF IRON ORE
(including Manganiferous Iron Ore)

Long tons

| Importing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|--------------|------------|------------|------------|------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Iron ore | } 12,898,609 | 13,349,960 | 17,968,495 | 14,965,971 | 12,897,165 | { 13,940,16 |
| Burnt pyrites . . . . . |  |  |  |  |  |  | 383,248 |
| Canada | 3,047,237 | 2,500,894 | 4,514,596 | 4,132,280 | 4,604,779 | 5,325,713 |
| Hong Kong | 5,751 | 11,080 | 5,728 | 3,724 | 8,250 | 12,250 |
| India | 645 | 839 | (d) 109 | (d) 1,218 | (d) 270 | (d) 100 |
| Australia (a) | 268,187 | 279,226 | 249,150 | 277,299 | 273,481 | 293,467 |
| Irish Republic | 1,697 | — | 14 | 20 | 15 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Iron ore | 1,027,342 | 649,323 | 1,586,422 | 1,276,474 | 1,028,169 | 972,994 |
| Burnt pyrites | 391,469 | 330,520 | 459,295 | 423,255 | 371,504 | 356,078 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Iron ore | 16,546,142 | 17,836,735 | 20,337,109 | 20,214,909 | 20,810,570 | 19,409,036 |
| Burnt pyrites | 58,981 | 179,122 | 87,853 | 111,275 | 58,059 | 43,483 |
| Czechoslovakia | 5,082,000 | 6,284,000 | 7,097,000 | 7,844,000 | 8,188,000 | n.a. |
| Denmark | (b) 5,992 | 2,736 | 2,539 | 3,411 | 1,422 | 2,053 |
| Finland | 122,199 | 124,572 | 159,474 | 142,947 | 441,585 | 377,101 |
| France— | | | | | | |
| Iron ore | 987,116 | 939,109 | 1,482,127 | 1,671,789 | 1,866,118 | 3,423,086 |
| Burnt pyrites | 1,304 | 2,594 | 13,876 | 14,504 | 18,668 | 26,865 |
| Germany (Federal)— | | | | | | |
| Iron ore (e) | 16,693,767 | 19,719,971 | 33,122,454 | 32,112,290 | 28,609,917 | 26,573,630 |
| Burnt pyrites | 1,581,871 | 1,668,245 | 2,952,623 | 2,441,821 | 1,834,503 | 1,885,295 |
| Germany (East) (c) | 895,500 | 1,002,400 | 1,170,800 | 1,078,000 | 1,240,500 | 1,312,439 |
| Hungary | 1,779,612 | 1,662,762 | 1,845,717 | 2,001,905 | 2,207,495 | 2,314,180 |
| Italy | 2,337,722 | 1,608,330 | 2,579,586 | 3,254,662 | 4,354,252 | 5,144,832 |
| Netherlands | 1,748,087 | 1,888,875 | 2,284,179 | 2,219,398 | 2,280,542 | 2,501,403 |
| Norway | 21,974 | 2,945 | 10,700 | 13,486 | 21,163 | 3,343 |
| Poland | 5,659,100 | 6,114,700 | 7,204,400 | 7,548,400 | 7,976,000 | 8,666,921 |
| Roumania | 740,900 | 802,100 | 902,600 | 1,238,300 | 1,897,300 | 2,201,200 |
| Spain | 284,713 | 77,720 | 32,705 | 210,918 | 248,866 | 91,701 |
| Sweden— | | | | | | |
| Iron Ore | 408 | 3,412 | 3,752 | 4,000 | 3,000 | 2,000 |
| Burnt pyrites | n.a. | 9,653 | 14,868 | 18,700 | 19,684 | 556,077 |
| Switzerland | 45,828 | 45,148 | (b) 8,840 | (b) 7,738 | (b) 1,309 | (b) 3,669 |
| Yugoslavia | 48,090 | 123,794 | 127,203 | 379,735 | 347,565 | 424,751 |
| United States— | | | | | | |
| Iron ore | 27,544,000 | 35,617,000 | 34,578,000 | 25,804,749 | 33,431,077 | 33,262,892 |
| Burnt pyrites | 2,721 | 10,157 | 5,884 | 3,504 | 4,248 | 3,263 |
| Argentina | n.a. | 181,877 | 436,786 | 312,389 | 506,912 | 745,428 |
| Formosa | 11,814 | 13,617 | 16,148 | 71,539 | 10,287 | 43,020 |
| Japan— | | | | | | |
| Iron ore | 7,493,525 | 10,274,816 | 14,687,616 | 20,693,941 | 21,947,378 | 25,661,157 |
| Burnt pyrites | — | 21,036 | 110,968 | 209,897 | 143,461 | 191,905 |

(a) Years ended June 30 of that stated.

(d) Years ended March 31 following that stated.

(b) Including burnt pyrites.

(e) Figures for 1958—1960 include ferruginous manganese ore.

(c) Fe content.

PRODUCTION OF PIG-IRON AND FERRO-ALLOYS*

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|--------------------|--------------------|---------------------|---------------------|--------------------|--------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 12,974,500 | 12,582,500 | 15,762,900 | 14,747,100 | 13,692,100 | 14,591,400 |
| Southern Rhodesia | 75,700 | 70,600 | 84,800 | 216,300 | 237,600 | 246,000 |
| Canada | 2,832,293 | 3,855,625 | r 3,961,057 | r 4,521,448 | 4,845,698 | 5,409,552 |
| India | 2,101,942 | 3,144,118 | 4,197,200 | r 5,020,000 | 5,820,000 | 6,640,000 |
| Australia(e) | 2,279,282 | 2,506,514 | r 2,876,267 | r 3,156,411 | 3,433,809 | 3,624,290 |
| TOTAL | 20,263,700 | 22,159,400 | r26,882,200 | r27,661,000 | 28,029,000 | 30,511,000 |
| OTHER COUNTRIES | | | | | | |
| Austria | 1,791,300 | 1,811,000 | 2,202,400 | 2,232,300 | 2,088,000 | 2,076,600 |
| Belgium | 5,431,759 | 5,871,000 | 6,449,236 | 6,351,962 | 6,633,876 | 6,806,138 |
| Bulgaria | 89,419 | 174,125 | 188,744 | 202,868 | 219,459 | 257,000 |
| Czechoslovakia | 3,714,000 | 4,177,000 | 4,621,000 | 4,892,000 | 5,095,000 | 5,171,000 |
| Finland | 99,449 | 94,690 | 102,931 | 145,387 | 336,126 | 369,265 |
| France (a) | 11,777,785 | 12,275,033 | 13,921,857 | 14,336,328 | 13,738,471 | 14,080,508 |
| Germany— | | | | | | |
| Federal Republic | 16,490,000 | 18,222,000 | 25,481,000 | 25,174,000 | 23,977,000 | 22,652,000 |
| Eastern | 1,746,800 | 1,868,400 | 1,963,200 | 1,998,800 | 2,042,400 | 2,115,900 |
| Hungary | 1,082,717 | 1,103,602 | 1,237,980 | 1,299,065 | 1,378,278 | 1,370,000 |
| Italy | 2,132,866 | 2,157,308 | 2,779,657 | 3,150,883 | 3,619,510 | 3,806,758 |
| Luxemburg | 3,233,467 | 3,357,000 | 3,725,552 | 3,773,177 | 3,540,045 | 3,530,158 |
| Netherlands | 898,800 | 1,121,400 | 1,324,300 | 1,433,300 | 1,546,500 | 1,681,400 |
| Norway | 513,963 | 612,649 | 708,452 | 744,704 | 711,716 | 733,438 |
| Poland | 3,803,100 | 4,305,000 | 4,491,000 | 4,695,000 | 5,227,000 | 5,310,000 |
| Portugal | 16,262 | 35,260 | 40,424 | 120,382 | 221,455 | 236,453 |
| Roumania | 725,224 | 832,983 | 998,116 | 1,081,872 | 1,486,942 | 1,679,000 |
| Saar | 3,054,222 | 3,169,000 | (c) | (c) | (c) | (c) |
| Spain | 1,320,853 | 1,696,623 | 1,897,002 | 2,089,512 | 2,120,045 | 1,959,000 |
| Sweden | 1,391,723 | 1,479,426 | r 1,606,169 | r 1,869,610 | 1,932,333 | 1,984,000 |
| Switzerland | 33,000 | 40,000 | 50,000 | 50,000 | 50,000 | 41,000 |
| U.S.S.R. | 38,974,000 | 42,293,000 | 46,019,000 | 50,089,000 | 54,392,000 | 57,764,000 |
| Yugoslavia | 767,000 | 888,000 | 1,003,000 | 1,036,000 | 1,086,000 | 1,043,000 |
| Egypt | (d) 40,000 | 116,000 | 146,000 | (d) 98,000 | (d) 98,000 | n.a. |
| South Africa | 1,556,700 | 1,779,000 | 1,961,700 | 2,291,200 | 2,377,300 | 2,402,500 |
| Mexico | r 497,369 | r 567,000 | r 675,000 | r 771,534 | 814,001 | 845,468 |
| United States | 52,507,405 | 55,516,456 | 61,219,986 | 59,433,091 | 60,352,980 | 65,817,167 |
| Argentina | 28,000 | 35,000 | 177,267 | 390,211 | 390,200 | 415,800 |
| Brazil | 1,380,000 | 1,562,709 | 1,755,231 | r 1,830,836 | 1,842,030 | d 1,969,000 |
| Chile (b) | 299,000 | 285,000 | 262,000 | 281,000 | 377,000 | 411,000 |
| Colombia | 146,412 | 124,436 | 164,447 | 186,000 | 143,000 | 199,000 |
| Venezuela | — | — | — | r 6,000 | 121,000 | 297,000 |
| China | 13,470,000 | 20,200,000 | 27,100,000 | 14,700,000 | 14,700,000 | d16,700,000 |
| Formosa | 6,427 | 8,280 | n.a. | n.a. | n.a. | n.a. |
| Japan | 7,635,885 | 9,790,986 | 12,234,395 | 16,191,700 | 18,197,975 | 20,154,399 |
| Korea (South) | 2,618 | 8,153 | 13,714 | 8,874 | — | 5,340 |
| Korea (North) | 310,000 | 680,000 | 840,000 | 915,000 | 1,194,000 | d 1,140,000 |
| Thailand | 5,000 | 7,000 | 6,000 | 5,000 | 5,000 | 6,000 |
| Turkey | 226,493 | 232,448 | 243,000 | 184,500 | 149,000 | 210,900 |
| TOTAL | 177,200,000 | 198,500,000 | r227,600,000 | r224,000,000 | 232,000,000 | 245,000,000 |
| WORLD'S TOTAL | 197,500,000 | 220,700,000 | r254,500,000 | r252,000,000 | 260,000,000 | 276,000,000 |

* For details see page 160.

(a) Excluding electric furnace and aluminio-thermic ferro-alloys. For these see page 161.

(b) Excluding ferro-alloys.

(c) Included with Germany (Federal).

(d) United States Bureau of Mines' estimate.

(e) Including recovery from scrap and excluding ferro-alloys. For ferro-alloys see page 160.

DETAILS OF PRODUCTION OF PIG-IRON AND FERRO-ALLOYS IN CERTAIN COUNTRIES
Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | | |
|---|------------|-------------|-------------|-------------|------------|------------|--------|--------|
| COMMONWEALTH COUNTRIES | | | | | | | | |
| United Kingdom— | | | | | | | | |
| Hematite | 1,237,100 | 1,021,000 | 1,187,100 | 1,136,800 | 875,700 | 816,800 | | |
| Basic | 10,314,800 | 10,284,700 | 13,072,100 | 12,255,700 | 11,568,300 | 12,644,400 | | |
| Foundry | 1,228,500 | 1,089,300 | 1,293,100 | } 1,196,200 | 1,054,000 | 1,005,800 | | |
| Forge | 19,500 | 39,300 | 5,200 | | | | | |
| Direct castings | 900 | 500 | 100 | | | | | |
| Blast furnace ferro-alloys— | | | | | | | | |
| Spiegeleisen | 27,400 | 25,000 | 25,600 | 29,600 | 41,100 | 23,000 | | |
| Ferro-manganese | 146,300 | 122,700 | 179,700 | 128,800 | 153,000 | 101,400 | | |
| Canada— | | | | | | | | |
| Basic | 2,380,094 | 3,172,255 | r 3,213,031 | r 3,753,195 | 4,070,153 | 4,540,073 | | |
| Foundry | 39,067 | 204,324 | r 258,973 | r 345,218 | 225,046 | 275,849 | | |
| Malleable | 312,606 | 358,041 | r 366,254 | r 317,678 | 427,062 | 465,325 | | |
| Ferro-alloys (a) | 100,526 | 121,005 | r 122,799 | r 105,357 | 123,437 | 128,305 | | |
| India— | | | | | | | | |
| Basic | 1,579,659 | 2,265,491 | 2,973,314 | r 3,536,000 | 4,240,000 | 4,750,000 | | |
| Foundry | 423,245 | 767,604 | 1,015,660 | r 1,067,000 | 1,100,000 | 1,364,000 | | |
| Other pig-iron | — | — | 85,583 | r 265,000 | 319,000 | 365,000 | | |
| Direct castings | 72,527 | 44,026 | 34,976 | 40,000 | 40,300 | 20,000 | | |
| Ferro-alloys | 26,511 | 66,997 | 87,847 | r 110,000 | 120,000 | 140,000 | | |
| Australia— | | | | | | | | |
| Pig-iron | 2,279,282 | 2,506,514 | r 2,876,267 | r 3,156,411 | 3,433,809 | 3,624,290 | | |
| Ferro-manganese (b) | 23,136 | 17,511 | 6,440 | — | 17,000 | 34,000 | | |
| Ferro-silicon (b) | 1,352 | 1,663 | 7,200 | 8,144 | 7,438 | 8,302 | | |
| Ferro-nickel (b) | 384 | — | 646 | 1,426 | — | — | | |
| Ferro-silico-manganese (b) | — | 162 | — | — | — | — | | |
| Silico-manganese (b) | — | — | 1,698 | 2,409 | 5,039 | 4,322 | | |
| Ferro-chrome (b) | 339 | 610 | 597 | 705 | 571 | 1,094 | | |
| OTHER COUNTRIES | | | | | | | | |
| Austria— | | | | | | | | |
| Basic | 1,683,573 | 1,757,885 | 2,184,202 | 2,142,834 | 2,061,747 | 2,037,600 | | |
| Hematite | 80,567 | 25,924 | — | 65,568 | 16,057 | 35,100 | | |
| Other | 25,173 | 23,744 | 12,297 | 18,172 | 6,417 | — | | |
| Electric furnace ferro-alloys | 2,000 | 3,400 | 5,900 | 5,700 | 3,800 | 3,900 | | |
| Belgium— | | | | | | | | |
| Basic | 5,306,517 | } 5,756,000 | { 6,301,675 | 6,207,543 | 6,521,320 | 6,714,803 | | |
| Forge | 16,100 | | | 33,590 | 13,008 | 4,729 | 482 | |
| Foundry | 90,025 | | | 93,000 | 93,733 | 110,458 | 92,703 | 73,124 |
| Ferro-alloys | 19,117 | | | 22,000 | 20,238 | 20,953 | 15,124 | 17,729 |
| Czechoslovakia— | | | | | | | | |
| Basic | 3,359,000 | 3,701,000 | 4,049,000 | 4,283,000 | 4,522,000 | n.a. | | |
| Foundry | 313,000 | 424,000 | 507,000 | 539,000 | 498,000 | n.a. | | |
| Ferro-alloys | 42,000 | 52,000 | 65,000 | 70,000 | 75,000 | n.a. | | |
| France— | | | | | | | | |
| Phosphoric (over 1.4% P)— | | | | | | | | |
| Basic | 9,981,745 | 10,711,249 | 12,086,358 | 12,342,936 | 11,946,528 | 11,872,295 | | |
| Foundry | 219,144 | 184,430 | 181,221 | 170,300 | 146,726 | 146,518 | | |
| Semi-phosphoric (from 0.5% to 1.4% P)— | | | | | | | | |
| Foundry | 354,483 | 202,288 | 237,002 | 286,204 | 294,265 | 293,879 | | |
| Open hearth, basic | — | — | — | 66,726 | — | (c) | | |
| Hematite (less than 0.5% P)— | | | | | | | | |
| Foundry | 276,655 | 276,349 | 327,024 | 360,900 | 366,023 | 436,753 | | |
| Open hearth and Bessemer | 294,528 | 269,880 | 400,228 | 352,526 | 265,488 | 769,698 | | |

(a) Factory shipments.

(b) Years ended November 30 of year stated.

(c) Included, if any, with phosphoric.

DETAILS OF PRODUCTION OF PIG-IRON AND FERRO-ALLOYS (cont.)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|------------|----------------|----------------|----------------|------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| France (cont.) | | | | | | |
| Blast furnace ferro-alloys— | | | | | | |
| Spiegeleisen | 131,400 | 132,636 | 136,372 | 130,802 | 135,723 | 110,153 |
| Ferro-manganese .. | 219,215 | 212,283 | 243,877 | 270,148 | 267,393 | 252,510 |
| Other pig-iron | 300,615 | 285,918 | 309,775 | 355,786 | 316,325 | 198,702 |
| Electric furnace and aluminio-thermic ferro-alloys— | | | | | | |
| Ferro-silicon (50% Si) | 95,734 | 85,254 | 104,058 | 126,468 | 100,355 | 86,643 |
| Silico-spiegeleisen and silico-manganese .. | 12,205 | 13,014 | 14,041 | 15,409 | 12,279 | 18,442 |
| Silico-aluminium and silico-manganese-aluminium | 1,647 | 1,295 | 1,172 | 1,020 | 1,506 | 938 |
| Ferro-manganese | 15,260 | 20,370 | 27,429 | 25,836 | 28,080 | <i>n.a.</i> |
| Ferro-chrome | 36,161 | 52,369 | 58,980 | 66,333 | 56,019 | 53,713 |
| Ferro-tungsten (<i>W content</i>) | 769 | 779 | 846 | 1,112 | 898 | 657 |
| Ferro-molybdenum (<i>Mo content</i>) | 1,452 | 1,091 | 2,036 | 2,052 | 1,593 | 1,772 |
| Ferro-vanadium (<i>V content</i>) | 222 | 219 | 477 | 443 | 275 | 270 |
| Titanium alloys | 3,000 | <i>r</i> 4,633 | <i>r</i> 5,582 | <i>r</i> 4,661 | 2,734 | 342 |
| Germany (Federal)— | | | | | | |
| Hematite and malleable Basic | 784,000 | 648,000 | 933,000 | 1,001,000 | 950,000 | 959,000 |
| Foundry | 10,716,000 | 11,954,000 | 16,454,000 | 16,000,000 | 14,941,000 | 13,858,000 |
| Other pig-iron | 564,000 | 522,000 | 696,000 | 678,000 | 657,000 | 593,000 |
| Stahleisen | 3,817,000 | 4,465,000 | 6,667,000 | 6,662,000 | 6,777,000 | 6,599,000 |
| Spiegeleisen (blast-furnace) | 247,000 | 233,000 | 274,000 | 267,000 | 271,000 | 286,000 |
| Ferro-manganese (blast furnace) | | | | | | |
| Siegerland special | | | | | | |
| Other pig-iron | | | | | | |
| Ferro-silicon (blast-furnace) | 268,000 | 281,000 | 308,000 | 420,000 | 271,000 | 253,000 |
| Electric furnace and aluminio-thermic ferro-alloys | 94,000 | 118,600 | 148,866 | 146,103 | 110,056 | 103,635 |
| Germany (East)— | | | | | | |
| Foundry | 409,100 | 476,100 | 479,200 | 489,500 | 530,000 | 524,700 |
| Open hearth | 929,000 | 939,300 | 1,024,900 | 1,054,300 | 1,058,800 | 1,140,300 |
| Basic Bessemer | 385,100 | 419,400 | 437,000 | 421,900 | 432,600 | 430,100 |
| Spiegeleisen | 23,600 | 33,600 | 22,100 | 33,100 | 20,500 | 20,300 |
| Other | — | — | — | — | 500 | 500 |
| Hungary— | | | | | | |
| Basic | 944,819 | 1,000,933 | 1,120,884 | 1,146,683 | 1,245,516 | 1,265,000 |
| Foundry | 118,067 | 84,458 | 100,227 | 137,548 | 110,357 | 99,000 |
| Spiegeleisen | 2,256 | 1,155 | 2,263 | 1,253 | 3,820 | 2,000 |
| Ferro-manganese | 11,971 | 12,444 | 10,826 | 8,715 | 12,704 | 7,000 |
| Ferro-silicon | 5,604 | 4,612 | 3,780 | 4,866 | 5,881 | <i>n.a.</i> |
| Italy— | | | | | | |
| Pig-iron | 2,027,229 | 2,064,570 | 2,640,469 | 3,008,079 | 3,499,821 | 3,681,586 |
| Spiegeleisen | 21,797 | 3,811 | 6,500 | 6,838 | 4,333 | 5,481 |
| Ferro-manganese | 26,468 | 22,556 | 29,971 | 32,658 | 26,091 | 28,657 |
| Ferro-silicon | 29,950 | 22,501 | 45,335 | 50,994 | 43,212 | 43,514 |
| Silico-manganese | 13,224 | 21,448 | 24,277 | 25,827 | 24,789 | 33,739 |
| Ferro-chrome | 2,704 | 13,773 | 20,218 | 16,374 | 10,016 | 5,146 |
| Ferro-titanium | 88 | 123 | 173 | 151 | 162 | 199 |
| Ferro-tungsten | 35 | 52 | 96 | 87 | 34 | 33 |
| Ferro-vanadium | 46 | 36 | 92 | 83 | 49 | 80 |
| Ferro-molybdenum | 398 | 624 | 1,048 | 1,072 | 942 | 833 |
| Silico-aluminium | 592 | 596 | 636 | 1,090 | 619 | 634 |

DETAILS OF PRODUCTION OF PIG-IRON AND FERRO-ALLOYS (cont.)

Long ton

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|------------|------------|------------|-------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Italy (cont.)— | | | | | | |
| Silicon pig iron (10-12% Si) | 3,934 | 3,018 | 4,573 | 2,522 | 2,217 | 967 |
| Silico-spiegeleisen | 3,089 | 249 | 1,538 | 1,305 | 1,326 | 1,750 |
| Silico-chrome | — | 90 | — | 312 | 1,117 | — |
| Calcium silicide | 3,196 | 3,765 | 4,605 | 2,875 | 4,081 | 3,676 |
| Ferro-phosphorus | 116 | 96 | 126 | 616 | 700 | 463 |
| Luxemburg— | | | | | | |
| Basic | 3,233,467 | 3,357,000 | 3,725,552 | 3,773,177 | 3,540,045 | 3,530,158 |
| Norway— | | | | | | |
| Pig-iron | 255,420 | 332,429 | 368,377 | 372,065 | 389,572 | 408,244 |
| Ferro-silicon | 122,164 | 124,940 | 170,148 | 190,279 | 168,910 | 145,135 |
| Ferro-manganese | 44,026 | 57,257 | 47,764 | 52,107 | 54,423 | 57,161 |
| Ferro-silico-manganese | 59,538 | 58,807 | 76,650 | 88,994 | 77,149 | 88,981 |
| Ferro-chrome and silico- chrome | 18,135 | 37,522 | 44,844 | 40,210 | 21,022 | 32,940 |
| Other ferro-alloys | 14,680 | 1,694 | 669 | 1,049 | 1,259 | 975 |
| Saar— | | | | | | |
| Basic | 2,826,084 | 3,169,000 | (a) | (a) | (a) | (a) |
| Other pig-iron and ferro-alloys | 228,138 | | | | | |
| Spain— | | | | | | |
| Pig-iron | 1,281,474 | 1,645,956 | 1,855,747 | 2,043,997 | 2,066,682 | n.a. |
| Ferro-manganese | 24,216 | 29,976 | 25,686 | 21,937 | 27,571 | n.a. |
| Ferro-silicon | 14,025 | 19,555 | 14,697 | 22,185 | 24,771 | n.a. |
| Ferro-tungsten | 85 | 87 | 53 | 95 | 153 | n.a. |
| Ferro-chrome | 673 | 725 | 405 | 805 | 868 | n.a. |
| Ferro-phosphorus | 380 | 324 | 414 | 493 | — | n.a. |
| Sweden— | | | | | | |
| Pig-iron | 1,303,175 | 1,379,884 | 1,487,008 | r 1,732,388 | 1,792,577 | n.a. |
| Ferro-manganese | 17,414 | 15,869 | 23,794 | 23,211 | 22,903 | n.a. |
| Ferro-silicon | 14,616 | 20,468 | 23,355 | 31,203 | 25,561 | n.a. |
| Ferro-silico-manganese | 11,133 | 10,741 | 11,609 | 11,803 | 14,023 | n.a. |
| Ferro-chrome | 26,232 | 36,530 | 38,675 | r 50,583 | 43,666 | n.a. |
| Ferro-titanium | 370 | 128 | — | — | 60 | n.a. |
| Ferro-tungsten | 203 | 402 | 393 | 553 | 519 | n.a. |
| Ferro-molybdenum | 1,187 | 1,132 | 1,744 | 1,761 | 1,241 | n.a. |
| Ferro-vanadium | 129 | 200 | 338 | r 344 | 282 | n.a. |
| Metallic silicon | 5,832 | 2,257 | 5,377 | 4,279 | 5,919 | n.a. |
| Silico-chrome | 10,756 | 11,184 | 12,554 | 12,380 | 25,253 | n.a. |
| Other ferro-alloys | 676 | 631 | r 1,322 | 1,105 | 329 | n.a. |
| U.S.S.R.— | | | | | | |
| Basic | 31,815,000 | 34,441,000 | 37,864,000 | 41,354,000 | 44,859,000 | 47,602,000 |
| Foundry | 6,136,000 | 6,707,000 | 6,851,000 | 7,313,000 | 7,943,000 | 8,481,000 |
| Spiegeleisen | 60,000 | 70,000 | 80,000 | 95,000 | 89,000 | 90,000 |
| Ferro-manganese | 553,000 | 560,000 | 633,000 | 688,000 | 799,000 | 808,000 |
| Other blast furnace ferro-alloys | 410,000 | 515,000 | 591,000 | 639,000 | 702,000 | 783,000 |
| Yugoslavia— | | | | | | |
| Pig-iron | 736,000 | 849,000 | 957,000 | 981,000 | 1,033,000 | 980,000 |
| Ferro-alloys | 31,337 | 39,446 | 46,083 | 54,772 | 52,626 | 62,777 |
| South Africa— | | | | | | |
| Pig-iron | 1,488,800 | 1,676,200 | 1,792,000 | 2,099,900 | 2,192,700 | 2,182,500 |
| Ferro-alloys | 67,900 | 102,800 | 169,700 | 191,300 | 184,600 | 220,000 |
| United States— | | | | | | |
| Basic | 43,852,362 | 46,530,622 | 52,018,846 | 51,919,214 | 52,505,467 | 57,991,137 |
| Bessemer | 3,214,172 | 2,728,371 | 3,038,928 | 2,322,452 | 2,520,245 | 2,472,682 |
| Low phosphorus | 285,963 | 334,356 | 345,768 | 157,212 | 156,012 | 167,561 |
| Foundry | 1,433,954 | 1,679,668 | 1,310,141 | 1,216,263 | 1,275,548 | 1,368,587 |
| Malleable | 2,057,950 | 2,221,296 | 2,386,496 | 1,877,432 | 1,923,176 | 1,952,204 |
| Other pig-iron | 189,266 | 250,371 | 257,543 | 213,397 | 227,431 | 194,306 |
| Ferro-manganese and spiegeleisen | 605,710 | 606,815 | 784,054 | 699,329 | 716,067 | 606,635 |

(a) Included with Germany (Federal).

DETAILS OF PRODUCTION OF PIG-IRON AND FERRO-ALLOYS (cont.)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-----------|-----------|------------|-------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| (cont.) | | | | | | |
| United States (cont.)— | | | | | | |
| Ferro-silicon and silvery pig-iron | 400,264 | 575,649 | 611,731 | 476,987 | 487,405 | 493,874 |
| Other ferro-alloys | 467,764 | 589,308 | 466,479 | 550,805 | 541,629 | 570,181 |
| Brazil— | | | | | | |
| Pig-iron | 1,363,677 | 1,534,954 | 1,722,212 | r 1,797,213 | 1,803,079 | n.a. |
| Spiegeleisen | n.a. | — | 137 | 273 | 124 | n.a. |
| Ferro-chrome | n.a. | 988 | 1,699 | 968 | 1,982 | n.a. |
| Ferro-manganese | n.a. | 14,580 | 18,827 | 18,196 | 22,442 | n.a. |
| Ferro-nickel | n.a. | 326 | 325 | 335 | 290 | n.a. |
| Ferro-silicon | n.a. | 7,033 | 7,273 | 7,373 | 9,168 | n.a. |
| Ferro-silico-manganese | n.a. | 4,828 | 4,758 | 6,478 | 4,945 | n.a. |
| Japan— | | | | | | |
| Pig-iron | 7,322,779 | 9,359,418 | 11,786,361 | 15,570,900 | 17,688,051 | 19,621,124 |
| Spiegeleisen | 5,921 | 3,758 | 8,059 | 3,100 | 3,583 | 717 |
| Ferro-chrome | 24,718 | 68,258 | 79,150 | 98,514 | 83,193 | 80,587 |
| Ferro-manganese | 138,894 | 155,348 | 153,145 | 182,601 | 163,962 | 162,979 |
| Ferro-molybdenum | 861 | 2,026 | 1,758 | 1,954 | 497 | 1,001 |
| Ferro-phosphorus | 1,948 | 1,285 | 2,126 | 2,164 | 1,130 | 1,241 |
| Ferro-silicon | 39,334 | 64,649 | 73,876 | 96,570 | 74,165 | 92,687 |
| Ferro-titanium | 65 | 92 | 223 | 449 | 450 | 169 |
| Ferro-tungsten | 280 | 570 | 1,177 | 1,677 | 869 | 748 |
| Ferro-nickel | 11,816 | 32,879 | 52,492 | 61,658 | 35,404 | 46,143 |
| Ferro-vanadium | 177 | 419 | 845 | 1,270 | 598 | 1,267 |
| Silico-manganese | 64,843 | 57,001 | 56,782 | 94,335 | 88,056 | 95,353 |
| Silico-chrome | 13,815 | 30,816 | 43,926 | 58,632 | 43,206 | 31,989 |
| Calcium-silicon | 3,217 | 5,230 | 7,753 | 9,222 | 7,361 | 6,922 |
| Other ferro-alloys | 7,217 | 9,237 | 10,648 | 8,608 | 7,450 | 11,472 |
| Turkey— | | | | | | |
| Pig-iron | 226,493 | 232,448 | 243,000 | 184,500 | 149,000 | 207,200 |
| Ferro-chrome | — | — | — | — | — | 3,700 |

PRODUCTION OF STEEL INGOTS AND CASTINGS*

Long ton

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-------------------|-------------------|--------------------|--------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 19,565,700 | 20,186,400 | 24,305,000 | 22,086,100 | 20,491,000 | 22,520,000 |
| Southern Rhodesia | 70,300 | 45,300 | (c) 84,400 | (c) 90,800 | (c) 86,600 | n.a. |
| Canada | 3,892,380 | 5,269,184 | r 5,186,703 | r 5,793,131 | 6,404,889 | 7,312,748 |
| India | 1,813,070 | 2,428,953 | 3,234,017 | 4,019,000 | (c)5,010,141 | (c)5,874,324 |
| Pakistan | 9,450 | 9,052 | 7,371 | 8,517 | 6,554 | 11,590 |
| Australia (f) | 3,133,081 | 3,395,261 | r 3,693,770 | r 3,884,929 | 4,167,175 | 4,577,014 |
| TOTAL | 28,484,000 | 31,334,200 | r36,510,000 | r35,880,000 | 36,170,000 | 40,000,000 |
| Irish Republic (g) | 24,200 | 22,200 | 29,800 | 28,000 | 18,800 | 19,400 |
| OTHER COUNTRIES | | | | | | |
| Austria | 2,355,364 | 2,472,409 | 3,112,578 | 3,052,367 | 2,923,119 | 2,900,800 |
| Belgium | 5,885,968 | 6,330,000 | 7,028,057 | 6,850,345 | 7,181,300 | 7,400,000 |
| Bulgaria | 207,249 | 226,315 | 249,457 | 334,610 | 415,993 | 441,000 |
| Czechoslovakia | 5,422,000 | 6,039,000 | 6,661,000 | 6,931,000 | 7,518,000 | 7,478,000 |
| Denmark | 250,300 | 287,300 | 312,100 | 317,800 | 361,000 | 353,200 |
| Finland | 185,434 | 232,358 | 253,392 | 276,548 | 308,197 | 310,000 |
| France | 14,384,937 | 14,978,149 | 17,007,694 | 17,292,546 | 16,968,015 | 17,279,305 |
| Germany— | | | | | | |
| Federal Republic | 22,425,000 | 25,414,000 | 33,562,000 | 32,929,000 | 32,045,000 | 31,078,000 |
| Eastern | 2,994,900 | 3,156,700 | 3,284,300 | 3,390,000 | 3,564,800 | 3,568,600 |
| Greece | 112,000 | 89,000 | (e) 125,000 | (e) 130,000 | (e) 150,000 | (e) 160,000 |
| Hungary | 1,601,074 | 1,731,495 | 1,857,114 | 2,020,693 | 2,295,710 | 2,336,634 |
| Italy | 6,172,009 | 6,655,005 | 8,099,101 | 8,980,181 | 9,603,344 | 9,996,123 |
| Luxemburg | 3,325,456 | 3,605,000 | 4,019,192 | 4,047,827 | 3,946,610 | 3,967,985 |
| Netherlands | 1,414,800 | 1,643,400 | 1,911,800 | 1,939,500 | 2,053,300 | 2,310,100 |
| Norway | 365,562 | 419,672 | 482,532 | 491,003 | 480,076 | 535,000 |
| Poland | 5,574,000 | 6,062,000 | 6,575,000 | 7,120,000 | 7,563,000 | 7,878,000 |
| Portugal | — | — | — | n.a. | 164,679 | 209,557 |
| Roumania | 918,940 | 1,397,218 | 1,777,260 | 2,092,913 | 2,412,000 | 2,661,000 |
| Saar | 3,405,632 | 3,536,000 | (d) | (d) | (d) | (d) |
| Spain | 1,535,763 | 1,781,406 | 1,926,549 | r 2,264,800 | 2,161,200 | 2,260,000 |
| Sweden | 2,384,732 | 2,809,972 | 3,167,345 | r 3,505,911 | 3,557,000 | 3,820,000 |
| Switzerland | 240,000 | 246,000 | 271,000 | 292,000 | 313,000 | 317,000 |
| U.S.S.R. | 54,053,000 | 59,003,000 | 64,261,000 | 69,634,000 | 75,101,000 | 78,959,000 |
| Yugoslavia | 1,101,000 | 1,279,000 | 1,419,000 | 1,508,000 | 1,570,000 | 1,563,000 |
| Egypt (e) | 98,000 | 98,000 | 130,000 | 145,000 | 145,000 | 370,000 |
| South Africa (a) | 1,743,000 | 1,089,100 | 2,032,400 | 2,390,300 | 2,537,600 | 2,707,500 |
| Mexico | 1,097,000 | 1,306,782 | 1,515,222 | 1,648,334 | 1,656,000 | 1,935,398 |
| United States (b) | 76,120,433 | 83,434,046 | 88,644,286 | 87,512,940 | 87,792,666 | 97,554,418 |
| Argentina (c) | 241,000 | 210,853 | 272,669 | 434,513 | 634,300 | 880,600 |
| Brazil | 1,565,000 | 1,772,000 | 2,246,200 | 2,404,600 | 2,514,400 | h 2,700,000 |
| Chile (c) | 343,000 | 408,243 | 414,896 | 357,140 | 486,748 | 481,000 |
| Colombia | 116,166 | 107,926 | 151,041 | 176,000 | 136,100 | 195,422 |
| Peru | 20,000 | 50,000 | 59,000 | 74,000 | 71,000 | 71,000 |
| Venezuela | n.a. | r(e) 50,000 | r 46,000 | r 74,000 | 221,000 | 358,000 |
| China | 10,910,000 | 13,140,000 | 18,160,000 | 9,500,000 | 10,000,000 | 12,000,000 |
| Formosa | 105,000 | 156,000 | 196,000 | 195,000 | 179,000 | 271,000 |
| Israel | n.a. | 23,000 | 40,000 | 61,000 | 79,000 | 66,000 |
| Japan | 11,926,604 | 16,365,957 | 21,788,740 | 27,821,909 | 27,111,196 | 31,003,913 |
| Korea (North) | 359,000 | 444,000 | 631,000 | 760,000 | 1,033,000 | 1,006,000 |
| Korea (South) | 20,422 | 39,237 | 50,528 | r 65,136 | 146,057 | 159,800 |

* For details see page 166.

(a) Excluding steel castings for which the amounts produced for sale were 60,200 tons, 58,900 tons, 46,700 tons, 45,400 tons, 62,300 tons and 81,800 tons in 1958, 1959, 1960, 1961, 1962 and 1963 respectively.

(b) Excluding steel castings which were produced by companies not manufacturing steel ingots.

(c) Ingots only.

(f) Including recovery from scrap.

(d) Included with Germany (Federal).

(g) Years ended June 30 of that stated.

(e) United States Bureau of Mines' estimate.

(h) Estimated.

PRODUCTION OF STEEL INGOTS AND CASTINGS (cont.)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------|--------------------|--------------------|--------------------|---------------------|--------------------|--------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Philippine Republic .. | 65,000 | (a) 62,000 | (a) 62,000 | (a) 70,000 | n.a. | n.a. |
| Thailand | 5,000 | 6,000 | 7,000 | 8,000 | 7,000 | (a) 7,000 |
| Turkey | 157,788 | 210,872 | 294,295 | 317,824 | 287,523 | 355,600 |
| TOTAL | 241,200,000 | 268,300,000 | 304,100,000 | r309,000,000 | 318,000,000 | 340,000,000 |
| WORLD'S TOTAL .. | 269,700,000 | 299,700,000 | 340,600,000 | r345,000,000 | 354,000,000 | 380,000,000 |

(a) United States Bureau of Mines' estimate.

DETAILS OF PRODUCTION OF STEEL INGOTS AND CASTINGS
IN CERTAIN COUNTRIES

Long ton

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|----------------------------------|------------|------------|--------------------|--------------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ingots and castings— | | | | | | |
| Open hearth, acid .. | 761,500 | 615,700 | 658,100 | 610,500 | 445,400 | 383,500 |
| do. basic .. | 16,385,100 | 16,708,300 | 19,874,700 | 17,773,400 | 16,407,200 | 16,919,100 |
| Bessemer, acid .. | 229,200 | 214,700 | 294,400 | 254,000 | 192,900 | 213,700 |
| do. basic and L.D. .. | 944,800 | 1,196,400 | 1,680,700 | 1,693,900 | 1,881,300 | 2,848,400 |
| Ingots, electric .. | 741,600 | 984,000 | 1,252,000 | 1,207,100 | 1,102,900 | 1,692,300 |
| Castings, electric .. | 384,200 | 364,400 | 433,500 | 440,900 | 377,700 | 384,600 |
| All other ingots and castings .. | 119,300 | 102,900 | 111,600 | 106,300 | 83,600 | 78,600 |
| Southern Rhodesia— | | | | | | |
| Ingots .. | 68,800 | 43,800 | 84,400 | 90,800 | 86,600 | <i>n.a.</i> |
| Castings .. | 1,500 | 1,500 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada— | | | | | | |
| Ingots— | | | | | | |
| Open hearth, basic and oxygen .. | 3,460,241 | 4,702,930 | <i>r</i> 4,544,339 | <i>r</i> 5,100,755 | 5,711,702 | 6,538,155 |
| do. electric .. | 345,225 | 475,066 | <i>r</i> 552,628 | <i>r</i> 592,197 | 583,693 | 662,623 |
| Castings— | | | | | | |
| Open hearth, basic .. | 14,178 | 13,245 | <i>r</i> 2,331 | <i>r</i> 2,527 | 3,494 | 6,008 |
| Bessemer .. | 18 | 6 | <i>r</i> — | <i>r</i> — | — | — |
| Electric .. | 72,718 | 77,937 | <i>r</i> 87,405 | <i>r</i> 97,652 | 106,000 | 105,962 |
| India— | | | | | | |
| Ingots— | | | | | | |
| Open hearth, basic .. | 1,706,589 | 2,289,235 | 3,119,182 | 3,894,077 | 4,934,779 | 5,791,632 |
| do. acid .. | — | 16,910 | — | — | — | — |
| Electric .. | 60,005 | 76,208 | 72,035 | 69,339 | 75,362 | 82,692 |
| Castings .. | 46,476 | 46,600 | 42,800 | 56,000 | <i>n.a.</i> | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Open hearth .. | 893,149 | 854,145 | 974,170 | 890,047 | 800,888 | 735,900 |
| Electric .. | 315,591 | 346,052 | 393,580 | 372,502 | 321,532 | 345,400 |
| L.D. .. | 1,146,624 | 1,272,212 | 1,744,828 | 1,789,818 | 1,800,699 | 1,819,500 |
| Belgium— | | | | | | |
| Ingots, open hearth .. | 564,324 | 580,000 | 599,137 | 529,767 | 496,606 | 486,634 |
| do. Bessemer, basic .. | 5,052,777 | 5,430,000 | 6,004,490 | 5,872,962 | 6,265,329 | 6,465,438 |
| do. electric .. | 202,999 | 246,000 | 363,898 | 377,914 | 350,868 | 288,421 |
| do. oxygen .. | — | — | — | — | — | 134,091 |
| Castings .. | 65,868 | 78,000 | 60,532 | 69,702 | 68,497 | <i>n.a.</i> |
| Czechoslovakia— | | | | | | |
| Open hearth .. | 4,488,000 | 5,060,000 | 5,612,000 | 5,781,000 | 6,266,000 | 6,192,000 |
| Bessemer .. | 244,000 | 238,000 | 243,000 | 231,000 | 226,000 | 219,000 |
| Electric .. | 690,000 | 741,000 | 806,000 | 919,000 | 1,026,000 | 1,067,000 |
| Denmark— | | | | | | |
| Ingots, open hearth .. | 229,300 | 264,700 | 286,500 | 291,000 | 334,500 | 328,600 |
| Castings do. .. | 9,700 | 9,000 | 6,800 | 5,600 | 4,000 | 9,000 |
| do. electric .. | 11,300 | 13,600 | 18,800 | 21,200 | 22,500 | 15,600 |
| Finland— | | | | | | |
| Ingots .. | 174,252 | 221,300 | 241,648 | 261,767 | 292,920 | 298,000 |
| Castings .. | 11,182 | 11,058 | 11,744 | 14,781 | 15,277 | 12,156 |
| France— | | | | | | |
| Ingots and castings— | | | | | | |
| Bessemer, acid .. | 135,606 | 107,281 | 100,128 | 110,423 | 99,836 | 79,742 |
| do. basic .. | 8,546,479 | 9,116,375 | 10,292,741 | 10,239,699 | 9,867,543 | 9,678,178 |
| Open hearth, acid .. | — | — | — | — | — | — |
| do. basic .. | 4,454,386 | 4,482,433 | 5,048,899 | 4,981,810 | 4,848,203 | 4,698,713 |
| Crucible .. | 1,976 | 1,621 | 2,185 | 2,453 | 2,500 | 2,086 |
| Electric .. | 1,246,490 | 1,270,439 | 1,470,602 | 1,541,573 | 1,502,105 | 1,501,032 |
| Kaldo, L.D., etc. .. | — | — | 93,139 | 416,588 | 647,828 | 1,319,554 |
| Of which— | | | | | | |
| Ingots .. | 14,038,992 | 14,665,394 | 16,706,319 | 16,938,838 | 16,603,902 | 16,938,984 |
| Castings .. | 345,945 | 312,755 | 301,375 | 353,708 | 364,113 | 340,321 |

DETAILS OF PRODUCTION OF STEEL INGOTS AND CASTINGS (cont.)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | | | | |
|---------------------------|------------|---------------|-------------|-------------|-------------|------------|--|--|--|--|
| OTHER COUNTRIES | | | | | | | | | | |
| <i>(cont.)</i> | | | | | | | | | | |
| Germany (Federal)— | | | | | | | | | | |
| Ingots— | | | | | | | | | | |
| Open hearth .. | 11,326,000 | 12,342,000 | 15,674,000 | 15,052,000 | 14,693,000 | 13,724,000 | | | | |
| Bessemer, basic .. | 9,035,000 | 10,562,000 | 14,671,000 | 14,141,000 | 13,002,000 | 12,244,000 | | | | |
| Electric .. | 1,209,000 | 1,444,000 | 1,707,000 | 1,836,000 | 2,035,000 | 2,150,000 | | | | |
| Oxygen .. | 338,000 | 538,000 | 849,000 | 1,182,000 | 1,657,000 | 2,414,000 | | | | |
| Castings— | | | | | | | | | | |
| Open hearth .. | 134,000 | 128,000 | 158,000 | 160,000 | 117,000 | 72,000 | | | | |
| Electric .. | 299,000 | 332,000 | 433,000 | 492,000 | 490,000 | 454,000 | | | | |
| Other .. | 84,000 | 68,000 | 70,000 | 66,000 | 51,000 | 40,000 | | | | |
| Germany (East)— | | | | | | | | | | |
| Open hearth .. | 2,366,700 | 2,499,300 | 2,578,800 | 2,665,200 | 2,816,400 | 2,820,200 | | | | |
| Bessemer, basic .. | 334,400 | 349,100 | 373,800 | 364,400 | 375,900 | 369,800 | | | | |
| Electric .. | 293,800 | 307,800 | 330,600 | 340,600 | 363,700 | 378,600 | | | | |
| Other .. | — | 500 | 1,100 | 19,800 | 8,800 | — | | | | |
| Italy— | | | | | | | | | | |
| Ingots .. | 6,027,724 | 6,521,665 | 7,922,632 | 8,782,674 | 9,409,042 | 9,803,095 | | | | |
| Castings .. | 144,285 | 133,340 | 176,469 | 197,507 | 194,302 | 193,028 | | | | |
| Luxembourg— | | | | | | | | | | |
| Bessemer, basic .. | 3,251,634 | 3,520,000 | 3,939,227 | 3,973,662 | 3,883,634 | 3,903,032 | | | | |
| Electric .. | 73,822 | 85,000 | 79,965 | 74,165 | 62,976 | 64,953 | | | | |
| Norway— | | | | | | | | | | |
| Ingots .. | 345,739 | 401,022 | 460,752 | 468,344 | 456,552 | 511,021 | | | | |
| Castings .. | 19,823 | 18,650 | 21,780 | 22,659 | 23,524 | 24,000 | | | | |
| Saar— | | | | | | | | | | |
| Ingots— | | | | | | | | | | |
| Open hearth .. | 756,109 | (b) 802,000 | } (a) | (a) | (a) | (a) | | | | |
| Bessemer, basic .. | 2,601,152 | (b) 2,682,000 | | | | | | | | |
| Electric .. | 40,337 | (b) 52,000 | | | | | | | | |
| Castings— | | | | | | | | | | |
| Open hearth .. | 5,588 | (c) | | | | | | | | |
| Bessemer, acid .. | — | (c) | | | | | | | | |
| Electric .. | 2,446 | (c) | | | | | | | | |
| Spain— | | | | | | | | | | |
| Open hearth and | | | | | | | | | | |
| Bessemer .. | 1,164,997 | 1,411,986 | r 1,624,800 | 2,013,900 | 1,832,800 | n.a. | | | | |
| Electric .. | 370,766 | 369,420 | r 301,700 | 250,900 | 328,400 | n.a. | | | | |
| Sweden— | | | | | | | | | | |
| Open hearth, acid .. | 229,333 | 292,933 | 322,185 | r 336,785 | } 1,134,000 | 1,191,000 | | | | |
| do. basic .. | 526,319 | 624,271 | 749,166 | 864,585 | | | | | | |
| Bessemer, acid .. | 28,360 | 35,465 | 33,497 | r 25,295 | — | — | | | | |
| do. basic .. | 434,084 | 398,853 | 415,636 | 477,544 | 440,000 | 437,000 | | | | |
| Electric .. | 1,091,170 | 1,358,402 | 1,538,551 | r 1,600,866 | 1,556,000 | 1,663,000 | | | | |
| Other .. | 75,466 | 100,048 | 108,310 | 200,836 | 427,000 | 529,000 | | | | |
| U.S.S.R.— | | | | | | | | | | |
| Open hearth .. | 46,834,000 | 50,310,000 | 54,239,000 | 59,101,000 | 63,899,000 | 66,994,000 | | | | |
| Bessemer .. | 1,651,000 | 1,767,000 | 1,837,000 | 1,865,000 | 1,879,000 | 1,940,000 | | | | |
| Electric .. | 4,407,000 | 5,066,000 | 5,728,000 | 6,201,000 | 6,710,000 | 7,346,000 | | | | |
| Other .. | 1,161,000 | 1,860,000 | 2,457,000 | 2,467,000 | 2,613,000 | 2,679,000 | | | | |
| of which— | | | | | | | | | | |
| Ingots .. | 49,865,000 | 53,923,000 | 59,348,000 | 64,497,000 | 69,761,000 | 73,236,000 | | | | |
| Castings .. | 4,188,000 | 5,080,000 | 4,913,000 | 5,137,000 | 5,340,000 | 5,723,000 | | | | |
| Yugoslavia— | | | | | | | | | | |
| Open hearth .. | 1,027,000 | 1,178,000 | 1,301,000 | 1,371,000 | 1,413,000 | 1,370,000 | | | | |
| Electric .. | 74,200 | 100,800 | 118,400 | 136,800 | 157,300 | 193,100 | | | | |

(a) Included with Germany (Federal).

(b) Including castings.

(c) Included with ingots.

DETAILS OF PRODUCTION OF STEEL INGOTS AND CASTINGS (cont.)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| South Africa— | | | | | | |
| Ingots— | | | | | | |
| Open hearth and Bessemer | 1,535,500 | 1,591,800 | 1,755,300 | 2,112,300 | 2,234,500 | 2,332,800 |
| Electric | 207,500 | 217,300 | 277,100 | 278,000 | 303,100 | 374,700 |
| Castings (b) | 60,200 | 58,900 | 46,700 | 45,400 | 62,300 | 81,800 |
| United States— | | | | | | |
| Ingots and castings (a)— | | | | | | |
| Open hearth, acid .. | 337,147 | 396,414 | 360,329 | 351,584 | 338,468 | 354,656 |
| do. basic .. | 67,412,312 | 72,522,333 | 76,753,515 | 75,096,694 | 73,730,566 | 78,961,348 |
| Bessemer | 1,246,415 | 1,232,396 | 1,061,782 | 786,661 | 718,719 | 859,517 |
| Oxygen | 1,181,572 | 1,664,587 | 2,987,639 | 3,542,105 | 4,957,765 | 7,628,641 |
| Electric and crucible | 5,942,987 | 7,618,316 | 7,481,021 | 7,735,896 | 8,047,148 | 9,750,256 |
| Of which— | | | | | | |
| Ingots | 75,959,017 | 83,273,954 | 88,450,195 | 87,346,859 | 87,631,707 | 97,395,545 |
| Castings | 161,416 | 160,092 | 194,091 | 166,081 | 160,959 | 158,873 |
| Japan— | | | | | | |
| Open hearth | 9,065,736 | 12,117,154 | 14,807,770 | 16,702,821 | 13,074,666 | 12,001,986 |
| Bessemer, basic | 813,186 | 1,186,262 | 2,587,061 | 5,272,273 | 8,307,354 | 11,854,960 |
| Electric | 2,047,682 | 3,062,541 | 4,393,909 | 5,846,815 | 5,729,176 | 7,146,967 |

(a) Excluding steel castings which were produced by companies not manufacturing steel ingots.

(b) Produced for sale.

EXPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC.

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Pig-iron— | | | | | | |
| Forge and foundry .. | 109,130 | 109,943 | 83,359 | 65,833 | 88,730 | 20,780 |
| Refined .. | 13,989 | 13,502 | 15,135 | 20,869 | 20,082 | 16,155 |
| Other .. | 28,568 | 34,514 | 47,030 | 58,375 | 110,611 | 49,656 |
| Iron and steel powders, shot and sponge .. | | | | | | |
| Spiegeleisen .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 18,078 |
| Ferro-manganese .. | 611 | 596 | 1,621 | 662 | 873 | 76 |
| Ferro-tungsten .. | 993 | 1,282 | 1,048 | 1,445 | 1,584 | 940 |
| Ferro-molybdenum .. | 296 | 333 | 245 | 246 | 229 | 160 |
| Ferro-titanium .. | 348 | 502 | 276 | 533 | 552 | 1,024 |
| Ferro-vanadium .. | 7 | 14 | 94 | 19 | 5 | 3 |
| Ferro-niobium and ferro-niobium-tantalum .. | 37 | 71 | 97 | 83 | 68 | 173 |
| Other ferro-alloys .. | 2,155 | 7,963 | 9,333 | 2,609 | 2,810 | 3,240 |
| Ingots, blooms, billets .. | 21,746 | 82,660 | 25,611 | 103,333 | 85,283 | 32,579 |
| Old and scrap (a) .. | 242,765 | 933,063 | 17,858 | 29,636 | 1,084,785 | 1,066,609 |
| Channel Islands— | | | | | | |
| Scrap .. | (c) 1,679 | (c) 2,444 | (c) 3,108 | r 3,320 | 3,584 | 4,336 |
| Malta— | | | | | | |
| Scrap .. | 7,021 | 10,793 | 8,072 | 11,378 | 4,276 | 5,879 |
| Kenya— | | | | | | |
| Scrap .. | — | — | — | — | <i>n.a.</i> | 2,908 |
| Nigeria— | | | | | | |
| Scrap .. | 10,872 | 15,119 | 19,833 | 17,923 | 4,551 | 5,232 |
| Rhodesia and Nyasaland— | | | | | | |
| Pig-iron .. | 1,882 | 35,603 | 44,814 | 117,837 | 201,960 | 213,277 |
| Ferro-alloys .. | (d) 6,384 | (d) 9,651 | 9,232 | 8,920 | 8,078 | 13,728 |
| Ingots, etc. .. | — | — | 13,761 | 29,410 | 9,153 | 184 |
| Scrap .. | <i>n.a.</i> | 26,805 | 8,990 | 1,849 | 10,712 | 21,376 |
| Tanganyika— | | | | | | |
| Scrap .. | — | — | — | — | — | 1,599 |
| Barbados— | | | | | | |
| Scrap .. | 636 | 2,300 | — | 2,080 | <i>n.a.</i> | 643 |
| Jamaica— | | | | | | |
| Scrap .. | 5,001 | 3,149 | 15,406 | 9,607 | 1,041 | <i>n.a.</i> |
| Trinidad and Tobago— | | | | | | |
| Old and scrap .. | 5,159 | 12,240 | 14,036 | 9,081 | — | <i>n.a.</i> |
| Canada— | | | | | | |
| Pig-iron .. | 300,528 | 418,156 | 431,433 | 537,656 | 414,215 | 435,745 |
| Ferro-chrome .. | 9,339 | 6,709 | 4,117 | 1,466 | 5,895 | 2,598 |
| Ferro-manganese .. | 201 | 172 | 651 | 212 | 121 | 9 |
| Ferro-silicon .. | 31,254 | 31,884 | 47,235 | 43,704 | 38,615 | 32,800 |
| Other ferro-alloys .. | 505 | 438 | 1,002 | 701 | 2,971 | 1,271 |
| Ingots, blooms, billets .. | 52,239 | 66,182 | 303,701 | 291,457 | 236,238 | 336,884 |
| Old and scrap .. | 345,667 | 341,872 | 376,293 | 718,545 | 349,063 | 383,919 |
| Tin-plate scrap .. | 30,993 | 33,963 | 32,640 | 30,509 | 19,707 | 21,776 |
| Aden— | | | | | | |
| Scrap .. | 2,330 | 3,303 | 3,194 | 3,690 | 39 | <i>n.a.</i> |
| Hong Kong— | | | | | | |
| Pig-iron .. | 117 | 7,860 | 23,753 | 11,731 | 574 | — |
| Old and scrap .. | 100,341 | 200,634 | 244,016 | 206,010 | 105,163 | 133,126 |
| Tinplate scrap .. | 2,141 | 2,783 | 5,916 | 3,891 | 5,028 | 3,938 |
| India— | | | | | | |
| Pig-iron .. | — | 50,566 | (b) 98,720 | (b) 72,594 | (b) 19,011 | (b) — |
| Ferro-manganese .. | 10,553 | 8,114 | (b) 47,073 | (b) 55,406 | (b) 12,093 | (b) 21,581 |
| Ingots, blooms, billets .. | <i>n.a.</i> | <i>n.a.</i> | (b) 67,479 | (b) 22,718 | (b) — | (b) — |
| Old and scrap .. | 107,575 | 280,711 | (b) 317,222 | (b) 263,371 | (b) 176,325 | (b) 377,863 |

(a) Excluding ships intended for breaking up as follows (gross tonnage): 1958—47,450; 1959—97,850; 1960—54,696; 1961—55,669; 1962—126,362; 1963—105,581.

(b) Years ended March 31 following that stated.

(c) Jersey only.

(d) Ferro-chrome only.

EXPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|-------------|-----------------|-----------|-----------|-------------|-------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Malaya— | | | | | | |
| Pig-iron | 502 | 275 | 127 | 53 | 656 | — |
| Ingots, slabs etc. | 72 | 2,501 | 120 | 283 | 1 | — |
| Scrap | 60,897 | 89,501 | 74,570 | 70,279 | 32,915 | 51,365 |
| Tin-plate scrap.. .. | 4,373 | 1,647 | 1,959 | 3,518 | 3,124 | 2,316 |
| Australia (a)— | | | | | | |
| Pig-iron | 16,455 | 22,668 | 65,101 | 213,022 | 225,647 | 159,359 |
| Ferro-alloys | 7 | 9 | 14 | 16 | 48 | 8 |
| Ingots, blooms, billets.. .. | 2,529 | 561 | 21,431 | 2,038 | 159,248 | 23,885 |
| Old and scrap | 117,816 | 137,333 | 176,169 | 205,870 | 151,038 | 196,453 |
| Tin-plate scrap.. .. | 18,755 | 33,990 | 18,221 | 15,753 | 14,819 | 22,629 |
| New Zealand— | | | | | | |
| Scrap | 60,858 | 52,257 | 55,221 | 14,976 | <i>n.a.</i> | 289 |
| Irish Republic— | | | | | | |
| Old and scrap | 18,064 | <i>r</i> 13,639 | 28,626 | 17,880 | 14,226 | 26,302 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Pig-iron | 67,662 | 73,669 | 36,790 | 9,990 | 2,167 | 1,022 |
| Ferro-silicon | 187 | 1,787 | 251 | 2,619 | 2,380 | 2,361 |
| Other ferro-alloys | 763 | 2,182 | 3,377 | | 8,264 | 5,467 |
| Ingots and blooms | 22,905 | 11,310 | 58,598 | 59,887 | 25,799 | 11,540 |
| Scrap | 6,919 | 7,146 | 3,365 | 4,462 | 4,427 | 3,386 |
| Belgium-Luxemburg E.U.— | | | | | | |
| Pig-iron | 29,817 | 46,909 | 58,940 | 43,894 | 53,204 | 137,478 |
| Spiegeleisen | 3,533 | 4,231 | 3,290 | 4,253 | 4,163 | 1,964 |
| Ferro-manganese | 13,150 | 13,698 | 16,017 | 16,644 | 22,946 | 29,017 |
| Other ferro-alloys | 741 | 466 | 5,083 | 7,793 | 8,264 | 5,467 |
| Ingots | 4,390 | 18,222 | 82,689 | 50,115 | 42,630 | 45,910 |
| Blooms, billets, etc. | 762,624 | 497,200 | 827,505 | 679,312 | 456,788 | 400,985 |
| Old and scrap | 139,881 | 270,462 | 439,159 | 329,671 | 356,644 | 512,353 |
| Denmark— | | | | | | |
| Blooms, billets, etc. | <i>n.a.</i> | 1,128 | 2,112 | 1,756 | 2,143 | 3,742 |
| Old and scrap | 23,026 | 44,879 | 24,033 | 20,127 | 27,501 | 38,169 |
| Finland— | | | | | | |
| Pig-iron | 32,069 | 22,446 | 32,205 | 40,818 | 106,425 | 229,944 |
| Ferro-alloys | — | — | — | — | — | 16,844 |
| Old and scrap | 1,431 | 5,642 | 2,733 | 1,950 | 3,055 | 2,974 |
| France— | | | | | | |
| Pig-iron | 83,781 | 160,885 | 228,551 | 254,134 | 218,112 | 149,744 |
| Spiegeleisen | 410 | 8,041 | 12,036 | 14,142 | 17,332 | 12,733 |
| Ferro-manganese | 83,036 | 98,939 | 132,693 | 156,294 | 152,040 | 147,755 |
| Ferro-silicon | 4,670 | 12,881 | 24,923 | 30,275 | 18,534 | 18,677 |
| Ferro-chrome | 10,623 | 21,100 | 18,526 | 16,218 | 15,070 | 16,112 |
| Other ferro-alloys | 1,592 | 3,294 | 3,462 | 3,193 | 4,682 | 7,074 |
| Ingots | 1,971 | 24,164 | 81,497 | 68,355 | 12,875 | 18,264 |
| Blooms, billets, etc. | 196,692 | 227,861 | 138,312 | 185,893 | 147,177 | 345,805 |
| Old and scrap | 579,296 | 1,217,162 | 1,203,386 | 1,142,799 | 1,171,229 | 1,176,547 |
| Germany (Federal)— | | | | | | |
| Pig-iron | 333,314 | 379,152 | 654,027 | 825,357 | 882,775 | 796,781 |
| Spiegeleisen | (b) | (b) | (b) | 9,519 | 16,771 | 17,619 |
| Ferro-alloys | 16,911 | 40,000 | 32,020 | 41,781 | 43,387 | 77,314 |
| Ingots, blooms, billets.. .. | 547,973 | 938,779 | 1,014,155 | 1,353,355 | 1,015,174 | 1,392,207 |
| Old and scrap | 926,421 | 944,529 | 1,202,068 | 1,442,667 | 1,188,214 | 1,278,191 |
| Hungary— | | | | | | |
| Pig iron | 19,338 | 19,679 | 76,075 | 33,977 | 27,050 | 14,588 |
| Iceland— | | | | | | |
| Scrap | 1,106 | 4,285 | 5,466 | 4,970 | 2,645 | <i>n.a.</i> |

(a) Years ended June 30 of that stated.

(b) Included with pig-iron.

EXPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Italy— | | | | | | |
| Pig-iron | 448 | 2,610 | 1,390 | 198 | 31 | 143 |
| Spiegeleisen | 74 | 139 | 325 | 240 | 101 | 8 |
| Ferro-manganese | 322 | 4,005 | 3,123 | 2,352 | 1,276 | 2,008 |
| Ferro-silicon | 4,618 | 3,217 | 4,562 | 5,435 | 3,723 | 1,682 |
| Ferro-silico-manganese | — | 5,199 | 1,444 | 246 | 290 | 59 |
| Ferro-chrome | 5 | 8,743 | 7,488 | 10,797 | 2,276 | 1,942 |
| Other ferro-alloys | 39 | 7 | 2 | 18 | 2 | 20 |
| Ingots | 94,669 | 82,951 | 120,944 | 116,160 | 98,162 | } 100,397 |
| Blooms, billets, etc. | 22,192 | 34,379 | 3,526 | 7,709 | 10,308 | |
| Scrap | 437 | 967 | 1,324 | 1,054 | 885 | 1,709 |
| Netherlands— | | | | | | |
| Pig-iron | 120,531 | 141,528 | 158,926 | 162,858 | 200,698 | 142,883 |
| Sponge iron | <i>n.a.</i> | <i>n.a.</i> | 83 | 113 | 421 | 154 |
| Ferro-alloys | 125 | 85 | 157 | 434 | 209 | 333 |
| Ingots, blooms and billets | 2,468 | 654 | 675 | 4,678 | 8,286 | 34,074 |
| Old and scrap | 179,981 | 272,101 | 326,392 | 338,507 | 230,706 | 277,612 |
| Norway— | | | | | | |
| Pig-iron | 58,414 | 95,071 | 108,432 | 117,957 | 132,985 | 172,507 |
| Ferro-chrome | 14,307 | 30,604 | 34,097 | 21,252 | 16,797 | 27,043 |
| Ferro-manganese | 41,844 | 61,938 | 50,497 | 47,360 | 45,844 | 59,499 |
| Ferro-silicon | 80,596 | 120,950 | 154,976 | 159,373 | 133,763 | 151,627 |
| Ferro-silico-manganese | 44,859 | 67,411 | 80,466 | 84,891 | 70,570 | 83,022 |
| Other ferro-alloys | 2,112 | 3,842 | 9,536 | 4,348 | 3,540 | 6,550 |
| Ingots, blooms, billets | 38,116 | 18,545 | 55,405 | 25,457 | 48,119 | 86,990 |
| Old and scrap | 5,693 | 6,436 | 4,582 | 5,513 | 2,352 | 4,574 |
| Poland— | | | | | | |
| Pig-iron | 22,581 | 1,476 | 1,566 | 2,077 | 27,500 | 57,576 |
| Ferro-alloys | 5,676 | 10,558 | 7,822 | 4,337 | 3,900 | 3,536 |
| Portugal— | | | | | | |
| Pig-iron | 16 | 16,623 | 24,049 | 14,795 | 10,017 | 19,090 |
| Ferro-alloys | 63 | 630 | 2,824 | 987 | 2,398 | 3,464 |
| Old and scrap | 22,505 | 20,562 | 25,761 | 16,393 | 14,782 | 18,089 |
| Spain— | | | | | | |
| Pig-iron | 80,695 | 186,103 | 422,245 | 283,134 | 142,339 | 148,192 |
| Ferro-silicon | — | 500 | 8,209 | 11,665 | 9,700 | 9,854 |
| Other ferro-alloys | — | — | 4,595 | 5,783 | 5,602 | 9,816 |
| Ingots, blooms, billets | — | 18,607 | 376,065 | 234,473 | 62,319 | 49,273 |
| Sweden— | | | | | | |
| Pig-iron | 37,376 | 37,429 | 43,938 | 69,721 | 34,413 | 56,000 |
| Sponge iron | 17,967 | 22,890 | 25,603 | 27,121 | 28,485 | 35,577 |
| Ferro-manganese | 1,382 | 2,693 | 1,650 | 2,540 | 2,537 | 4,183 |
| Ferro-silicon | 4,199 | 159 | 955 | 5,785 | 4,549 | 2,825 |
| Ferro-silico-manganese | — | 226 | 25 | 15 | 25 | 20 |
| Ferro-chrome | 9,871 | 15,597 | 15,952 | 18,656 | 17,057 | 22,613 |
| Ferro-tungsten | 64 | 184 | 126 | 20 | 104 | 169 |
| Other ferro-alloys | 492 | 955 | 1,727 | 1,602 | 2,902 | 2,318 |
| Ingots | 522 | 566 | 250 | 361 | 2,623 | } 103,498 |
| Blooms, billets, etc. | 94,256 | 58,201 | 98,275 | 143,597 | 106,289 | |
| Old and scrap | 8,307 | 10,164 | 12,541 | 13,868 | 11,288 | 11,616 |
| Switzerland— | | | | | | |
| Pig-iron and steel, etc. | 3,880 | 6,362 | 392 | 346 | 507 | 437 |
| Ferro-alloys | 949 | 2,200 | 8,979 | 11,590 | 8,929 | 13,911 |
| Old and scrap | 3,149 | 3,943 | 5,729 | 6,155 | 6,971 | 14,622 |
| U.S.S.R.— | | | | | | |
| Pig iron | 1,029,400 | 1,419,700 | 1,772,400 | 1,785,400 | 2,238,300 | 2,498,113 |
| Ferro-manganese | 45,000 | 49,700 | 50,000 | 50,800 | 54,800 | 56,001 |
| Ferro-silicon | 29,700 | 43,600 | 57,200 | 55,900 | 53,300 | 13,877 |
| Other ferro-alloys | 33,200 | 35,800 | 45,300 | 46,300 | 36,900 | 61,021 |
| Steel ingots and billets | 522,500 | 647,900 | 759,000 | 804,600 | 829,700 | 782,641 |
| Scrap | 53,800 | 104,000 | 167,400 | 219,100 | 221,200 | 266,818 |

EXPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Yugoslavia— | | | | | | |
| Pig-iron | — | 8,315 | — | 4,206 | 59 | — |
| Spiegeleisen | 923 | 1,865 | 1,008 | 1,278 | 167 | — |
| Ferro-chrome | 7,611 | 7,871 | 8,822 | 7,303 | 5,763 | 7,184 |
| Ferro-manganese | 7,842 | 6,538 | 10,925 | 7,037 | 7,693 | 8,130 |
| Silico-manganese | 197 | 886 | 1,162 | 2,504 | 1,794 | 4,564 |
| Ferro-silicon | 6,126 | 9,723 | 9,322 | 8,105 | 9,561 | 16,168 |
| Steel ingots | 19,208 | 12,807 | — | — | 50,507 | 27,397 |
| Scrap | — | 116 | 1,166 | 11,187 | 2,757 | 682 |
| Algeria— | | | | | | |
| Old and scrap | 32,295 | 39,804 | 51,597 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Morocco— | | | | | | |
| Old and scrap | 29,402 | 38,801 | 52,445 | 39,355 | 20,138 | 27,152 |
| Mozambique— | | | | | | |
| Scrap | 4,077 | 8,943 | 9,947 | 7,607 | — | — |
| South Africa— | | | | | | |
| Pig-iron | 31,474 | 273,666 | 220,252 | 244,138 | 212,595 | <i>n.a.</i> |
| Ferro-manganese | 33,635 | 75,299 | 103,511 | 130,214 | 77,444 | <i>n.a.</i> |
| Other ferro-alloys | 37 | 34,207 | 27,056 | 28,298 | 15,131 | <i>n.a.</i> |
| Ingots, blooms, billets | 37 | 34,207 | 19,551 | 17,268 | 30,469 | <i>n.a.</i> |
| Tunisia— | | | | | | |
| Scrap | 14,653 | 21,322 | 29,811 | 19,732 | 18,238 | <i>n.a.</i> |
| Cuba— | | | | | | |
| Old and scrap | 20,738 | 36,725 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico— | | | | | | |
| Ferro-alloys | 395 | 2 | — | 2,574 | 2,795 | 1,260 |
| United States— | | | | | | |
| Pig-iron | 92,275 | 9,235 | 99,797 | 371,132 | 137,839 | 62,637 |
| Spiegeleisen | 745 | 339 | 132 | 469 | 638 | 1,050 |
| Ferro-phosphorus | 39,735 | 44,556 | 42,765 | 26,839 | 12,616 | 36,930 |
| Ferro-manganese | 1,255 | 845 | 670 | 419 | 3,673 | 605 |
| Ferro-chrome | 1,714 | 5,470 | 13,918 | 7,004 | 2,745 | 2,102 |
| Ferro-molybdenum | 101 | 111 | 190 | 160 | 85 | 107 |
| Ferro-vanadium | 68 | 135 | 144 | 107 | 179 | 164 |
| Ferro-silicon | 1,943 | 9,427 | 4,912 | 31,040 | 3,662 | 2,795 |
| Ferro-tungsten | 1 | 34 | — | — | 5 | 1 |
| Ferro-titanium | 288 | 286 | 219 | 189 | 116 | 188 |
| Other ferro-alloys | 169 | 288 | 3,433 | 4,321 | 308 | 384 |
| Steel ingots, slabs, blooms, billets and sheet bars | 25,001 | 13,142 | 66,539 | 123,254 | 225,596 | 271,889 |
| Scrap (a) | 2,598,575 | 4,387,457 | 7,086,431 | 8,447,727 | 4,499,930 | 5,681,801 |
| Argentina— | | | | | | |
| Ingots, blooms, billets | <i>n.a.</i> | 9 | 237 | 3,296 | 1,633 | 43,876 |
| Brazil— | | | | | | |
| Pig-iron | — | 984 | 14,369 | 37,862 | — | — |
| Ferro-manganese | — | — | — | 49 | 4,937 | <i>n.a.</i> |
| Chile— | | | | | | |
| Pig-iron | 150 | 1,476 | 295 | — | 364 | <i>n.a.</i> |
| Ferro-manganese | 5,822 | 2,735 | 2,971 | 3,673 | 13,509 | <i>n.a.</i> |
| Indonesia— | | | | | | |
| Scrap | 13,996 | 26,544 | 6,428 | 8,312 | 984 | <i>n.a.</i> |
| Israel— | | | | | | |
| Scrap | <i>n.a.</i> | <i>n.a.</i> | 515 | 1,739 | 1,342 | 1,199 |
| Japan— | | | | | | |
| Pig-iron | 11,023 | 76 | 148 | 235 | 1,867 | 288 |
| Ferro-chrome | 4,081 | 17,273 | 14,533 | 15,911 | 12,288 | 7,840 |
| Ferro-manganese | 47,900 | 33,269 | 38,914 | 14,249 | 21,091 | 14,158 |
| Ferro-silicon | 1,013 | 1,253 | 405 | 18 | 2,646 | 557 |
| Ferro-silico-manganese | 21,611 | 9,633 | 2,684 | 772 | 6,463 | 3,701 |
| Other ferro-alloys | 513 | 504 | 458 | 794 | 648 | 767 |
| Ingots, blooms, billets | 58,051 | 9,132 | 692 | 1,032 | 28,913 | 56,443 |
| Scrap | 39 | 23 | 23 | 95 | 663 | 1,715 |

(a) Including tin-plate and terne-plate scrap.

EXPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|-------|-------|-------|--------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Korea (South)— | | | | | | |
| Scrap | 1,503 | 663 | — | 500 | 445 | 90 |
| Lebanon— | | | | | | |
| Scrap | 3,577 | 7,153 | 9,683 | 3,796 | <i>n.a.</i> | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Scrap | — | 162 | — | — | — | 492 |
| Thailand— | | | | | | |
| Scrap | 1,080 | 285 | 2,874 | 4,605 | 576 | 2,847 |
| Turkey— | | | | | | |
| Pig iron | — | — | 9,694 | 10,039 | <i>n.a.</i> | <i>n.a.</i> |
| Ingots, blooms, billets.. | — | — | 9,842 | 34,595 | <i>n.a.</i> | <i>n.a.</i> |
| Old and scrap | 261 | 1,020 | 1,041 | 5,388 | 584 | 276 |

IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC.

Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-------------|-------------|-------------|----------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Pig-iron— | | | | | | |
| Charcoal | 662 | 448 | 942 | 1,492 | 808 | } 22,234 |
| Forge and foundry .. | 573 | 2,981 | 2,036 | 4,080 | 1,436 | |
| Hematite | 5,573 | 28,885 | 36,300 | 17,720 | 59,088 | 122,336 |
| Basic | 137,130 | 58,480 | 178,019 | 4,922 | 66,760 | 42,139 |
| Other (vanadium-titanium pig-iron produced in electric furnace) | 6,892 | 5,385 | 4,092 | 4,436 | 3,756 | 2,558 |
| Sponge-iron | 3,545 | 4,500 | 5,799 | 5,519 | 5,693 | 7,768 |
| Spiegeleisen | } 18,097 | } 28,807 | } 35,375 | } 41,830 | } 44,206 | } 54,205 |
| Ferro-manganese | | | | | | |
| Ferro-silicon | 55,277 | 63,334 | 95,967 | 85,234 | 75,804 | 87,825 |
| Ferro-silicon-chrome .. | 1,744 | 1,623 | 3,595 | 2,984 | 3,043 | 3,848 |
| Ferro-chrome | 25,764 | 31,901 | 46,606 | 42,358 | 24,510 | 34,458 |
| Ferro-vanadium | (b) | — | — | 71 | 24 | 59 |
| Silico-manganese | 16,122 | 22,685 | 29,185 | 26,497 | 25,056 | 27,297 |
| Other ferro-alloys | 1,077 | 1,175 | 1,611 | 2,144 | 2,016 | 2,578 |
| Iron and steel ingots, etc. | 711 | 833 | 30,551 | 28,369 | 4,627 | 556 |
| Blooms, billets, slabs— | | | | | | |
| Iron | — | — | 202 | — | 127 | 1 |
| Steel | 82,675 | 1,768 | 222,574 | 70,757 | 151,719 | 255,428 |
| Old and scrap (a) | 64,766 | 2,873 | 277,609 | 22,648 | 4,524 | 4,201 |
| Malta— | | | | | | |
| Ingots, etc. | — | — | 10 | <i>n.a.</i> | 306 | 1,093 |
| Ghana— | | | | | | |
| Pig-iron | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 382 | 191 | 288 |
| Kenya— | | | | | | |
| Pig-iron | 140 | 279 | 862 | 1,387 | 493 | 493 |
| Ferro-alloys | 16 | 11 | 22 | 10 | 2 | 37 |
| Ingots, blooms, etc. .. | 1,753 | 1,360 | 1,768 | 1,495 | 1,496 | 2,554 |
| Mauritius— | | | | | | |
| Pig-iron, ingots, etc. .. | 56 | 30 | 40 | 34 | 62 | 33 |
| Rhodesia and Nyasaland— | | | | | | |
| Pig-iron, ingots, etc. .. | 298 | 357 | 1,359 | 601 | 1,491 | 42 |
| Ferro-alloys | — | 927 | 1,475 | 1,353 | 1,820 | 1,904 |
| Tanganyika— | | | | | | |
| Pig-iron | 74 | 37 | 75 | 101 | 94 | 94 |
| Ferro-alloys | 805 | 790 | 666 | 394 | 723 | 860 |
| Ingots, blooms, etc. .. | 477 | 271 | 310 | 231 | 163 | 282 |
| Uganda— | | | | | | |
| Pig-iron | — | — | — | — | 45 | 50 |
| Ferro-alloys | — | — | — | — | 192 | 162 |
| Ingots, blooms, etc. .. | 193 | 79 | 80 | 133 | 338 | 182 |
| Canada— | | | | | | |
| Pig-iron | 23,659 | 18,937 | 7,662 | 308 | 9,023 | 15,751 |
| Sponge iron | 251 | 331 | 513 | 667 | 795 | 1,096 |
| Ferro-manganese | 2,217 | 2,084 | 13,835 | 10,772 | 13,332 | 20,211 |
| Ferro-silicon | 1,101 | 2,263 | 3,455 | 3,846 | 5,332 | 3,415 |
| Ferro-tungsten | 89 | 370 | 438 | 231 | 127 | 279 |
| Silico-manganese | 1,950 | 2,669 | 2,112 | 1,940 | 2,434 | 2,102 |
| Other ferro-alloys | 4,011 | 10,352 | 8,613 | 5,939 | 8,468 | 8,144 |
| Ingots, blooms, billets .. | 5,011 | 11,254 | 27,396 | 5,144 | 5,595 | 3,743 |
| Scrap | 258,397 | 587,822 | 524,877 | 313,878 | 400,618 | 580,971 |
| Jamaica— | | | | | | |
| Pig-iron | 52 | 87 | 102 | 112 | 76 | 210 |
| Trinidad and Tobago— | | | | | | |
| Pig-iron | 48 | 6 | 11 | 33 | 11 | <i>n.a.</i> |
| Ingots, etc. | 132 | 846 | 685 | 141 | 733 | <i>n.a.</i> |

(a) Excluding ships intended for breaking up as follows (gross tonnage): 1958—4,740; 1959—38,051; 1960—284,532; 1961—37,407; 1962—16,413; 1963—14,956.

(b) Included, if any, with "Other ferro-alloys".

IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|---------|---------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| British Guiana— Pig-iron, ingots, etc. . . | 279 | 307 | 1,019 | 767 | 65 | n.a. |
| Ceylon— Pig-iron | 948 | 862 | 350 | 695 | 586 | 519 |
| Ingots, blooms, billets etc. | 2,483 | 1,600 | 2,425 | 3,809 | 4,385 | 2,142 |
| Cyprus— Pig-iron | — | 10 | 33 | — | 50 | 199 |
| Ingots, etc. | 2 | 1 | 629 | 901 | 714 | 961 |
| Hong Kong— Pig-iron | 3,017 | 10,433 | 29,908 | 13,688 | 5,834 | 9,576 |
| Ingots, blooms, billets . . | 561 | 594 | 1,418 | 640 | 4,644 | 2,992 |
| Old and scrap | 14,234 | 24,439 | 27,573 | 25,677 | 41,639 | 40,712 |
| Tinplate scrap | 8,932 | 13,093 | 16,660 | 12,055 | 12,891 | 14,822 |
| India— g-iron | 100,443 | 67,993 | (b) 10,870 | (b) 1,672 | (b) 826 | (b) 207 |
| Ingots, blooms, billets . . | 226,917 | 138,255 | (b) 35,408 | (b) 16,958 | (b) 76,647 | (b) 50,397 |
| Ferro-chrome | 131 | 271 | (b) 410 | (b) 803 | (b) 656 | (b) 477 |
| Ferro-manganese | 200 | 150 | (b) 155 | (b) 519 | (b) 453 | (b) 677 |
| Ferro-silicon | 38 | 689 | (b) 3,637 | (b) 5,614 | (b) 534 | (b) 118 |
| Other ferro-alloys | 711 | 1,111 | (b) 1,435 | (b) 922 | (b) 760 | (b) 2,486 |
| Old and scrap | 4,553 | 29,807 | (b) 12,983 | (b) 6,669 | (b) 1,710 | (b) 1,213 |
| Malaya— Pig-iron | 2,346 | 2,761 | 3,958 | 4,277 | 9,780 | 14,579 |
| Ferro-alloys | 2 | 27 | 11 | 30 | 38 | 107 |
| Ingots, slabs, etc. | 3,362 | 2,343 | 3,543 | 3,673 | 6,204 | 8,056 |
| Scrap | 3,493 | 1,197 | 1,426 | 718 | 1,752 | 1,009 |
| Tinplate scrap | 7,765 | 8,735 | 12,568 | 12,563 | 13,985 | 14,804 |
| Pakistan— Pig-iron | 18,174 | 67,432 | 63,876 | 42,920 | 76,343 | 50,714 |
| Ferro-alloys | 81 | 74 | 359 | 1,145 | 930 | 573 |
| Ingots, blooms, billets . . | 85,061 | 56,302 | 39,750 | 228,214 | 229,705 | 226,273 |
| Old and scrap | 692 | 94 | 145 | 518 | 49 | 872 |
| Sabah— Ingots, etc. | 342 | 475 | 553 | 322 | 730 | n.a. |
| Australia— Ferro-manganese | 3,060 | 9,910 | 30,340 | 40,276 | 8,723 | 12,897 |
| Ferro-chrome | 1,892 | 2,824 | 5,714 | 4,133 | 1,974 | 2,713 |
| Ferro-molybdenum | 164 | 108 | 219 | 283 | 63 | 149 |
| Ferro-silicon | 7,482 | 10,463 | 3,905 | 9,677 | 3,798 | 9,558 |
| Other ferro-alloys | 737 | 684 | 1,434 | 1,590 | 1,660 | 3,461 |
| Ingots and billets, etc.(c) | 34 | 6 | 7,504 | 410 | (a) 191 | 117 |
| Scrap (c) | (a) 510 | (a) 20 | (a) 221 | (a) 2,466 | 15 | 81 |
| New Zealand— Pig-iron | 9,755 | 7,332 | 8,107 | 9,238 | 8,896 | 7,158 |
| Ferro-alloys | 64 | 73 | 135 | 263 | 709 | n.a. |
| Billets and blooms | 211 | 1,089 | 157 | 2,762 | 6,729 | 153 |
| Irish Republic— Pig-iron and sponge iron | 3,210 | r 3,546 | 3,150 | 3,641 | 3,354 | 8,507 |
| Ferro-alloys | 348 | 519 | 655 | 573 | 491 | 541 |
| Ingots, blooms, billets, etc. | 5,077 | 13,015 | 3,601 | 5,658 | 9,349 | 1,403 |
| OTHER COUNTRIES | | | | | | |
| Austria— Pig-iron | 11,498 | 7,771 | 156,408 | 67,021 | 35,299 | 95,090 |
| Spiegeleisen | n.a. | 493 | 1,728 | 1,698 | 2,255 | 2,331 |

(a) Excess of re-exports.

(c) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.) Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------------|---------|---------|-----------|---------|---------|---------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Austria (cont.)— | | | | | | |
| Ferro-manganese .. | 8,268 | 5,818 | 9,473 | 8,679 | 8,481 | 9,407 |
| Ferro-silicon .. | 6,289 | 8,985 | 10,099 | 8,564 | 7,787 | 7,825 |
| Other ferro-alloys .. | 7,545 | 14,993 | 19,324 | 15,815 | 14,285 | 16,300 |
| Ingots and blooms .. | 2,574 | 14,824 | 10,197 | 3,212 | 375 | 8,521 |
| Scrap .. | 61,958 | 47,787 | 119,810 | 78,267 | 41,119 | 52,361 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Pig-iron .. | 227,278 | 336,614 | 364,542 | 379,182 | 418,972 | 465,048 |
| Sponge-iron .. | 205 | 260 | 752 | 1,064 | 2,094 | 40 |
| Spiegeleisen .. | 20,666 | 7,118 | 7,099 | 16,143 | 22,537 | 19,010 |
| Ferro-chrome, etc. .. | 2,031 | 2,759 | 4,258 | 4,161 | 4,672 | 4,279 |
| Ferro-manganese .. | 46,626 | 55,300 | 58,558 | 52,644 | 56,141 | 37,914 |
| Ferro-silico-manganese .. | 2,317 | 2,494 | 3,378 | 3,766 | 3,578 | 3,601 |
| Ferro-molybdenum .. | 65 | 265 | 482 | 532 | 498 | 297 |
| Ferro-silicon .. | 11,388 | 15,204 | 20,333 | 20,881 | 15,636 | 14,311 |
| Ferro-tungsten .. | 29 | 71 | 80 | 234 | 132 | 82 |
| Other ferro-alloys .. | 482 | 571 | 943 | 896 | 744 | 1,115 |
| Ingots .. | 3,705 | 22,618 | 26,439 | 57,914 | 14,344 | 25,175 |
| Blooms, billets, etc. .. | 38,444 | 65,176 | 52,486 | 32,634 | 81,943 | 125,637 |
| Old and scrap .. | 304,605 | 240,913 | 192,680 | 193,644 | 120,620 | 85,966 |
| Czechoslovakia— | | | | | | |
| Pig iron .. | 246,000 | 188,000 | 199,000 | 175,000 | 250,000 | n.a. |
| Denmark— | | | | | | |
| Pig-iron .. | 39,428 | 55,407 | 84,814 | 74,175 | 108,880 | 80,361 |
| Ferro-chrome .. | 236 | 321 | 450 | 437 | 413 | 308 |
| Ferro-manganese, etc. .. | 2,219 | 2,275 | 2,638 | 2,428 | 2,209 | 2,932 |
| Ferro-silicon .. | 2,321 | 1,829 | 3,964 | 3,426 | 2,832 | 2,557 |
| Other ferro-alloys .. | 64 | 187 | 522 | 259 | 97 | 118 |
| Ingots, blooms, billets .. | 359 | 21 | 3,672 | 20,625 | 11,656 | 12,163 |
| Old and scrap .. | 4,116 | 3,007 | 977 | 1,289 | 905 | 1,172 |
| Finland— | | | | | | |
| Pig-iron .. | 1,834 | 3,788 | 2,927 | 2,682 | 3,379 | 6,945 |
| Billets .. | 15,431 | 135,800 | 135,217 | 103,657 | 78,928 | 58,989 |
| Ferro-manganese and spiegeleisen .. | 1,363 | 2,176 | 3,338 | 2,194 | 2,545 | 2,598 |
| Other ferro-alloys .. | 2,312 | 5,145 | 6,997 | 7,019 | 7,026 | 7,266 |
| Old and scrap .. | 48,006 | 75,693 | 94,006 | 101,353 | 126,029 | 81,072 |
| France— | | | | | | |
| Pig-iron—hematite .. | 129,831 | 93,560 | 115,784 | 148,191 | 138,468 | 169,837 |
| do. other .. | 17,939 | 19,206 | 33,754 | 28,544 | 23,837 | 41,134 |
| Sponge-iron .. | n.a. | n.a. | 114 | 667 | 2,163 | 2,275 |
| Spiegeleisen .. | 16,552 | 10,786 | 7,317 | 2,151 | 2,022 | 2,658 |
| Ferro-manganese .. | 3,405 | 4,665 | 6,333 | 7,276 | 7,626 | 9,963 |
| Ferro-silicon .. | 66 | 12 | 81 | 1 | 74 | 915 |
| Ferro-chrome .. | 19 | 12 | 285 | 361 | 942 | 889 |
| Ferro-nickel .. | 11,195 | 10,005 | 23,248 | 20,957 | 12,238 | 19,587 |
| Other ferro-alloys .. | 21 | 267 | 154 | 674 | 1,073 | 1,716 |
| Ingots .. | 22,400 | 19,430 | 86,139 | 80,314 | 126,196 | 145,552 |
| Blooms, billets, etc. .. | 256,700 | 315,174 | 637,978 | 680,485 | 495,074 | 495,417 |
| Old and scrap .. | 557,936 | 305,955 | 487,660 | 730,655 | 361,304 | 568,078 |
| Germany (Federal)— | | | | | | |
| Pig-iron .. | 273,363 | 324,088 | 387,415 | 319,545 | 586,139 | 457,467 |
| Spiegeleisen .. | (a) | (a) | (a) | 15,223 | 14,930 | 13,697 |
| Ferro-alloys .. | 99,420 | 159,273 | 224,964 | 242,207 | 205,761 | 207,646 |
| Rough blooms, ingots, bars, etc. .. | 204,960 | 272,956 | 563,425 | 279,656 | 229,154 | 662,770 |
| Old and scrap .. | 354,508 | 612,524 | 1,008,926 | 926,736 | 611,407 | 628,197 |
| Germany (East)— | | | | | | |
| Pig-iron .. | 547,700 | 629,600 | 696,400 | 554,200 | 619,300 | 647,313 |

(a) Included with pig-iron.

IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-----------|-----------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Greece— | | | | | | |
| Pig-iron | 55,190 | 74,830 | 13,658 | 25,346 | 43,833 | 28,671 |
| Ferro-alloys | 1,200 | 741 | 543 | 737 | 722 | 1,060 |
| Ingots, blooms, slabs, etc. | 91,137 | 78,661 | 104,174 | 74,602 | 102,482 | 69,276 |
| Old and scrap | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 9,566 | 5,023 | 534 |
| Hungary— | | | | | | |
| Pig-iron | 38,061 | 59,246 | 41,767 | 38,239 | 100,939 | 87,394 |
| Ferro-chrome | 1,754 | 2,130 | 2,260 | 3,419 | 4,035 | 5,632 |
| Ferro-manganese | 5,834 | 6,672 | 6,649 | 7,621 | 10,485 | 11,208 |
| Ferro-silicon | 1,378 | 143 | 2,828 | 1,445 | 2,087 | 2,466 |
| Other ferro-alloys | 203 | 218 | 153 | 368 | 422 | 355 |
| Ingots | 146,429 | 158,117 | 207,816 | 173,756 | 323,002 | 366,817 |
| Italy— | | | | | | |
| Pig-iron | 329,628 | 370,340 | 689,614 | 870,005 | 783,680 | 876,391 |
| Spiegeleisen | 4,431 | 2,265 | 6,778 | 12,335 | 13,201 | 19,064 |
| Ferro-chrome | 6,132 | 8,359 | 15,091 | 14,157 | 10,198 | 14,753 |
| Ferro-manganese | 18,136 | 20,182 | 27,526 | 30,620 | 42,949 | 53,853 |
| Ferro-silicon | 2,419 | 2,853 | 1,492 | 1,420 | 6,122 | 7,386 |
| Ferro-silico-manganese | 2,001 | 1,767 | 1,991 | 2,913 | 2,670 | 5,535 |
| Ferro-titanium | 272 | 234 | 286 | 507 | 457 | 401 |
| Ferro-tungsten | 55 | 41 | 116 | 311 | 185 | 129 |
| Other ferro-alloys | 497 | 437 | 1,033 | 1,024 | 1,484 | 1,672 |
| Ingots | 64,998 | 83,008 | 213,500 | 77,703 | 73,169 | 712,099 |
| Blooms, billets, etc. | 95,497 | 109,174 | 397,059 | 669,605 | 354,908 | |
| Old and scrap | 2,769,895 | 2,588,339 | 3,181,660 | 3,345,502 | 3,902,135 | 3,783,838 |
| Netherlands— | | | | | | |
| Pig-iron | 13,692 | 17,144 | 22,704 | 13,610 | 13,063 | 31,940 |
| Sponge iron | <i>n.a.</i> | <i>n.a.</i> | 1,627 | 1,106 | 1,542 | 1,887 |
| Spiegeleisen | 512 | 1,672 | 6,199 | 935 | 483 | 1,075 |
| Ferro-manganese | 9,103 | 8,806 | 12,807 | 14,210 | 8,297 | 12,009 |
| Ferro-chrome | 244 | 290 | 499 | 302 | 438 | 396 |
| Ferro-silicon | 2,188 | 2,665 | 3,797 | 5,249 | 4,792 | 4,556 |
| Ferro-silico-manganese | 229 | 372 | 452 | 896 | 405 | 282 |
| Ferro-molybdenum | 35 | 21 | 46 | 51 | 99 | 56 |
| Other ferro-alloys | 515 | 644 | 564 | 984 | 1,476 | 1,018 |
| Ingots, blooms, billets | 140,317 | 91,672 | 164,442 | 114,113 | 57,835 | 257,322 |
| Old and scrap | 52,373 | 64,884 | 94,016 | 36,956 | 81,097 | 88,131 |
| Norway— | | | | | | |
| Pig-iron | 11,848 | 9,566 | 9,944 | 16,813 | 8,352 | 10,036 |
| Ferro-alloys | 199 | 106 | 168 | 4,816 | 317 | 212 |
| Ingots, blooms, billets | 7,460 | 1,720 | 2,459 | 11,757 | 8,376 | 76,022 |
| Old and scrap | 1,695 | 65 | 14,055 | 52,430 | 43,490 | 33,350 |
| Poland— | | | | | | |
| Pig-iron | 11,848 | 84,014 | 13,262 | 82,389 | 1,000 | 63,186 |
| Ferro-alloys | 1,274 | 1,035 | 3,287 | 2,126 | 1,000 | 1,884 |
| Portugal— | | | | | | |
| Iron and steel ingots | 12,202 | 1,749 | 156 | 1,113 | 1,223 | 224 |
| Old and scrap | 4,174 | 2,622 | 3,656 | 1,176 | 1,108 | 1,340 |
| Roumania— | | | | | | |
| Ferro-alloys | 17,300 | 20,100 | 24,900 | 27,300 | 34,800 | 33,300 |
| Spain— | | | | | | |
| Pig-iron | 2,615 | 1,048 | 715 | 1,470 | 3,670 | 3,204 |
| Ferro-manganese | 120 | 629 | 140 | 1,421 | 1,397 | 1,483 |
| Other ferro-alloys | 675 | 1,256 | 816 | 1,911 | 2,670 | 3,468 |
| Ingots and blooms | 858 | 130 | 509 | 278 | 172,545 | 138,083 |
| Old and scrap | 169,997 | 115,641 | 113,583 | 242,981 | 301,751 | 145,188 |
| Sweden— | | | | | | |
| Pig-iron | 91,467 | 142,842 | 212,019 | 128,436 | 178,431 | 185,024 |
| Sponge iron | <i>n.a.</i> | 28 | 2,005 | 4,466 | 478 | 854 |
| Spiegeleisen | 59 | 98 | 118 | 139 | 100 | 200 |
| Ferro-manganese | 3,176 | 5,765 | 6,138 | 10,806 | 9,982 | 12,170 |
| Ferro-chrome | 2,398 | 6,318 | 13,164 | 7,288 | 3,060 | 5,059 |

IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sweden (cont.)— | | | | | | |
| Ferro-silicon and ferro-silico-manganese .. | 2,319 | 6,024 | 8,989 | 9,496 | 9,628 | 14,646 |
| Ferro-tungsten .. | 62 | 185 | 411 | 396 | 260 | 256 |
| Other ferro-alloys .. | 1,314 | 1,518 | 5,273 | 3,689 | 1,289 | 3,367 |
| Blooms, billets, etc. .. | 605 | 1,126 | 24,942 | 22,352 | 4,814 | 6,862 |
| Old and scrap .. | 58,971 | 198,871 | 297,070 | 163,907 | 28,946 | 121,059 |
| Switzerland— | | | | | | |
| Pig-iron .. | 31,501 | 34,469 | 57,284 | 74,463 | 81,618 | 63,997 |
| Ferro-alloys .. | 5,201 | 4,230 | 9,139 | 10,718 | 9,118 | 13,019 |
| Ingots, blooms, billets .. | 55,742 | 118,065 | 157,509 | 217,092 | 278,244 | 299,047 |
| Old, filings and scrap .. | 9,717 | 48,613 | 44,002 | 17,997 | 37,900 | 10,998 |
| U.S.S.R.— | | | | | | |
| Pig-iron .. | 157,100 | 135,900 | 205,100 | 132,100 | 138,800 | 225,974 |
| Ferro-alloys .. | 4,800 | 2,400 | 13,200 | 16,000 | 12,200 | 12,200 |
| Ingots .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 121,845 | 55,312 |
| Yugoslavia— | | | | | | |
| Pig-iron .. | 37,491 | 54,460 | 64,292 | 83,580 | 112,468 | 78,791 |
| Ferro-alloys .. | 537 | 854 | 1,172 | 1,042 | 1,030 | 1,460 |
| Ingots .. | 1 | 3,104 | 33,382 | 18,651 | 3,329 | 20,302 |
| Scrap .. | 36,916 | 20,010 | 63,072 | 123,102 | 78,421 | 48,026 |
| Algeria— | | | | | | |
| Pig-iron .. | 495 | 641 | 403 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Spiegeleisen and ferro-alloys .. | 775 | 808 | 898 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ingots, blooms, billets .. | 22,398 | 14,665 | 13,858 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Old and scrap .. | 12 | 1,681 | 1,456 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Congo Republic— | | | | | | |
| Pig-iron .. | 289 | 95 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-alloys .. | 710 | 285 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt— | | | | | | |
| Pig-iron and spiegeleisen .. | 16,997 | 12,209 | 19,619 | 39,933 | 121,231 | <i>n.a.</i> |
| Ferro-alloys .. | 2,587 | 4,911 | 2,049 | 2,371 | 4,680 | <i>n.a.</i> |
| Ingots, blooms, etc. .. | 2,976 | 26 | 295 | 2,950 | 16,851 | <i>n.a.</i> |
| Scrap .. | 4,068 | 7,721 | 4,783 | 8,088 | 26,244 | <i>n.a.</i> |
| Morocco— | | | | | | |
| Pig-iron .. | 831 | 560 | 824 | 901 | 863 | 1,408 |
| Ferro-alloys .. | 141 | 96 | 135 | 168 | 189 | 232 |
| Scrap, etc. .. | 9,813 | 5,456 | 1,608 | 600 | 409 | 342 |
| South Africa— | | | | | | |
| Pig-iron and steel ingots .. | 2,216 | 6 | 689 | 307 | 148 | <i>n.a.</i> |
| Ferro-silicon .. | 400 | 204 | 627 | 447 | 453 | <i>n.a.</i> |
| Other ferro-alloys .. | 175 | 240 | 189 | 379 | 417 | <i>n.a.</i> |
| Sudan— | | | | | | |
| Crude iron and steel .. | 10,416 | 9,318 | 18,454 | 17,918 | 49,806 | <i>n.a.</i> |
| Tunisia— | | | | | | |
| Pig-iron .. | 144 | 189 | 118 | 100 | 120 | <i>n.a.</i> |
| Old and scrap .. | 571 | 80 | 163 | 59 | 12 | <i>n.a.</i> |
| Cuba— | | | | | | |
| Pig-iron .. | 292 | 8,668 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ingots, blooms, etc. .. | 38,413 | 27,932 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Honduras— | | | | | | |
| Ingots, blooms, etc. .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 950 |
| Mexico— | | | | | | |
| Pig-iron .. | 5 | — | — | 429 | — | 38 |
| Ferro-manganese .. | 1,192 | 730 | 158 | 106 | 97 | 530 |
| Other ferro-alloys .. | 3,805 | 3,032 | 1,673 | 1,446 | 1,415 | 1,413 |
| Ingots, blooms, billets .. | 87,408 | 39,619 | 2,468 | 10 | 7 | 1 |
| Scrap .. | 288,036 | 378,445 | 371,683 | 351,553 | 269,289 | 142,531 |
| Tin-plate scrap .. | 6,446 | 10,804 | 12,184 | 8,942 | 12,348 | 15,163 |
| Salvador— | | | | | | |
| Ingots, blooms, billets .. | 322 | 106 | 1,218 | 2,037 | 47 | 337 |
| Scrap .. | 274 | 298 | 321 | 154 | 411 | 401 |

IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------------|-------------|-------------|-----------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States— | | | | | | |
| Pig-iron | 187,271 | 624,637 | 295,399 | 336,768 | 446,437 | 576,191 |
| Ferro-chrome | 22,124 | 83,331 | 44,096 | 24,834 | 32,428 | 25,931 |
| Ferro-manganese | 57,082 | 80,412 | 107,341 | 198,157 | 112,156 | 132,705 |
| Ferro-silicon | 10,369 | 15,613 | 15,954 | 12,259 | 14,580 | 13,055 |
| Ferro-titanium | 90 | 113 | 74 | 163 | 107 | 37 |
| Ferro-tungsten | 87 | 294 | 100 | 191 | 294 | 487 |
| Sponge iron | 5,367 | 7,665 | 4,299 | 3,928 | 5,126 | 4,338 |
| Bar-iron, slabs, blooms, etc. | 61 | 73 | 65 | 54 | 189 | 237 |
| Steel ingots, blooms, etc. | 16,016 | 81,937 | 60,502 | 159,746 | 152,326 | 232,460 |
| Scrap | 264,160 | 239,142 | 123,828 | 210,134 | 215,016 | 174,449 |
| Tin-plate scrap | 32,824 | 37,151 | 36,352 | 29,499 | 18,832 | 19,486 |
| Argentina— | | | | | | |
| Pig-iron | 93,281 | 135,456 | 129,223 | 41,270 | 12,035 | 35 |
| Ferro-manganese | — | — | 292 | 415 | 452 | 178 |
| Ferro-silicon | 17,946 | 9,578 | 13,392 | 23,796 | 706 | 173 |
| Ingots | 630,941 | 559,085 | 442,721 | 720,552 | 270,872 | 81,147 |
| Blooms and billets | <i>n.a.</i> | 397,909 | 452,830 | 684,243 | 457,262 | 160,271 |
| Old and scrap | — | 909 | 1,065 | 3,228 | 70 | 9,195 |
| Brazil— | | | | | | |
| Ferro-manganese | 63 | 819 | 45 | 171 | 44 | 58 |
| Ferro-silicon | 78 | 2,156 | 355 | 57 | 160 | 82 |
| Ferro-chrome | 250 | 269 | 585 | 881 | 895 | 985 |
| Other ferro-alloys | 193 | 71 | 155 | 295 | 304 | 113 |
| Chile— | | | | | | |
| Pig-iron | 51 | 120 | 113 | 688 | 100 | <i>n.a.</i> |
| Ferro-alloys | 237 | 42 | 172 | | | |
| Colombia— | | | | | | |
| Pig-iron | — | 5 | — | — | 9 | — |
| Ingots, etc. | 620 | 50 | — | 10 | — | 1,124 |
| Blooms, billets, etc. | 29 | 20 | — | — | 4,867 | 10 |
| Ferro-alloys | 976 | 4,058 | 3,611 | 2,105 | 1,855 | 3,634 |
| Peru— | | | | | | |
| Pig-iron | 483 | 197 | 113 | 137 | 298 | 81 |
| Ferro-alloys | 334 | 460 | 428 | 1,042 | 371 | 429 |
| Uruguay— | | | | | | |
| Ingots | 36,127 | 34,439 | 29,314 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ferro-alloys | 290 | 328 | 222 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela— | | | | | | |
| Pig-iron | 19,677 | 10,512 | 231 | 234 | 741 | 6,355 |
| Ferro-alloys | 867 | 682 | 274 | 607 | 4,556 | 1,973 |
| Scrap | — | 9,315 | — | 4 | 11,000 | <i>n.a.</i> |
| Ingots, blooms and billets | <i>n.a.</i> | 1,116 | 13,345 | 9,991 | 43,225 | 6,503 |
| Formosa— | | | | | | |
| Blooms, billets, etc. | 4,584 | 1,942 | 4,092 | 10,061 | 10,956 | 994 |
| Ferro-alloys | 884 | 326 | 584 | 1,027 | 600 | 125 |
| Old and scrap | 44,912 | 68,843 | 142,146 | 180,443 | 291,292 | 170,944 |
| Iran (a)— | | | | | | |
| Old and scrap | 1,746 | 848 | 4,129 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Israel— | | | | | | |
| Pig-iron | 14,306 | 24,044 | 21,457 | 23,094 | 18,240 | 19,854 |
| Spiegeleisen | <i>n.a.</i> | <i>n.a.</i> | 1,821 | 118 | 1,676 | 984 |
| Ferro-alloys | 477 | 1,121 | 1,820 | 839 | 4,471 | 4,467 |
| Japan— | | | | | | |
| Pig-iron | 2,290 | 272,621 | 980,531 | 2,027,909 | 1,424,473 | 1,524,730 |
| Ferro-alloys | 97 | 2 | 10 | 21,445 | 6,541 | 2,081 |
| Ingots, blooms, billets | — | 696 | 3,736 | 124,259 | 113,727 | 4,206 |
| Old and scrap | 1,326,785 | 3,987,543 | 4,355,670 | 6,900,920 | 3,577,393 | 4,518,628 |
| Jordan— | | | | | | |
| Ingots, blooms, billets | 21,486 | 29,719 | 28,296 | 31,258 | 34,702 | 40,858 |

(a) Years ended March 20 of year following that stated.

IMPORTS OF PIG-IRON, FERRO-ALLOYS, STEEL INGOTS AND CASTINGS, ETC. (cont.)

Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|--------|--------|--------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Korea (South)— | | | | | | |
| Ferro-alloys | <i>n.a.</i> | <i>n.a.</i> | 2,452 | 2,249 | 5,385 | 4,778 |
| Ingots, blooms, etc. .. | <i>n.a.</i> | <i>n.a.</i> | 6,593 | 18,737 | 1,465 | 43,719 |
| Lebanon— | | | | | | |
| Pig-iron | 2,044 | 7,191 | 5,442 | 6,968 | 4,030 | <i>n.a.</i> |
| Ferro-alloys | 5 | 63 | — | 572 | 303 | <i>n.a.</i> |
| Old and scrap | 141 | 2,449 | 2,281 | 7,554 | 1,672 | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Pig-iron | <i>n.a.</i> | <i>n.a.</i> | 17,241 | 14,097 | 10,945 | 9,944 |
| Ferro-alloys | 1,074 | 712 | 502 | 150 | 1,098 | 958 |
| Ingots, blooms, billets .. | 2,583 | 1,416 | 1,856 | 6,831 | 2,237 | 30,315 |
| Syria— | | | | | | |
| Pig-iron | 867 | 842 | 1,383 | 645 | 1,414 | 968 |
| Scrap | 686 | 1,426 | 1,337 | 1,475 | 1,952 | 2,086 |
| Thailand— | | | | | | |
| Pig-iron | 606 | 435 | 501 | 315 | 296 | 298 |
| Ferro-alloys | 495 | 791 | 418 | 723 | 602 | 607 |
| Turkey— | | | | | | |
| Pig-iron | — | 5,023 | 4,562 | 5,015 | 8,033 | 12,819 |
| Ferro-alloys | 1,049 | 369 | 955 | 3,627 | 4,400 | 1,077 |
| Blooms, billets, etc. .. | — | 12,077 | 24,265 | — | 8,079 | 73,695 |

LEAD
PRODUCTION OF LEAD ORE
(Metal content)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|----------------|----------------|----------------|------------------|----------------|----------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 4,165 | 1,809 | 1,420 | 1,587 | 903 | 990 |
| Algeria (a) .. | 487 | 378 | 199 | 6 | — | — |
| Southern Rhodesia (b) .. | 13,043 | 14,400 | 14,429 | r 15,177 | 14,592 | 19,300 |
| Northern Rhodesia .. | — | — | 17 | 31 | — | — |
| Tanganyika (c) .. | 4,465 | 5,715 | 6,185 | 345 | — | — |
| Uganda .. | 229 | 53 | — | — | — | — |
| Canada (d) .. | 166,679 | 166,693 | 183,616 | 205,745 | 192,258 | 183,838 |
| Hong Kong .. | 16 | — | — | — | — | — |
| India .. | 3,911 | 4,790 | 4,456 | r 3,997 | 4,523 | 4,248 |
| Australia .. | 328,347 | 316,293 | 308,163 | 269,656 | 370,110 | 410,328 |
| TOTAL .. | 521,342 | 510,131 | 518,485 | r 496,544 | 582,386 | 618,700 |
| sh Republic .. | — | 1,318 | 1,322 | 249 | — | — |
| OTHER COUNTRIES | | | | | | |
| Austria .. | 6,048 | 6,028 | 5,695 | 6,021 | 5,887 | 5,442 |
| Bulgaria .. | 69,500 | 79,200 | 82,400 | 78,800 | 92,900 | 87,500 |
| Czechoslovakia (e) .. | 5,900 | 6,000 | 6,400 | 6,400 | 13,300 | 13,300 |
| Finland (f) .. | 2,216 | 1,898 | 1,567 | 3,071 | 2,822 | 1,127 |
| France .. | 13,149 | 16,370 | 18,260 | 18,558 | 14,050 | 7,915 |
| Germany— | | | | | | |
| Federal Republic .. | 59,953 | 51,681 | 49,106 | 48,777 | 48,968 | 52,003 |
| East (g) .. | 7,000 | 7,000 | 7,000 | 7,000 | 7,000 | 10,000 |
| Greece .. | 10,058 | 9,840 | 9,087 | 11,382 | 13,000 | (e) 13,000 |
| Italy .. | 58,310 | 50,585 | r 48,683 | 44,304 | 37,396 | 28,482 |
| Norway .. | 2,099 | 2,220 | 2,482 | 2,254 | 2,815 | 2,944 |
| Poland .. | 32,600 | 34,800 | 38,600 | 37,600 | 37,300 | 38,000 |
| Portugal .. | 888 | 31 | 31 | 25 | 43 | 220 |
| Roumania (b) (g) .. | 11,000 | 11,000 | 11,000 | 11,000 | 12,000 | 12,000 |
| Spain .. | 68,491 | 68,992 | 71,744 | 78,449 | 69,877 | 59,889 |
| Sweden .. | 41,602 | 47,609 | 54,432 | r 62,963 | 66,715 | 67,600 |
| U.S.S.R. (b) (g) .. | 300,000 | 320,000 | 340,000 | 370,000 | 400,000 | 400,000 |
| Yugoslavia .. | 88,423 | 90,990 | 89,780 | 95,153 | 100,383 | 99,972 |
| Algeria .. | 9,906 | 10,869 | 10,294 | 9,230 | 8,897 | (g) 8,900 |
| Angola .. | (h) 88 | (h) 12 | — | — | — | — |
| Congo (Republic of) .. | 3,200 | 4,900 | 4,224 | 1,458 | 329 | 325 |
| Egypt (e) .. | 290 | 690 | 79 | r 35 | 530 | 500 |
| Morocco .. | 92,389 | 90,300 | 93,254 | 86,874 | 88,681 | 72,804 |
| South Africa .. | 32 | 150 | 121 | 91 | 5 | 14 |
| South West Africa .. | 74,818 | 69,242 | 63,800 | 62,000 | 73,038 | 81,000 |
| Tunisia .. | 22,160 | 17,860 | 17,630 | 16,560 | 12,864 | 13,620 |
| Greenland .. | 8,588 | 10,386 | 6,820 | 9,021 | 795 | — |
| Guatemala (f) .. | 7,846 | 5,697 | 8,422 | 8,445 | 953 | 737 |
| Honduras .. | 3,018 | 4,111 | 5,279 | 6,037 | 5,823 | (c) 9,744 |

(a) Excluding native production.

(b) Smelter.

(c) Exports.

(d) Lead in base bullion plus recoverable lead in ores exported.

(e) United States Bureau of Mines' estimate.

(f) Amount estimated as recoverable.

(g) Estimated.

(h) Including lead in vanadium-lead ore as follows (long tons): 1958—80; 1959—12.

PRODUCTION OF LEAD ORE (cont.)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Mexico (a) | 198,734 | 187,668 | 187,658 | 178,462 | 190,245 | 186,986 |
| United States (a) .. | 238,729 | 228,202 | 220,240 | 233,858 | 211,568 | 226,222 |
| Argentina | 29,000 | r 30,000 | r 23,000 | 27,000 | 28,000 | 26,000 |
| Bolivia (c) | 22,432 | 21,652 | 21,031 | 20,002 | 18,184 | 19,622 |
| Brazil (e) | 4,700 | 6,000 | 10,900 | 13,700 | 15,500 | 15,500 |
| Chile | 2,514 | 2,285 | 2,405 | 2,011 | 1,431 | 959 |
| Colombia (d) | 760 | 509 | 629 | 645 | 392 | 8 |
| Ecuador | 118 | 105 | 106 | 109 | 122 | 162 |
| Peru | 132,043 | (a) 113,396 | (a) 129,551 | (a) 134,244 | (a) 126,152 | 144,033 |
| Burma | 18,911 | 19,000 | 17,000 | 16,500 | 20,000 | 25,700 |
| China (e) | 50,000 | r 70,000 | 80,000 | 90,000 | 90,000 | 100,000 |
| Iran (e) (f) | 16,700 | r 14,500 | r 14,500 | r 14,500 | 10,000 | 10,000 |
| Japan | 36,114 | 35,575 | 38,908 | 45,549 | 52,611 | 51,891 |
| Korea (South) | 1,200 | r 2,300 | 900 | 850 | 1,400 | 1,900 |
| Korea (North) (b) .. | 40,000 | 45,000 | 50,000 | 50,000 | 50,000 | 50,000 |
| Philippine Republic .. | 1,264 | 349 | 120 | 99 | 81 | 70 |
| Thailand | 979 | 1,500 | 2,000 | 2,300 | 2,500 | 2,200 |
| Turkey | r 2,902 | r 1,162 | r 1,634 | r 3,159 | 3,838 | 2,510 |
| TOTAL | 1,900,000 | 1,800,000 | 1,800,000 | 1,900,000 | 1,900,000 | 1,900,000 |
| WORLD'S TOTAL .. | 2,400,000 | 2,300,000 | 2,400,000 | 2,400,000 | 2,500,000 | 2,600,000 |

(a) Amount estimated as recoverable.

(b) Estimated.

(c) Exports of ore (metal content) and metal.

(d) Imports into the United States.

(e) United States Bureau of Mines' estimate.

(f) Years ended March 20 of year following that stated.

METAL PRODUCTION OF LEAD

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (h) .. | 7,155 | 8,765 | 15,399 | 24,784 | 29,152 | 27,942 |
| Northern Rhodesia .. | 13,043 | 14,400 | 14,429 | r 15,177 | 14,592 | 19,300 |
| Canada | 118,738 | 120,800 | 141,527 | 153,422 | 135,908 | 138,393 |
| India | 3,334 | 3,895 | 3,686 | 3,606 | 2,804 | 3,481 |
| Australia (c) .. | 248,645 | 236,115 | 242,546 | 210,354 | 263,235 | 305,266 |
| TOTAL | 390,915 | 384,000 | 417,587 | r 407,343 | 455,691 | 494,382 |
| OTHER COUNTRIES | | | | | | |
| Austria (b) | 11,386 | 11,292 | 11,211 | 11,260 | 11,031 | 10,100 |
| Belgium (b) | 92,324 | 87,044 | 91,241 | 98,312 | 91,685 | 96,878 |
| Bulgaria | 25,658 | 32,223 | 39,768 | 40,267 | 43,017 | 50,521 |
| Czechoslovakia (a) | 9,000 | 9,000 | 9,000 | 9,000 | 14,000 | 15,000 |
| France | 69,500 | 68,700 | 73,300 | 70,300 | 69,400 | 76,400 |
| Germany—Federal | 132,130 | 147,172 | 145,332 | 138,400 | 146,130 | 137,529 |
| do. East (a) (b) | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 |
| Greece | 3,866 | 3,680 | 3,042 | 2,917 | 2,900 | 3,500 |
| Italy | 46,888 | r 43,346 | r 40,993 | 44,437 | 41,323 | 41,272 |
| Poland | 35,200 | 38,100 | 39,100 | 39,200 | 40,100 | 38,300 |
| Portugal | 1,644 | 782 | 891 | 1,485 | 1,988 | 1,100 |
| Roumania (a) .. | 11,000 | 11,000 | 11,000 | 11,000 | 12,000 | 12,000 |
| Spain | 69,401 | 67,408 | 70,057 | 76,498 | 71,131 | 58,904 |
| Sweden | 32,548 | 36,267 | 43,850 | 38,166 | 38,158 | 40,200 |
| U.S.S.R. (a) .. . | 300,000 | 320,000 | 340,000 | 370,000 | 400,000 | 400,000 |
| Yugoslavia .. . | 82,950 | 84,046 | 87,735 | 88,973 | 96,379 | 102,529 |
| Morocco | 32,601 | 28,000 | 30,242 | 24,102 | 23,762 | 18,464 |
| South West Africa | — | — | — | — | — | 558 |
| Tunisia | 24,748 | 21,464 | 19,548 | 18,160 | 15,578 | 12,600 |
| Guatemala | — | 50 | 179 | 55 | 62 | 46 |
| Mexico | 192,622 | 185,967 | 164,019 | 187,356 | 178,734 | 182,002 |
| United States (e) | 419,090 | 304,362 | 341,461 | 401,397 | 335,736 | 352,439 |
| Argentina | 32,300 | 33,600 | 28,900 | 26,100 | 24,000 | 23,621 |
| Bolivia (f) | 784 | 223 | 46 | 4 | — | — |
| Brazil | 4,269 | 5,438 | 9,819 | 12,329 | 14,070 | (d) 13,700 |
| Chile | 287 | 796 | 589 | 472 | 250 | 217 |
| Peru | 63,433 | 55,910 | 72,970 | 75,226 | 67,282 | 81,765 |
| Burma | 17,098 | 19,337 | 13,161 | 15,514 | 17,110 | 17,458 |
| China (a) (b) .. | 60,000 | 75,000 | 70,000 | r 85,000 | 85,000 | 85,000 |
| Iran (g) | 935 | (d) 900 | 1,143 | 1,283 | 393 | (d) 390 |
| Japan | 37,869 | 59,957 | 68,273 | 74,532 | 86,371 | 99,460 |
| Korea (North) (a) | 20,000 | 25,000 | 25,000 | 40,000 | 40,000 | 40,000 |
| Turkey | 2,657 | 1,612 | 393 | 623 | 627 | 1,851 |
| TOTAL | 1,900,000 | 1,800,000 | 1,900,000 | 2,000,000 | 2,000,000 | 2,000,000 |
| WORLD'S TOTAL .. | 2,300,000 | 2,200,000 | 2,300,000 | 2,400,000 | 2,400,000 | 2,500,000 |

(a) Estimated.

(b) Including secondary metal.

(c) Including lead in base bullion as follows:

| Year | Long tons | Year | Long tons |
|--------------|-----------|--------------|-----------|
| 1958 | 57,171 | 1961 | 48,090 |
| 1959 | 50,310 | 1962 | 73,110 |
| 1960 | 52,723 | 1963 | 80,661 |

(d) United States Bureau of Mines' estimate.

(e) In addition the recovery of secondary lead was as follows:

| Year | Long tons | Year | Long tons |
|--------------|-----------|--------------|-----------|
| 1958 | 358,738 | 1961 | 404,279 |
| 1959 | 403,024 | 1962 | 396,609 |
| 1960 | 419,556 | 1963 | 440,599 |

(f) Exports.

(g) Years ended March 20 of year following that stated.

(h) Source: British Bureau of Non-Ferrous Metal Statistics.

EXPORTS OF LEAD, ETC.*

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|---------|---------|---------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unwrought | 12,732 | 9,340 | 15,317 | 25,913 | 32,076 | 38,657 |
| do. alloys | 2,383 | 2,796 | 2,697 | 3,086 | 3,570 | 3,657 |
| Semi-manufactures (a) | 2,764 | 2,613 | 3,064 | 2,489 | 2,049 | 1,963 |
| White lead | 1,815 | 1,769 | 2,179 | 2,140 | 3,614 | 1,690 |
| Red lead, etc | 3,815 | 3,532 | 3,811 | 3,876 | 3,928 | 4,050 |
| Nigeria— | | | | | | |
| Ore and concentrates .. | 780 | 1,208 | 789 | 522 | 610 | 195 |
| Rhodesia and Nyasaland— | | | | | | |
| Ore | — | 10 | 57 | 15 | — | — |
| Unwrought | 10,938 | 13,124 | 12,052 | 10,951 | 13,916 | 14,029 |
| Tanganyika— | | | | | | |
| Concentrates (Pb content) | 4,465 | 5,715 | 6,185 | 345 | — | — |
| Uganda— | | | | | | |
| Ore and concentrates .. | 100 | 200 | 67 | — | — | — |
| Canada— | | | | | | |
| Ore (Pb content) | 48,287 | 47,970 | 45,835 | 63,363 | 53,120 | 47,996 |
| Unwrought | 82,456 | 82,368 | 86,115 | 105,033 | 112,323 | 86,736 |
| Scrap | 385 | 2,701 | 5,971 | (a) 2,238 | (a) 1,589 | (a) 3,561 |
| White lead | 591 | 745 | 972 | n.a. | n.a. | n.a. |
| Hong Kong— | | | | | | |
| Ore and concentrates .. | 117 | — | — | — | — | — |
| Unwrought (a) | 267 | 382 | 578 | 281 | 700 | 667 |
| Scrap | 104 | 70 | 67 | 225 | 45 | 13 |
| Semi-manufactures (a) | 6 | 6 | 9 | 4 | — | 1 |
| Malaya— | | | | | | |
| Unwrought (a) | 686 | 884 | 537 | 593 | 284 | 87 |
| Semi-manufactures (a) | 20 | 19 | 24 | 24 | 37 | 37 |
| Australia (b)— | | | | | | |
| Ores and concentrates (Pb content) | 72,515 | 69,574 | 60,054 | 60,655 | 59,802 | 106,289 |
| Base bullion (Pb content) | 48,166 | 59,273 | 48,920 | 53,365 | 46,140 | 77,564 |
| Unwrought | 164,060 | 143,828 | 121,420 | 127,055 | 199,942 | 169,264 |
| do. alloys | 447 | 365 | 921 | 4,933 | 1,390 | 1,495 |
| Scrap (a) | 6,573 | 2,970 | 1,241 | 531 | 6 | 73 |
| Semi-manufactures .. | 99 | 93 | 97 | 1,140 | 351 | 1,106 |
| Red and white lead, etc. | 1,477 | 1,489 | 1,798 | 2,061 | 2,468 | 2,373 |
| Irish Republic— | | | | | | |
| Ore and concentrates .. r | 832 | 2,121 | 2,245 | r 1,249 | — | — |
| Scrap | r 415 | 356 | 285 | 196 | 912 | 283 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unwrought (a) | 3,205 | 3,336 | 3,134 | 2,829 | 2,680 | 1,733 |
| Scrap | 15 | — | — | 10 | — | 6 |
| Red and white lead, etc. | 461 | 678 | 1,199 | 961 | 611 | 1,078 |

*In these tables the description "unwrought" lead corresponds to item 685.1 of the Standard International Trade Classification (Revised) and comprises base bullion, pigs, unwrought bars, etc. "Semi-manufactures" corresponds to S.I.T.C.(R). 685.2 and includes foil and powder as well as wrought bars, wire, sheets, tubes, pipes, etc.

(a) Including alloys.

(b) Years ended June 30 of that stated.

EXPORTS OF LEAD, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------|--------|--------|--------|--------|--------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E. U.— | | | | | | |
| Unwrought | 64,280 | 53,587 | 50,412 | 53,613 | 57,781 | 63,833 |
| do. alloys | 1,880 | 2,203 | 2,149 | 2,492 | 2,923 | 5,610 |
| Scrap | 2,641 | 555 | 1,668 | 1,191 | 2,031 | 2,088 |
| Semi-manufactures (a) | 3,807 | 5,016 | 4,327 | 6,479 | 6,994 | 6,351 |
| Red and white lead, etc. | 3,268 | 3,163 | 3,970 | 4,547 | 4,922 | 4,406 |
| Denmark— | | | | | | |
| Unwrought | 9,869 | 7,967 | 4,055 | 5,230 | 1,091 | 1,443 |
| do. alloys | 3,731 | 3,773 | 4,398 | 3,251 | 3,267 | 2,566 |
| Scrap | 180 | 24 | 103 | — | — | — |
| Semi-manufactures (a) | 17 | 49 | 74 | 168 | 218 | 314 |
| Finland— | | | | | | |
| Unwrought (a) | 1,222 | 400 | 369 | 124 | 57 | 2 |
| France— | | | | | | |
| Ore | 1,983 | 4,536 | 19,170 | 8,367 | 4,837 | 123 |
| Unwrought | 15,171 | 11,478 | 6,243 | 4,699 | 3,408 | 2,792 |
| do. alloys | 1,407 | 1,462 | 942 | 1,382 | 1,993 | 16,171 |
| Scrap | 3 | 56 | 563 | 1,642 | 7,432 | 8,237 |
| Semi-manufactures (a) | 1,215 | 1,529 | 1,256 | 1,148 | 757 | 709 |
| Red and white lead, etc. | 4,692 | 6,430 | 7,286 | 4,850 | 4,809 | 4,897 |
| Germany (Federal)— | | | | | | |
| Ore | 176 | 26 | — | — | 5 | 10,054 |
| Unwrought (a) | 27,215 | 27,276 | 24,529 | 25,271 | 22,482 | 17,684 |
| Scrap (a) | 144 | 23 | 702 | 2,770 | 5,066 | 8,690 |
| Semi-manufactures (a) | 3,209 | 4,103 | 3,332 | 4,293 | 3,268 | 2,950 |
| Red and white lead .. | 7,861 | 10,975 | 9,722 | 10,725 | 9,884 | 9,943 |
| Greece— | | | | | | |
| Ore | 16,952 | 14,299 | 16,159 | 14,185 | 12,066 | 9,430 |
| Unwrought | 330 | — | 6 | 8 | — | — |
| Italy— | | | | | | |
| Ore | 13,611 | 10,437 | 7,240 | 4,811 | 5,442 | 4,370 |
| Unwrought (a) | 1,069 | 286 | 18 | 4 | 89 | 112 |
| Semi-manufactures (a) | 25 | 20 | 1,281 | 184 | 74 | 400 |
| Red and white lead .. | 24 | 178 | 57 | 1,378 | 1,434 | 942 |
| Netherlands— | | | | | | |
| Unwrought | 3,769 | 5,417 | 6,333 | 7,243 | 5,859 | 5,381 |
| do. alloys | 956 | 683 | 1,466 | 1,072 | 1,207 | 1,843 |
| Scrap (a) | 772 | 1,013 | 1,655 | 3,178 | 2,683 | 3,196 |
| Semi-manufactures (a) | 1,892 | 3,576 | 3,547 | 2,994 | 2,477 | 2,882 |
| Red and white lead .. | 1,920 | 1,811 | 1,416 | 1,520 | 2,038 | 1,664 |
| Norway— | | | | | | |
| Ore | 3,478 | 3,400 | 4,364 | 3,386 | 5,070 | 3,378 |
| Unwrought (a) | 184 | 285 | 215 | 481 | 251 | 183 |
| Semi-manufactures (a) | 233 | 273 | 179 | 192 | 341 | 412 |
| Scrap | 1,672 | 1,677 | 2,050 | 2,356 | 2,369 | 2,692 |
| Portugal— | | | | | | |
| Unwrought (a) | 39 | 47 | 26 | 8 | 5 | 11 |
| Semi-manufactures (a) | | | 50 | 20 | 22 | 37 |
| Red and white lead .. | | | 6 | 9 | 53 | 42 | 41 | 10 |
| Spain— | | | | | | |
| Ore | — | — | 2,490 | 1,165 | 533 | 20 |
| Unwrought (a) | 23,093 | 29,387 | 37,762 | 35,795 | 28,791 | 11,444 |
| Semi-manufactures (a) | 50 | 1,036 | 3,100 | 39 | 152 | 42 |
| Sweden— | | | | | | |
| Ore | 12,425 | 12,296 | 9,028 | 22,443 | 41,966 | 41,385 |
| Unwrought | 16,693 | 18,770 | 17,352 | 14,306 | 12,686 | 11,820 |
| do. alloys | n.a. | 1,903 | 2,177 | 1,576 | 1,567 | 2,111 |
| Scrap | 52 | 157 | 231 | 167 | 52 | 170 |
| Semi-manufactures (a) | 11 | 6 | 154 | 196 | 233 | 27 |
| Red and white lead, etc. | 1,267 | 1,462 | 1,658 | 1,606 | 1,352 | 1,469 |

(a) Including alloys.

EXPORTS OF LEAD, ETC. (cont.)

Long ton

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|---------|---------|---------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Switzerland— | | | | | | |
| Unwrought | 61 | 83 | — | 6 | 1 | 15 |
| Scrap | 1,956 | 2,445 | 2,032 | 2,092 | 2,377 | 3,405 |
| Semi-manufactures | 25 | 1 | 83 | 78 | 101 | 105 |
| U.S.S.R.— | | | | | | |
| Unwrought | 61,200 | 56,300 | 68,700 | 100,700 | 92,900 | 108,460 |
| Yugoslavia— | | | | | | |
| Unwrought | 61,438 | 57,896 | 60,675 | 50,128 | 51,251 | 51,766 |
| do. alloys | 344 | 2,072 | 1,670 | 1,260 | 863 | 828 |
| Semi-manufactures (a) | 486 | 3,134 | 4,660 | 6,715 | 14,424 | 7,652 |
| Red lead | 187 | 154 | 307 | 245 | 411 | 695 |
| Algeria— | | | | | | |
| Ore | 11,290 | 8,566 | 5,729 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Unwrought (a) | 53 | 39 | 51 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Scrap | 2,286 | 2,485 | 3,692 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Red and white lead | 2 | 5 | 14 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Angola— | | | | | | |
| Ore | 9 | — | — | — | — | — |
| Congo (Republic of)— | | | | | | |
| Ore | 5,643 | 8,568 | 7,189 | 2,603 | — | — |
| Morocco— | | | | | | |
| Ore | 116,787 | 100,519 | 144,353 | 96,789 | 91,975 | 135,410 |
| Unwrought | 26,558 | 29,102 | 26,359 | 23,411 | 23,758 | 11,034 |
| do. alloys | 114 | 277 | 8 | 39 | 20 | 2,760 |
| Scrap | 44 | — | 86 | 32 | — | — |
| South Africa— | | | | | | |
| Ore | — | — | — | — | — | <i>n.a.</i> |
| Unwrought | 49 | 63 | 92 | 67 | 36 | <i>n.a.</i> |
| Semi-manufactures | 47 | 1 | 4 | 2 | — | <i>n.a.</i> |
| South West Africa— | | | | | | |
| Complex concentrates (Pb content) | 73,692 | 61,192 | 60,542 | 57,386 | 69,115 | 67,00 |
| Lead-vanadium concentrates | 3,578 | 4,612 | 7,716 | 8,296 | 7,594 | 10,51 |
| Tunisia— | | | | | | |
| Unwrought (a) | 23,126 | 19,463 | 16,446 | 18,745 | 14,993 | <i>n.a.</i> |
| Scrap | 342 | 284 | 457 | 415 | 329 | <i>n.a.</i> |
| Greenland— | | | | | | |
| Ore | 9,435 | 10,654 | 10,602 | 12,567 | 2,290 | — |
| Guatemala— | | | | | | |
| Ore | 14,565 | 2,070 | 8,901 | 15,139 | 2,929 | <i>n.a.</i> |
| Honduras— | | | | | | |
| Ore and concentrates | 5,486 | 7,632 | 5,407 | 7,847 | 8,438 | 9,743 |
| Mexico— | | | | | | |
| Ores and concentrates | 2,343 | 1,654 | 3,505 | 3,897 | 4,344 | 2,894 |
| Unwrought— | | | | | | |
| Refined | 141,170 | 133,913 | 129,487 | 148,155 | 121,557 | 122,433 |
| Base bullion | 1,721 | 1,562 | 11,806 | 17,385 | 10,408 | 11,752 |
| Antimonial | 5,738 | 12,138 | 1,440 | 1,578 | 335 | 368 |
| Semi-manufactures | 595 | — | — | — | — | — |
| Red and white lead | 8,775 | 12,168 | 14,721 | 18,151 | 22,356 | 29,114 |

(a) Including alloys.

EXPORTS OF LEAD, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|--------|--------|--------|---------|---------|--------|
| OTHER COUNTRIES | | | | | | |
| (cont.) | | | | | | |
| United States— | | | | | | |
| Ore, mattes and base bullion (Pb content) .. | 904 | 200 | 1,158 | 3,961 | 2,588 | n.a. |
| Unwrought (a) .. | 1,213 | 2,460 | 1,756 | 1,904 | 1,882 | 972 |
| Scrap .. | 906 | 1,019 | 2,302 | 4,610 | 2,197 | 2,162 |
| Semi-manufactures (a) | 776 | 958 | 460 | 611 | 836 | 710 |
| Red and white lead, etc. | 3,076 | 2,838 | 1,891 | 2,056 | 1,714 | n.a. |
| Argentina— | | | | | | |
| Ore .. | 9 | — | — | — | — | 266 |
| Unwrought .. | — | — | — | — | 1 | 2 |
| Bolivia— | | | | | | |
| Ore, etc. (Pb content) .. | 21,648 | 21,429 | 20,985 | 19,998 | 18,184 | 19,622 |
| Unwrought .. | 784 | 223 | 46 | 4 | — | — |
| Chile— | | | | | | |
| Ore and concentrates .. | 4,883 | 695 | 2,645 | r 2,850 | 2,128 | n.a. |
| Colombia— | | | | | | |
| Ore .. | 597 | 952 | 1,107 | — | — | — |
| Ecuador— | | | | | | |
| Concentrates .. | 269 | 692 | 979 | 410 | n.a. | 997 |
| Peru— | | | | | | |
| Ore and concentrates (Pb content) .. | 70,574 | 58,443 | 57,051 | 64,481 | 125,901 | 64,496 |
| Unwrought (Pb content) | | | | | | |
| Refined .. | 63,400 | 54,612 | 58,789 | 75,510 | 71,734 | 54,103 |
| Unrefined .. | 213 | — | 62 | 221 | 224 | 37 |
| Burma— | | | | | | |
| Ore .. | 911 | 900 | 648 | 396 | 450 | 576 |
| Unwrought .. | 14,929 | 21,541 | 13,448 | 12,363 | 18,643 | 16,579 |
| do. alloys .. | 307 | 443 | 198 | 327 | 468 | 486 |
| Ore .. | 22,182 | 23,875 | 12,298 | 20,938 | 30,045 | 28,048 |
| Japan— | | | | | | |
| Unwrought (a) .. | 93 | 66 | 69 | 73 | 68 | 108 |
| Semi-manufactures (a) | 225 | 131 | 145 | 813 | 339 | 3,727 |
| Red and white lead .. | 83 | 19 | 13 | 18 | (c) 17 | (c) 4 |
| Korea (South)— | | | | | | |
| Ore .. | 2,401 | 1,721 | 1,805 | 1,596 | 1,420 | 4,903 |
| Philippine Republic— | | | | | | |
| Ores and concentrates .. | 772 | 177 | — | — | — | — |
| Thailand— | | | | | | |
| Ore .. | 3,083 | 3,248 | 4,733 | 5,002 | 4,262 | 4,998 |
| Turkey - | | | | | | |
| Ore .. | — | 3,199 | 2,323 | 2,313 | 2,411 | 5,008 |

(a) Including alloys.

(b) Years ended March 20 following that stated.

(c) Excluding white lead.

IMPORTS OF LEAD, ETC.*

Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------------|-------------|---------|---------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates (Pb content) (c) .. | <i>n.a.</i> | <i>n.a.</i> | 22,303 | 22,939 | 26,647 | 25,404 |
| Unwrought (a) .. | 162,419 | 175,242 | 208,820 | 179,865 | 180,282 | 179,622 |
| Scrap (a) .. | 1,812 | 2,098 | 2,671 | 886 | 2,135 | 1,593 |
| Semi-manufactures (a) | 248 | 216 | 507 | 475 | 203 | 232 |
| Channel Islands— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 109 | 119 | 131 | 150 | 139 | 78 |
| Ghana— | | | | | | |
| Unwrought (a) .. | 371 | 277 | 236 | 52 | 40 | 18 |
| Semi-manufactures (a) | | | | 291 | 235 | 383 |
| Kenya— | | | | | | |
| Unwrought (a) .. | 90 | 82 | 52 | 80 | 119 | 104 |
| Semi-manufactures (a) | 18 | 12 | 13 | 10 | 17 | 7 |
| Mauritius— | | | | | | |
| Unwrought (a) .. | 21 | 1 | — | 10 | 6 | 1 |
| Semi-manufactures (a) | 69 | 43 | 30 | 37 | 34 | 25 |
| Nigeria— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 527 | 537 | 595 | 505 | 1,179 | 414 |
| Rhodesia and Nyasaland— | | | | | | |
| Semi-manufactures (a) | 77 | 100 | 129 | 106 | 67 | 84 |
| Red and white lead, etc. | 103 | 164 | 190 | 137 | 127 | 117 |
| Sierra Leone— | | | | | | |
| Semi-manufactures (a) | 10 | 13 | 32 | 92 | 45 | 36 |
| Tanganyika— | | | | | | |
| Unwrought (a) .. | 17 | 7 | 5 | 11 | 21 | 64 |
| Semi-manufactures (a) | 16 | 7 | 8 | 7 | 10 | 6 |
| Uganda— | | | | | | |
| Unwrought (a) .. | 19 | 24 | 48 | 10 | 24 | 8 |
| Semi-manufactures (a) | 10 | 2 | 4 | 6 | 9 | 5 |
| Barbados— | | | | | | |
| Unwrought (a) .. | — | 25 | 1 | — | <i>n.a.</i> | 4 |
| Semi-manufactures (a) | 60 | 55 | 152 | 51 | 34 | 80 |
| Jamaica— | | | | | | |
| Unwrought (a) .. | 115 | 41 | 1 | 80 | 110 | 134 |
| Semi-manufactures (a) | 135 | 127 | 118 | 71 | 53 | 76 |
| Trinidad and Tobago— | | | | | | |
| Unwrought (a) .. | — | 6 | 13 | 14 | 2 | <i>n.a.</i> |
| Semi-manufactures (a) | 45 | 46 | 96 | 39 | 46 | <i>n.a.</i> |
| Red and white lead, etc. | 33 | 31 | 23 | 16 | 13 | <i>n.a.</i> |
| Canada— | | | | | | |
| Unwrought .. | 1,489 | 1,616 | 553 | 1,001 | 516 | 1,555 |
| Scrap .. | 109 | 221 | 137 | 83 | 41 | 49 |
| Semi-manufactures, etc. | 44 | 117 | 40 | 56 | 61 | 87 |
| Red and white lead, etc. | 1,524 | 1,346 | 1,090 | 1,008 | 921 | 1,122 |
| British Guiana— | | | | | | |
| Semi-manufactures (a) | 25 | — | 22 | 29 | 19 | <i>n.a.</i> |
| Ceylon— | | | | | | |
| Unwrought (a) .. | 163 | 97 | 62 | 100 | 156 | 428 |
| Semi-manufactures (a) | 16 | 33 | (b) 1 | 59 | 91 | 4 |
| Cyprus— | | | | | | |
| Semi-manufactures (a) | 32 | 54 | 33 | 125 | 164 | 63 |
| Hong Kong— | | | | | | |
| Unwrought (a) .. | 123 | 336 | 228 | 310 | 515 | 259 |
| Scrap .. | 28 | 38 | 20 | 11 | 1 | 19 |
| Semi-manufactures (a) | 155 | 88 | 92 | 166 | 107 | 113 |

*See footnote on p. 184 concerning the descriptions "unwrought" lead and "semi-manufactures" used in these tables.

(a) Including alloys.

(b) Excess of re-exports.

(c) Source: British Bureau of Non-Ferrous Metal Statistics.

IMPORTS OF LEAD, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|---------|---------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| India— | | | | | | |
| Ore | 110 | 130 | (b) 100 | (b) 79 | (b) 30 | (b) 9 |
| Unwrought | 21,105 | 23,034 | (b) 23,694 | (b) 27,781 | (b) 33,088 | (b) 35,955 |
| do. alloys | 310 | 642 | (b) 376 | (b) 284 | (b) 346 | (b) 511 |
| Semi-manufactures (a) | 65 | 85 | (b) 177 | (b) 405 | (b) 96 | (b) 166 |
| Litharge, red and white lead, etc. | 2 | 23 | (b) 9 | (b) 24 | (b) 50 | (b) 35 |
| Malaya— | | | | | | |
| Unwrought (a) | 204 | 296 | 454 | 670 | 324 | 290 |
| Semi-manufactures (a) | 117 | 73 | 151 | 156 | 570 | 615 |
| Pakistan— | | | | | | |
| Ore | 70 | 98 | 306 | 438 | 233 | 255 |
| Unwrought (a) | 247 | 588 | 547 | 1,448 | n.a. | 1,126 |
| Semi-manufactures (a) | 244 | 35 | 104 | 248 | n.a. | 15 |
| Litharge, red and white lead, etc. | 564 | 297 | 431 | 561 | 148 | 124 |
| Sabah— | | | | | | |
| Semi-manufactures (a) | 17 | 19 | 23 | 25 | 24 | n.a. |
| Australia (c)— | | | | | | |
| Unwrought and semi-manufactures (a) | 2 | 6 | 10 | 2,395 | 4,296 | 2,283 |
| Red and white lead, etc. | 28 | 97 | 86 | 162 | 137 | 97 |
| Fiji— | | | | | | |
| Unwrought and semi-manufactures (a) | 24 | 10 | 32 | 47 | 78 | 80 |
| New Zealand— | | | | | | |
| Unwrought (a) | 5,218 | 3,347 | 4,337 | 5,215 | 4,379 | } 6,433 |
| Semi-manufactures (a) | 5 | 4 | 6 | 6 | 111 | |
| Red and white lead, etc. | 1,575 | 1,506 | 1,415 | 1,030 | 1,056 |  | n.a. |
| Irish Republic— | | | | | | |
| Unwrought (a) | 258 | 419 | 359 | 497 | 493 | 614 |
| Semi-manufactures (a) | 230 | 130 | 106 | 77 | 44 | 87 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 5,492 | 5,118 | 4,921 | 4,577 | 4,217 | 3,642 |
| Unwrought (a) | 8,169 | 9,367 | 12,666 | 10,277 | 12,647 | 12,698 |
| Scrap | 11 | — | 261 | 233 | 65 | 43 |
| Semi-manufactures (a) | 141 | 215 | 375 | 243 | 232 | 306 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 169,112 | 151,180 | 137,252 | 152,380 | 149,660 | 123,621 |
| Unwrought | 15,520 | 17,469 | 19,374 | 13,954 | 19,048 | 18,028 |
| do. alloys | 416 | 365 | 853 | 169 | 754 | 670 |
| Scrap | 796 | 1,109 | 1,185 | 4,599 | 3,522 | 3,988 |
| Semi-manufactures (a) | 126 | 417 | 795 | 508 | 632 | 812 |
| Red and white lead, etc. | 1,305 | 1,374 | 1,214 | 1,050 | 1,139 | 1,069 |
| Denmark— | | | | | | |
| Unwrought | 22,250 | 23,052 | 16,620 | 18,878 | 15,412 | 13,147 |
| do. alloys | 47 | 949 | 307 | 107 | 308 | 581 |
| Scrap | 3,525 | 4,813 | 4,972 | 3,692 | 3,789 | 3,631 |
| Semi-manufactures (a) | 43 | 100 | 210 | 294 | 625 | 871 |
| Red and white lead | 741 | 1,838 | 1,985 | 1,988 | 1,637 | 1,540 |
| Finland— | | | | | | |
| Unwrought (a) | 9,691 | 10,116 | 14,395 | 10,904 | 10,655 | 15,254 |
| Semi-manufactures (a) | 733 | 1,009 | 833 | 1,275 | 969 | 685 |
| Red and white lead, etc. | 558 | 582 | 471 | 443 | 548 | 570 |

(a) Including alloys.

(b) Years ended March 31 following that stated.

(c) Years ended June 30 of that stated.

IMPORTS OF LEAD, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| France— | | | | | | |
| Ore | 105,988 | 102,495 | 99,342 | 90,894 | 96,096 | 130,182 |
| Unwrought | 48,895 | 44,364 | 55,713 | 63,602 | 63,725 | 64,404 |
| do. alloys | 1,442 | 810 | 1,220 | 1,858 | 2,602 | 2,316 |
| Scrap | 5,562 | 3,675 | 4,337 | 3,034 | 2,313 | 3,938 |
| Semi-manufactures (a) | 83 | 244 | 66 | 101 | 164 | 136 |
| Red and white lead, etc. | 418 | 1,613 | 1,978 | 2,110 | 2,511 | 2,764 |
| Germany (Federal)— | | | | | | |
| Ore | 127,821 | 140,707 | 151,751 | 144,394 | 142,462 | 107,473 |
| Unwrought (a) | 47,089 | 66,049 | 86,404 | 75,330 | 98,382 | 98,974 |
| Scrap (a) | 478 | 1,050 | 1,028 | 1,243 | 1,265 | 1,226 |
| Semi-manufactures (a) | 41 | 98 | 198 | 470 | 1,214 | 1,815 |
| Red and white lead, etc. | 1,919 | 2,865 | 3,953 | 4,419 | 4,429 | 3,355 |
| Greece— | | | | | | |
| Unwrought | 721 | 667 | 255 | 453 | 1,402 | 492 |
| Hungary— | | | | | | |
| Unwrought | 7,712 | 8,185 | 10,540 | 11,020 | 10,286 | 10,951 |
| Iceland— | | | | | | |
| Unwrought | 141 | 165 | 176 | 224 | 278 | 255 |
| Semi-manufactures (a) | 24 | 29 | 27 | 32 | 30 | 70 |
| Red and white lead .. | 22 | 28 | 24 | 21 | 11 | 19 |
| Italy— | | | | | | |
| Ore | 255 | 77 | 5,191 | 8,824 | 8,027 | 20,635 |
| Unwrought (a) | 13,357 | 16,128 | 24,560 | 38,608 | 47,120 | 38,350 |
| Scrap | 4,216 | 2,842 | 7,242 | 13,194 | 20,298 | 21,044 |
| Semi-manufactures (a) | 36 | 67 | 894 | 2,862 | 4,636 | 3,752 |
| Red and white lead .. | 305 | 373 | 427 | 642 | 2,158 | 3,839 |
| Netherlands— | | | | | | |
| Ore | 12 | 4 | 3 | 1 | 3 | — |
| Unwrought | 31,140 | 35,557 | 33,291 | 41,707 | 39,738 | 31,846 |
| do. alloys | 2,065 | 9,300 | 11,932 | 13,853 | 10,007 | 8,086 |
| Scrap (a) | 3,121 | 2,238 | 2,795 | 1,287 | 1,178 | 3,649 |
| Semi-manufactures (a) | 1,004 | 2,005 | 2,191 | 2,592 | 2,322 | 2,672 |
| Red and white lead .. | 5,309 | 5,494 | 6,014 | 5,952 | 6,545 | 4,029 |
| Norway— | | | | | | |
| Unwrought | 9,551 | 8,177 | 8,606 | 8,454 | 7,990 | 9,348 |
| do. alloys | 1,088 | 1,378 | 1,479 | 1,224 | 1,381 | 1,692 |
| Semi-manufactures (a) | 937 | 848 | 1,014 | 1,083 | 1,334 | 868 |
| Red and white lead .. | 532 | 659 | 718 | 700 | 714 | 847 |
| Poland— | | | | | | |
| Unwrought | 6,822 | 14,294 | 10,932 | 14,800 | n.a. | 13,352 |
| Portugal— | | | | | | |
| Unwrought (a) | 6,276 | 5,429 | 5,708 | 6,593 | 6,385 | 7,784 |
| Scrap | 80 | 56 | 27 | 37 | 47 | 44 |
| Semi-manufactures (a) | 1 | 75 | 73 | 12 | 4 | 10 |
| Red and white lead, etc. | 150 | 116 | 166 | 172 | 145 | 119 |
| Sweden— | | | | | | |
| Unwrought | 11,185 | 9,384 | 9,474 | 8,688 | 11,782 | 6,508 |
| do. alloys | n.a. | 802 | 1,405 | 1,264 | 893 | 1,577 |
| Scrap | 121 | 142 | 375 | 325 | 307 | 584 |
| Semi-manufactures (a) | 1,426 | 2,066 | 2,068 | 1,619 | 2,333 | 2,038 |
| Red and white lead .. | 1,103 | 1,044 | 1,249 | 1,402 | 1,711 | 1,404 |
| Switzerland— | | | | | | |
| Unwrought | 17,519 | 16,971 | 18,673 | 21,917 | 23,738 | 19,529 |
| Semi-manufactures .. | 534 | 570 | 414 | 683 | 677 | 560 |
| Red and white lead .. | 653 | 604 | 580 | 715 | 631 | 598 |
| U.S.S.R.— | | | | | | |
| Unwrought | 29,700 | 39,100 | 39,100 | 38,900 | 25,700 | 38,187 |

(a) Including alloys.

IMPORTS OF LEAD, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Algeria— | | | | | | |
| Ore | 45 | 35 | 54 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Unwrought | 2,377 | 3,862 | 3,940 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| do. alloys | 254 | 337 | 251 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Scrap | — | — | 20 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures (a) | 555 | 658 | 739 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Red and white lead, etc. | 161 | 147 | 197 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Angola— | | | | | | |
| Semi-manufactures | 7 | 13 | 8 | 59 | 59 | 74 |
| Red and white lead | 34 | 52 | 53 | 38 | 39 | 54 |
| Congo Republic— | | | | | | |
| Unwrought and scrap | 59 | 58 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Red and white lead | 102 | 108 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt— | | | | | | |
| Unwrought and scrap | 768 | 3,026 | 4,643 | 4,427 | 5,993 | <i>n.a.</i> |
| Semi-manufactures | 31 | 3 | 57 | 40 | 37 | <i>n.a.</i> |
| Red and white lead | 1,062 | 822 | 718 | 678 | 1,757 | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Unwrought (a) | 129 | 79 | 31 | 66 | 81 | 126 |
| Semi-manufactures (a) | 18 | 25 | 27 | 21 | 58 | 50 |
| Red and white lead | 43 | 16 | 17 | 11 | 18 | 25 |
| Morocco— | | | | | | |
| Semi-manufactures (a) | 89 | 65 | 29 | 58 | 86 | 90 |
| Red and white lead | 100 | 84 | 117 | 152 | 160 | 110 |
| Mozambique— | | | | | | |
| Semi-manufactures (a) | 81 | 96 | 150 | 132 | 35 | <i>n.a.</i> |
| Red and white lead | 9 | 45 | 25 | 26 | 27 | <i>n.a.</i> |
| South Africa— | | | | | | |
| Unwrought | 15,551 | 13,026 | 12,066 | 11,922 | 13,431 | <i>n.a.</i> |
| Semi-manufactures | 136 | 117 | 22 | 27 | 75 | <i>n.a.</i> |
| Red and white lead | 240 | 149 | 154 | 106 | 89 | <i>n.a.</i> |
| Sudan— | | | | | | |
| Semi-manufactures | 46 | 19 | 47 | 24 | 41 | 144 |
| Tunisia— | | | | | | |
| Ore | 1 | 1 | 3 | 3 | 1 | <i>n.a.</i> |
| Red and white lead, etc. | 27 | 85 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Costa Rica— | | | | | | |
| Unwrought (a) | 22 | 68 | 39 | 23 | 54 | 183 |
| Cuba— | | | | | | |
| Unwrought | 203 | 345 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures | 238 | 479 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico— | | | | | | |
| Unwrought | 10 | 12 | 11 | 9 | 7 | 9 |
| United States— | | | | | | |
| Ore, matte and flue dust (Pb content) | 212,165 | 121,898 | 122,592 | 122,196 | 118,821 | 120,040 |
| Bullion and base bullion (Pb content) | 371 | 31 | 262 | 211 | 1,860 | 3,355 |
| Unwrought (Pb content) do. alloys (Pb content) | 314,071 | 234,493 | 190,488 | 220,828 | 230,273 | 196,784 |
| Scrap (Pb content) | 5,870 | 7,831 | 4,846 | 6,405 | 7,626 | 3,966 |
| Semi-manufactures | 7,696 | 7,051 | 4,998 | 3,477 | 1,856 | 13,764 |
| Red and white lead, etc. | 2,344 | 3,221 | 2,549 | 2,540 | 2,032 | 2,169 |
| Argentina— | | | | | | |
| Unwrought | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 801 | 3,249 |
| Brazil— | | | | | | |
| Unwrought | 11,653 | 11,978 | 8,464 | 13,283 | } 7,953 | 15,585 |
| do. alloys | 86 | 38 | 112 | 28 | | |
| Red and white lead | 656 | 636 | 612 | 1,008 |  |  | 354 | 1,771 |
| Chile— | | | | | | |
| Unwrought | 391 | 1,200 | 687 | 296 | 724 | <i>n.a.</i> |
| Bars and sheets | 82 | 342 | 43 | 5 | 182 | <i>n.a.</i> |
| Red and white lead | 141 | 260 | 152 | 151 | 196 | <i>n.a.</i> |

(a) Including alloys.

IMPORTS OF LEAD, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Colombia— | | | | | | |
| Unwrought (a) .. | 1,610 | 1,267 | 1,441 | 1,204 | 228 | 1,275 |
| Semi-manufactures (a) .. | 59 | 130 | 113 | 97 | 11 | 43 |
| Red and white lead .. | 497 | 356 | 403 | 514 | 767 | 998 |
| Ecuador— | | | | | | |
| Unwrought | 91 | 139 | <i>n.a.</i> | 193 | 152 | 99 |
| Red and white lead .. | 38 | 101 | <i>n.a.</i> | 121 | 93 | <i>n.a.</i> |
| Peru— | | | | | | |
| Semi-manufactures (a) .. | 37 | 44 | 39 | 103 | 48 | 89 |
| Red and white lead .. | 122 | 73 | 62 | 52 | 40 | 47 |
| Uruguay— | | | | | | |
| Unwrought | 1,683 | 2,280 | 1,866 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Red and white lead, etc. | 90 | 277 | 298 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela— | | | | | | |
| Unwrought | 1,102 | 1,515 | 1,104 | 1,861 | 1,855 | 2,767 |
| Semi-manufactures .. | <i>n.a.</i> | <i>n.a.</i> | 113 | 201 | 268 | 147 |
| Red and white lead .. | 912 | 1,611 | 1,525 | 1,496 | 1,575 | 1,140 |
| Burma— | | | | | | |
| Semi-manufactures (a) .. | 50 | 152 | 56 | 36 | <i>n.a.</i> | 5 |
| Formosa— | | | | | | |
| Unwrought (a) | 1,755 | 1,218 | 1,423 | 1,205 | 1,873 | 2,481 |
| Semi-manufactures (a) .. | 158 | 37 | 30 | 50 | 24 | 84 |
| Red and white lead, etc. | 136 | 141 | 141 | 95 | 91 | 41 |
| Indonesia— | | | | | | |
| Unwrought and scrap .. | 361 | 1,527 | 1,271 | 3,338 | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures (a) .. | 179 | 143 | 288 | 596 | <i>n.a.</i> | <i>n.a.</i> |
| Red and white lead .. | 402 | 293 | 383 | 797 | <i>n.a.</i> | <i>n.a.</i> |
| Iran— | | | | | | |
| Unwrought | 22 | 35 | 22 | 43 | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures .. | 1 | 2 | 62 | 28 | <i>n.a.</i> | <i>n.a.</i> |
| Iraq— | | | | | | |
| Semi-manufactures .. | 220 | 70 | 170 | 46 | 24 | <i>n.a.</i> |
| Israel— | | | | | | |
| Unwrought | 857 | 883 | 658 | 824 | 1,314 | 904 |
| Scrap | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 201 | 311 | 14 |
| Semi-manufactures .. | 76 | 111 | 116 | 222 | 100 | 192 |
| Red and white lead .. | 635 | <i>n.a.</i> | 480 | 355 | 538 | 581 |
| Japan— | | | | | | |
| Ore | 26,694 | 37,786 | 41,332 | 68,090 | 38,005 | 67,565 |
| Unwrought | 3,340 | 2,027 | 22,224 | 43,590 | 25,781 | 23,802 |
| Scrap | 1,546 | 1,128 | 1,062 | 856 | 781 | 873 |
| Semi-manufactures (a) .. | 119 | 11 | 1 | 3 | 4 | 13 |
| Red and white lead .. | 1 | 2 | 1 | — | 1 | 1 |
| Jordan— | | | | | | |
| Unwrought | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 189 | 275 | 281 |
| Lebanon— | | | | | | |
| Unwrought | 213 | 339 | 236 | 398 | 274 | <i>n.a.</i> |
| Semi-manufactures (a) .. | 107 | 190 | 159 | 273 | 75 | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Unwrought (a) | 1,229 | 1,203 | 1,312 | 1,638 | 3,577 | 1,911 |
| Semi-manufactures (a) .. | | | | 490 | 364 | 112 |
| Red and white lead .. | | | | 1,390 | 473 | 75 |
| Syria— | | | | | | |
| Unwrought | 297 | 282 | 255 | 664 | <i>n.a.</i> | <i>n.a.</i> |
| Red and white lead .. | 58 | 111 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Thailand— | | | | | | |
| Unwrought (a) | 515 | 1,026 | 701 | 643 | 1,023 | 674 |
| Semi-manufactures (a) .. | 115 | 96 | 103 | 66 | 48 | 64 |
| Turkey— | | | | | | |
| Unwrought (a) | 330 | 2,328 | 1,690 | 549 | 2,103 | 2,303 |
| Semi-manufactures (a) .. | 11 | 184 | 227 | 296 | 99 | 16 |
| Red and white lead .. | 684 | 1,054 | 826 | 94 | 450 | 548 |

(a) Including alloys.

LITHIUM MINERALS
PRODUCTION OF LITHIUM MINERALS

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|--------|-------------|-------------|--------|--------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Southern Rhodesia— | | | | | | |
| Amblygonite | 1,638 | <i>n.a.</i> | — | 77 | 31 | 46 |
| Eucryptite | 355 | <i>n.a.</i> | 1,191 | 1,678 | 773 | 1,039 |
| Lepidolite | 57,767 | <i>n.a.</i> | 13,826 | 21,462 | 18,967 | 14,426 |
| Petalite | 11,755 | <i>n.a.</i> | 56,818 | 24,730 | 19,379 | 26,738 |
| Spodumene | 4,677 | <i>n.a.</i> | 6,866 | 1,453 | 1,336 | 1,996 |
| Uganda— | | | | | | |
| Amblygonite | — | — | — | 23 | 20 | 47 |
| Canada— | | | | | | |
| Lithium minerals (<i>Li₂O content</i>) | 1,720 | 1,230 | 91 | 239 | 223 | 296 |
| Australia— | | | | | | |
| Petalite | 68 | — | 1 | 96 | } 136 | } 432 |
| Amblygonite | — | — | 15 | 24 | | |
| Spodumene | — | — | — | 5 | | |
| OTHER COUNTRIES | | | | | | |
| Spain— | | | | | | |
| Amblygonite | — | — | 25 | 17 | — | — |
| Mozambique— | | | | | | |
| Lepidolite | 86 | 89 | <i>n.a.</i> | 151 | 270 | 102 |
| Rwanda and Burundi— | | | | | | |
| Amblygonite | 10 | 2,648 | 2,294 | 1,655 | 321 | <i>n.a.</i> |
| South Africa— | | | | | | |
| Amblygonite | — | 9 | 154 | 232 | 1,128 | 372 |
| South West Africa— | | | | | | |
| Amblygonite | 477 | 216 | 143 | 121 | 126 | 115 |
| Lepidolite | 931 | 1,936 | 868 | 1,266 | 1,590 | 77 |
| Petalite | 6,612 | 2,488 | 3,683 | 2,268 | 899 | 772 |
| Argentina— | | | | | | |
| Spodumene | 156 | 167 | 137 | 396 | 443 | <i>n.a.</i> |
| Brazil— | | | | | | |
| Amblygonite (a) | — | 527 | 49 | — | — | — |
| Spodumene (a) | 157 | 418 | — | — | 148 | 25 |
| Surinam— | | | | | | |
| Amblygonite (a) | — | — | — | 424 | 738 | <i>n.a.</i> |

Lithium minerals are also produced in the United States and lithium chemicals recovered from Searles Lake brines in California.

(a) Exports.

EXPORTS OF LITHIUM MINERALS

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia and Nyasaland— Lithium minerals .. | 149,125 | 51,697 | 114,219 | 29,056 | 29,203 | 35,931 |
| OTHER COUNTRIES | | | | | | |
| Germany (Federal)— Lithium minerals .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 331 | 406 |
| Mozambique— Lepidolite | 157 | — | <i>n.a.</i> | 151 | 270 | 102 |
| Rwanda and Burundi— Amblygonite | 1,632 | 2,943 | 1,476 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— Lithium minerals .. | — | — | — | 50 | 916 | 380 |
| South West Africa— Amblygonite | 627 | 117 | — | 68 | 130 | 176 |
| Lepidolite | 358 | 1,609 | 638 | 822 | 1,318 | 281 |
| Petalite | 4,704 | 1,261 | 1,753 | 2,104 | 310 | 681 |
| Brazil— Amblygonite | — | 527 | 49 | — | — | — |
| Spodumene | 157 | 418 | — | — | 148 | 25 |
| Surinam— Amblygonite | — | — | — | 424 | 738 | <i>n.a.</i> |

IMPORTS OF LITHIUM MINERALS*

Long tons

| Importing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|---------|--------|--------|--------|--------|--------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) .. | 6,000 | 5,100 | 10,500 | 4,000 | 3,400 | 3,200 |
| OTHER COUNTRIES | | | | | | |
| France (a) | 500 | 400 | 200 | — | — | — |
| Germany (Federal) .. | 4,882 | 7,730 | 10,093 | 9,814 | 10,307 | 9,809 |
| Netherlands (a) | 5,800 | 6,400 | 4,200 | 5,100 | 3,000 | 3,200 |
| United States (a) (b) .. | 139,700 | 38,900 | 92,000 | 18,000 | 19,000 | 19,000 |
| Japan (a) | 600 | 1,400 | 3,000 | 2,000 | 4,000 | 3,100 |

*Imports of lithium minerals are not separately recorded in the trade returns of most importing countries.

(a) Figures represent exports to the country stated from the principal producing countries and are not necessarily complete.

(b) Official figures of United States imports for consumption, available from 1960 onwards, are as follows (long tons): 1960—45,624; 1961—23,954; 1962—27,419; 1963—20,056.

MAGNESITE AND DOLOMITE
PRODUCTION OF MAGNESITE AND DOLOMITE

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|------------|------------|------------|------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Dolomite, crude (a) .. | 2,600,000 | 2,800,000 | 3,100,000 | 2,800,000 | 2,700,000 | 3,000,000 |
| Kenya— | | | | | | |
| Magnesite, crude .. | 492 | 2,808 | 30 | 1,723 | — | 257 |
| Southern Rhodesia— | | | | | | |
| Magnesite, crude .. | — | — | 7,171 | 12,394 | 10,375 | 10,774 |
| Dolomite | 593 | 423 | 205 | — | — | — |
| Tanganyika— | | | | | | |
| Magnesite, crude (c) .. | 301 | 105 | 112 | 42 | — | 84 |
| Canada— | | | | | | |
| Magnesitic dolomite (b) | £926,433 | £1,132,435 | £1,204,194 | £1,079,395 | £1,143,386 | £1,028,473 |
| India— | | | | | | |
| Magnesite, crude .. | 102,590 | 155,472 | 153,862 | 206,431 | 209,526 | 230,861 |
| Dolomite | 174,666 | r 335,982 | 639,417 | r 709,186 | 886,311 | 1,053,489 |
| Pakistan— | | | | | | |
| Magnesite | — | 396 | 434 | r 160 | 300 | n.a. |
| Dolomite | n.a. | n.a. | 151 | 346 | 509 | n.a. |
| Australia— | | | | | | |
| Magnesite, crude .. | 69,391 | 60,586 | 62,166 | 98,795 | 62,191 | 56,946 |
| Dolomite | 138,832 | 160,084 | 190,868 | 191,624 | 180,697 | 211,753 |
| New Zealand— | | | | | | |
| Magnesite, crude .. | 1,200 | n.a. | 795 | 581 | 635 | 781 |
| Dolomite | 3,052 | 3,165 | 3,390 | 3,550 | 5,748 | 4,387 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Magnesite— | | | | | | |
| Crude | 1,201,906 | 1,182,239 | 1,599,735 | 1,770,273 | 1,582,022 | 1,292,054 |
| Caustic (d) | 98,688 | 101,668 | 118,782 | 127,698 | 130,450 | 129,960 |
| do. powder (d) .. | 38,132 | 39,898 | 46,440 | 51,573 | 47,925 | n.a. |
| Dead-burned (d) .. | 413,803 | 376,698 | 491,642 | 533,760 | 476,524 | 404,310 |
| Bricks (d) | 227,350 | 183,237 | 256,074 | 290,081 | 270,260 | 219,540 |
| Belgium— | | | | | | |
| Dolomite— | | | | | | |
| Crude | 363,397 | 378,080 | 443,210 | 481,940 | 576,760 | 681,420 |
| Calcined | 241,123 | 248,430 | 302,440 | 294,910 | 291,470 | 318,450 |
| Bulgaria— | | | | | | |
| Magnesite, crude (e) .. | 147,000 | 147,000 | 147,000 | 147,000 | n.a. | n.a. |
| Finland— | | | | | | |
| Dolomite | n.a. | n.a. | n.a. | 93,220 | 90,800 | n.a. |
| France— | | | | | | |
| Dolomite, crude .. | 584,492 | 686,241 | 754,843 | 757,558 | 832,941 | 760,000 |
| Greece— | | | | | | |
| Magnesite— | | | | | | |
| Crude | 87,270 | 110,327 | 184,331 | 146,047 | 145,465 | (e) 245,000 |
| Caustic (d) | 23,982 | 23,218 | 40,457 | 46,343 | 29,183 | 49,700 |
| Dead-burned (d) .. | 8,089 | 21,599 | 25,826 | 23,059 | 29,652 | 41,648 |
| Hungary— | | | | | | |
| Dolomite | 303,470 | 274,980 | 330,189 | 447,889 | 423,966 | n.a. |
| Italy— | | | | | | |
| Magnesite, crude .. | 5,804 | 6,752 | 5,879 | 6,677 | 8,281 | 6,707 |
| Dolomite— | | | | | | |
| Metallurgical .. | 57,289 | 66,596 | 70,878 | 60,594 | n.a. | n.a. |
| Refractory, etc. .. | 400,635 | 427,478 | 482,009 | 640,583 | n.a. | n.a. |
| Luxembourg— | | | | | | |
| Dolomite, calcined .. | 8,597 | 10,000 | 7,393 | — | — | — |

(a) Estimated.

(b) Including brucite, dead-burned magnesitic dolomite and serpentine.

(c) Exports.

(d) Derived from crude shown and not additional.

(e) United States Bureau of Mines' estimate.

PRODUCTION OF MAGNESITE AND DOLOMITE (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Norway— | | | | | | |
| Dolomite | 144,922 | 154,144 | 208,882 | 209,839 | 213,811 | 267,000 |
| Poland— | | | | | | |
| Magnesite, crude | 13,779 | 16,239 | 21,357 | 26,672 | 33,600 | (d) 33,600 |
| Portugal— | | | | | | |
| Dolomite | 2,087 | 2,400 | 2,600 | 2,707 | 3,740 | 3,858 |
| Spain— | | | | | | |
| Magnesite | 34,323 | 39,793 | 47,535 | 81,877 | 70,260 | (d) 70,000 |
| Sweden— | | | | | | |
| Dolomite, crude | 43,557 | 50,440 | 53,293 | 54,900 | 50,700 | 50,600 |
| Yugoslavia— | | | | | | |
| Magnesite, crude | 219,672 | 240,939 | 247,869 | 268,752 | 367,465 | 405,453 |
| South Africa— | | | | | | |
| Magnesite, crude | 71,607 | 52,574 | 59,637 | 60,475 | 91,386 | 96,704 |
| United States— | | | | | | |
| Magnesite— | | | | | | |
| Crude | 440,162 | 530,631 | 445,114 | 538,979 | 439,706 | 471,121 |
| Caustic (b) (c) | 39,840 | 48,297 | 58,978 | 71,493 | 77,508 | 120,426 |
| Dead-burned (b) (c) | 370,423 | 462,447 | 451,706 | 534,794 | 514,038 | 636,370 |
| Dolomite— | | | | | | |
| Dead-burned (c) | 1,481,414 | 1,774,792 | 1,740,411 | 1,770,321 | 1,658,427 | 1,740,137 |
| Argentina— | | | | | | |
| Dolomite | 21,583 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Brazil— | | | | | | |
| Magnesite | 47,425 | 47,659 | 62,315 | 75,491 | 92,275 | 88,872 |
| Dolomite | 127,382 | 152,905 | 222,574 | r 308,109 | 412,361 | 470,259 |
| Colombia— | | | | | | |
| Magnesite | n.a. | n.a. | n.a. | 100 | 100 | 250 |
| Dolomite | n.a. | n.a. | 2,000 | 2,000 | 2,638 | 5,000 |
| Peru— | | | | | | |
| Dolomite | 747 | n.a. | 696 | 870 | 963 | n.a. |
| Uruguay— | | | | | | |
| Dolomitic limestone | 671 | 927 | 975 | 11,145 | 692 | 26,383 |
| Formosa— | | | | | | |
| Dolomite | 10,747 | 14,250 | 14,771 | 21,832 | 29,366 | 30,416 |
| Iran (a)— | | | | | | |
| Magnesite | 1,959 | 2,864 | 2,900 | 500 | n.a. | n.a. |
| Japan— | | | | | | |
| Dolomite | 1,380,859 | 1,309,430 | 1,675,402 | 1,844,771 | 1,768,000 | 1,714,000 |
| Philippine Republic— | | | | | | |
| Dolomite | — | — | 12 | 7,137 | 4,916 | 5,009 |
| Turkey— | | | | | | |
| Magnesite | 640 | — | 15 | 2,155 | 9,586 | 17,634 |
| New Caledonia— | | | | | | |
| Magnesite | 7,514 | 2,969 | — | — | 1,157 | 12 |

Magnesite is known to have been produced in Czechoslovakia, U.S.S.R., Chile, Mexico, Korea and Manchuria. Dolomite is known to have been produced in other countries. Magnesia is extracted from sea-water in the United Kingdom.

(a) Years ended March 20 of year following that stated.

(b) Derived partly from crude shown and partly from other sources, e.g. sea-water, brucite, dolomite.

(c) Sold or used by producers.

(d) United States Bureau of Mines' estimate.

PRODUCTION OF MAGNESIUM

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|---------------|---------------|---------------|----------------|----------------|----------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) .. | 2,399 | 2,033 | 3,687 | 5,200 | 5,000 | 4,700 |
| Canada | 6,068 | 5,448 | 6,508 | 6,817 | 7,871 | 7,764 |
| OTHER COUNTRIES | | | | | | |
| France | 1,694 | 1,730 | 2,109 | 2,042 | 2,087 | 1,769 |
| Germany (Federal) (a) .. | 590 | 490 | (b) 295 | (b) 390 | (b) 490 | (b) 490 |
| Italy | 4,161 | 4,435 | r 5,361 | 5,507 | 5,500 | 5,400 |
| Norway | 9,047 | 9,435 | 10,154 | 14,302 | 14,352 | 20,312 |
| U.S.S.R. (c) | 17,300 | 20,000 | 25,000 | 31,000 | 31,000 | 31,000 |
| United States | 26,871 | 27,708 | 35,777 | 36,379 | 61,567 | 67,719 |
| Japan | 987 | 1,539 | 2,110 | 2,212 | 2,054 | 2,401 |
| WORLD'S TOTAL* .. | 69,000 | 73,000 | 91,000 | 104,000 | 130,000 | 142,000 |

*Excluding magnesium known to have been produced in China.

(a) Including re-melt alloys.

(c) "Metallgesellschaft" estimate.

(b) United States Bureau of Mines estimate.

EXPORTS OF MAGNESITE, ETC.*

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------------|--------------|--------------|------------|------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Magnesium and alloys.. | 3,464 | 2,649 | 2,152 | 1,807 | 2,013 | (e) 2,967 |
| Magnesium compounds | 15,952 | 36,476 | 16,864 | 20,801 | 21,397 | n.a. |
| Rhodesia and Nyasaland— | | | | | | |
| Crude and calcined .. | — | — | 6,195 | 12,057 | 8,826 | 9,363 |
| Tanganyika— | | | | | | |
| Crude | 301 | 105 | 112 | 42 | — | 84 |
| Canada— | | | | | | |
| Magnesium | (£1,052,011) | (£1,442,226) | (£1,118,531) | 5,384 | 5,867 | (£1,217,459) |
| India— | | | | | | |
| Crude and calcined .. | 19,585 | 27,548 | (c) 29,071 | (c) 30,956 | (c) 31,270 | (c) 34,823 |
| Chloride | 173 | 49 | (c) 8 | (c) 41 | (c) 211 | (c) 106 |
| Australia (b)— | | | | | | |
| Crude and calcined .. | 60 | 32 | 53 | 240 | 2,629 | 318 |
| Sulphate | 8 | 7 | — | — | — | — |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Crude | 569 | 599 | 728 | 593 | 761 | 413 |
| Caustic | 80,420 | 87,043 | 95,230 | 95,494 | 95,074 | 93,080 |
| Dead-burned | 130,754 | 169,487 | 212,142 | 234,126 | 185,998 | 161,699 |
| Bricks | 184,846 | 151,000 | 218,000 | 251,815 | 231,187 | 89,133 |
| Dolomite | 23,820 | 5,500 | 12,969 | 15,654 | 15,234 | 18,358 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | 5,188 | 5,029 | 394 | 10 | — | — |
| Calcined | 144 | 86 | 55 | 83 | 25 | 36 |
| Carbonate | 2 | 12 | 4 | — | — | 4 |
| Chloride | 16 | 2 | 1 | 3 | 1 | 1 |
| Sulphate | 14 | 66 | 74 | 48 | 15 | 25 |
| Dolomite, crude .. | 90,651 | 164,206 | 184,212 | 163,686 | 212,206 | 271,599 |
| do. ground | 12,371 | 30,824 | (d) | (d) | (d) | (d) |
| do. calcined | 138,548 | 132,482 | 150,174 | 164,296 | 166,637 | 169,707 |
| Czechoslovakia .. | 85,000 | 103,000 | 122,000 | 114,000 | 116,000 | n.a. |
| France— | | | | | | |
| Crude and calcined .. | 468 | 84 | 108 | 778 | 810 | 435 |
| Magnesium metal (a) .. | 61 | 51 | 59 | 93 | 62 | 92 |
| Carbonate | 401 | 581 | 636 | 714 | 823 | 830 |
| Chloride | 1,070 | 392 | 1,937 | 1,440 | 2,662 | 1,139 |
| Oxide and hydroxide .. | 276 | 567 | 819 | 934 | 1,589 | 1,404 |
| Sulphate | 194 | 111 | 74 | 102 | 119 | 85 |
| Dolomite, crude .. | 6,009 | 8,742 | 12,326 | 15,347 | 17,085 | 18,725 |
| do. calcined | 4,348 | 3,395 | 4,387 | 4,685 | 5,835 | 5,346 |
| Germany (Federal)— | | | | | | |
| Crude and calcined .. | 2,490 | 3,685 | 2,143 | 4,135 | 2,484 | 3,858 |
| Magnesium metal .. | 159 | 200 | 698 | 607 | 231 | 427 |
| Carbonate | 411 | 444 | 629 | 338 | 358 | 277 |
| Chloride | 13,298 | 15,342 | 17,838 | 19,233 | 33,807 | 63,091 |
| Oxide and hydroxide .. | 457 | 694 | 874 | 938 | 1,104 | 1,574 |
| Sulphate | 44,375 | 48,461 | 47,686 | 50,596 | 52,651 | 40,299 |
| Dolomite | 118,225 | 89,385 | 67,118 | 69,658 | 83,540 | 56,597 |
| Kieserite | 63,226 | 78,396 | 89,552 | 126,538 | 159,845 | 168,346 |
| Germany (East)— | | | | | | |
| Sulphate | 19,874 | 19,408 | 20,083 | 21,110 | 20,309 | 20,297 |
| Greece— | | | | | | |
| Crude | 22,390 | 16,044 | 18,336 | 18,166 | 23,065 | 20,040 |
| Calcined | 32,970 | 51,458 | 64,275 | 75,464 | 79,637 | 90,249 |

* Magnesite unless otherwise stated.

(a) Including alloys and scrap.

(b) Years ended June 30 of that stated.

(c) Years ended March 31 following that stated.

(d) Included with crude and calcined.

(e) Including scrap.

EXPORTS OF MAGNESITE, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|--------|--------|--------|---------|--------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Italy— | | | | | | |
| Crude | 9 | 7 | 90 | 103 | 101 | 19 |
| Calcined | 8 | 22 | 133 | 74 | 99 | 88 |
| Magnesium metal including alloyed | 3,259 | 4,379 | 4,300 | 4,369 | 4,469 | 4,100 |
| Carbonate | 68 | 136 | 155 | 106 | 127 | 138 |
| Chloride | 3 | 6 | 22 | 22 | 16 | 10 |
| Oxide | 154 | 161 | 294 | 317 | 253 | 290 |
| Dolomite, crude | 948 | 1,799 | 2,109 | } 9,897 | 11,037 | 11,318 |
| do. calcined | 3,998 | 2,749 | 5,849 | | | |
| Netherlands— | | | | | | |
| Crude | 532 | 369 | 628 | 722 | 775 | 802 |
| Magnesium metal | n.a. | n.a. | 32 | 177 | 245 | 362 |
| Calcined | 11,574 | 13,710 | 16,819 | 23,942 | 30,100 | 35,234 |
| Chloride | 402 | 360 | 422 | 505 | 452 | 533 |
| Sulphate | 1,082 | 964 | 836 | 889 | 374 | 716 |
| Norway— | | | | | | |
| Crude | — | — | — | 100 | — | — |
| Magnesium metal | n.a. | 10,987 | 12,768 | 12,157 | 14,526 | 18,779 |
| Oxide | 79 | n.a. | n.a. | n.a. | n.a. | — |
| Dolomite, crude | n.a. | 37,876 | 43,053 | 45,782 | 58,834 | 65,095 |
| Poland— | | | | | | |
| Dolomite | 1,236 | 1,239 | 1,716 | 3,692 | n.a. | 2,226 |
| Spain— | | | | | | |
| Crude and calcined | n.a. | n.a. | n.a. | 14,715 | 7,733 | 17,571 |
| Dolomite, crude | n.a. | n.a. | n.a. | 7,304 | 6,036 | 4,387 |
| Sweden— | | | | | | |
| Crude and calcined | 586 | — | 10 | 291 | 196 | 193 |
| Dolomite | n.a. | 4,309 | 4,340 | 5,286 | 5,793 | 3,836 |
| Bricks | n.a. | 589 | 494 | 433 | 111 | 441 |
| U.S.S.R.— | | | | | | |
| Magnesium metal | 1,600 | 1,000 | 1,300 | 1,800 | 1,900 | 2,067 |
| Yugoslavia— | | | | | | |
| Crude | — | — | 426 | 2,628 | 486 | 3,779 |
| Ground and dead-burned | 51,213 | 57,046 | 62,262 | 55,718 | 61,787 | 84,285 |
| Bricks | 6,409 | 7,922 | 10,114 | 10,347 | 13,651 | 11,533 |
| South Africa— | | | | | | |
| Crude and calcined | 18 | — | 75 | — | 10 | — |
| Mexico— | | | | | | |
| Crude | — | — | 346 | 856 | 49 | — |
| United States— | | | | | | |
| Dead-burned | 47,447 | 77,008 | 82,310 | 109,501 | 64,166 | 69,312 |
| Magnesium metal (a) | 184 | 1,429 | 3,988 | 5,500 | 5,737 | 2,918 |
| Brazil | 1,240 | 207 | 645 | 3,701 | 4,796 | 15,477 |
| Japan— | | | | | | |
| Dolomite | 2,301 | 2,223 | 1,056 | 2,037 | 1,403 | 1,816 |
| Magnesium metal | 767 | 91 | 1 | — | 50 | 19 |
| Carbonate | 621 | 955 | 1,288 | 2,109 | 2,438 | 3,334 |
| Chloride and sulphate | 3,046 | 889 | 316 | 346 | (b) 57 | (b) 145 |
| Turkey— | | | | | | |
| Carbonate | n.a. | n.a. | 15 | 1,613 | 3,297 | 10,437 |

(a) Including alloys and scrap.

(b) Sulphate only.

IMPORTS OF MAGNESITE, ETC.*

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|------------|------------|------------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Crude and calcined .. | 29,145 | 19,128 | 94,652 | 151,454 | 46,833 | 37,368 |
| Magnesium (c) .. | 2,044 | 3,491 | 4,391 | 5,480 | 5,516 | (d) 4,605 |
| Chloride .. | 8,518 | 6,097 | 7,636 | 5,012 | 4,930 | 3,974 |
| Dolomite .. | n.a. | n.a. | n.a. | n.a. | n.a. | 10,051 |
| Canada— | | | | | | |
| Magnesium alloys .. | (£93,688) | (£101,495) | (£123,731) | (£150,252) | (£59,815) | (£60,178) |
| Calcined and dead-burned .. | 13,703 | 17,958 | 24,133 | 22,125 | 24,613 | 16,644 |
| Carbonate and oxide .. | 1,536 | 2,145 | 1,223 | 1,069 | 780 | 681 |
| Sulphate .. | 2,190 | 2,430 | 2,173 | 2,314 | 2,505 | 3,001 |
| Bricks .. | (£120,083) | (£162,590) | (£252,179) | (£173,117) | (£153,600) | (£71,261) |
| Other salts .. | 4,448 | 1,996 | 1,162 | 1,674 | 1,889 | 10,581 |
| Trinidad and Tobago— | | | | | | |
| Crude .. | — | 12 | 50 | 49 | 39 | n.a. |
| Hong Kong— | | | | | | |
| Crude .. | — | 256 | 158 | 73 | 109 | 99 |
| India— | | | | | | |
| Crude .. | 61 | 120 | (b) 4 | (b) — | (b) — | (b) — |
| Calcined .. | 855 | — | (b) — | (b) — | (b) — | (b) — |
| Magnesium metal .. | 79 | 43 | (b) 76 | (b) 85 | (b) 147 | (b) 270 |
| Carbonate .. | 873 | 1,119 | (b) 1,206 | (b) 782 | (b) 676 | (b) 439 |
| Chloride .. | 1 | 1 | (b) 2 | (b) 21 | (b) — | (b) — |
| Oxides .. | 33 | 72 | (b) 50 | (b) 87 | (b) 43 | (b) 37 |
| Other salts .. | 18 | 46 | (b) 37 | (b) 22 | (b) 26 | (b) 69 |
| Malaya— | | | | | | |
| Crude .. | 16 | 14 | 34 | 24 | 21 | 152 |
| Pakistan— | | | | | | |
| Chloride .. | 90 | 3 | 47 | 131 | 32 | 130 |
| Sulphate .. | 113 | 215 | 428 | 129 | 12 | n.a. |
| Other salts .. | 397 | 355 | 179 | n.a. | n.a. | 248 |
| Australia (a)— | | | | | | |
| Crude and calcined .. | 2,576 | 7,288 | 8,743 | 12,815 | 12,558 | 3,863 |
| Magnesium metal and powder .. | | | | | | |
| Oxide .. | 92 | 97 | 90 | 148 | 125 | 203 |
| Carbonate .. | 154 | 158 | 304 | 222 | 269 | 389 |
| Chloride .. | 148 | 159 | 143 | 164 | 135 | 153 |
| Sulphate .. | 329 | 332 | — | — | — | — |
| New Zealand— | | | | | | |
| Crude .. | 51 | 88 | 26 | 46 | 302 | n.a. |
| Sulphate .. | 822 | 660 | 848 | 974 | 689 | n.a. |
| Other salts .. | 229 | 249 | 309 | 353 | n.a. | n.a. |
| Irish Republic— | | | | | | |
| Magnesium salts .. | 366 | 449 | 344 | 349 | 378 | 42 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Crude .. | 6,061 | 28 | 11 | 2,148 | 4,176 | 10,621 |
| Magnesium metal .. | n.a. | 270 | 372 | 333 | 318 | 451 |
| Chloride .. | 2,427 | 2,023 | 2,052 | 1,840 | 2,481 | 1,764 |
| Dolomite .. | 1,433 | 2,012 | 2,250 | 2,246 | 1,982 | 2,470 |
| Kieserite .. | 8,563 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude .. | 1,082 | 2,611 | 873 | 197 | 406 | 757 |
| Calcined .. | 2,189 | 4,534 | 3,057 | 4,299 | 3,545 | 2,816 |
| Bricks .. | 13,848 | 13,565 | 17,235 | n.a. | n.a. | n.a. |

* Magnesite unless otherwise stated.

(a) Years ended June 30 of that stated.

(c) Including alloys.

(b) Years ended March 31 following that stated.

(d) Including scrap.

IMPORTS OF MAGNESITE, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Belgium-Luxemburg | | | | | | |
| <i>E. U. (cont.)—</i> | | | | | | |
| Magnesium metal .. | 510 | 321 | 428 | 370 | 510 | 479 |
| Carbonate | 276 | 330 | 225 | 243 | 249 | 261 |
| Chloride | 773 | 1,389 | 1,761 | 382 | 458 | 646 |
| Oxide and hydroxide .. | 285 | 390 | 519 | 407 | 455 | 642 |
| Sulphate | 2,483 | 2,511 | 3,640 | 1,727 | 1,807 | 2,128 |
| Dolomite, crude .. | 1,832 | 1,936 | 5,524 | 7,028 | 8,519 | 7,341 |
| do. ground .. | 315 | 143 | (b) | (b) | (b) | (b) |
| do. calcined .. | 5,261 | 4,437 | 6,541 | 5,863 | 5,292 | 5,527 |
| Denmark— | | | | | | |
| Crude | 1,566 | 2,071 | 2,513 | 2,419 | 2,506 | 3,315 |
| Carbonate | 218 | 112 | 104 | 109 | 90 | 1,005 |
| Chloride | 538 | 567 | 537 | 831 | 486 | 537 |
| Oxide | 120 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 1,520 | 1,149 | 1,409 | 1,474 | 1,754 | 2,210 |
| Dolomite | 11,935 | 12,474 | 12,520 | 11,231 | 17,457 | 16,669 |
| Finland— | | | | | | |
| Crude and calcined .. | 413 | 753 | 906 | 1,140 | 1,862 | 1,884 |
| Bricks | 2,698 | 1,999 | 2,920 | 2,896 | 3,875 | 3,574 |
| Oxide | 58 | 156 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Carbonate | 64 | 139 | 87 | 105 | 88 | 60 |
| Chloride | 273 | 370 | 222 | 411 | 214 | 222 |
| Sulphate | 109 | 152 | 215 | 239 | 215 | 309 |
| France— | | | | | | |
| Crude | 5,604 | 3,212 | 4,553 | 3,660 | 4,456 | 3,163 |
| Calcined | 24,279 | 17,944 | 20,131 | 23,232 | 23,729 | 22,714 |
| Bricks | 47,201 | 25,953 | 29,686 | <i>n.a.</i> | <i>n.a.</i> | 29,477 |
| Magnesium metal (a) .. | 746 | 134 | 467 | 456 | 1,176 | 1,847 |
| Carbonate | 146 | 230 | 263 | 270 | 217 | 275 |
| Chloride | 174 | 207 | 42 | 40 | 96 | 30 |
| Oxide and hydroxide .. | 114 | 261 | 374 | 422 | 420 | 567 |
| Sulphate | 2,326 | 2,649 | 2,371 | 2,103 | 2,765 | 2,621 |
| Dolomite, crude .. | 28,511 | 16,819 | 18,157 | 29,999 | 47,669 | 49,733 |
| do. calcined .. | 176,282 | 139,570 | 144,775 | 135,460 | 139,253 | 132,452 |
| Germany (Federal)— | | | | | | |
| Crude | 2,851 | 1,634 | 1,812 | 1,942 | 1,371 | 1,182 |
| Caustic | 88,156 | 100,145 | 108,902 | 108,487 | 110,152 | 102,475 |
| Dead-burned | 69,270 | 55,103 | 82,277 | 97,318 | 99,274 | 97,513 |
| Magnesium metal (a) .. | 13,744 | 17,763 | 26,301 | 25,980 | 29,538 | 30,528 |
| Carbonate | 191 | 295 | 429 | 291 | 210 | 223 |
| Chloride | 4 | 12 | 4 | — | 33 | 92 |
| Oxide and hydroxide .. | 318 | 507 | 1,043 | 2,061 | 3,170 | 4,007 |
| Sulphate | 1 | 7 | 3 | 2 | 3 | 17 |
| Dolomite | 23,607 | 18,108 | 23,298 | 103,213 | 59,155 | 117,379 |
| Hungary— | | | | | | |
| Dead-burned | 45,629 | 42,907 | 49,468 | 58,605 | 68,226 | 64,118 |
| Italy— | | | | | | |
| Crude | 4,275 | 3,136 | 8,069 | 11,328 | 14,913 | 12,413 |
| Calcined | 13,976 | 16,219 | 27,160 | 41,434 | 32,005 | 26,054 |
| Chloride | 3,385 | 3,001 | 3,352 | 3,399 | 3,917 | 4,259 |
| Oxide | 49 | 154 | 173 | 205 | 271 | 379 |
| Sulphate | 2,514 | 2,135 | 1,330 | 1,268 | 1,807 | 2,518 |
| Dolomite | 1,040 | 354 | 649 | 963 | 2,132 | 1,065 |
| Netherlands— | | | | | | |
| Crude | 1,114 | 1,144 | 2,268 | 2,242 | 1,910 | 2,150 |
| Calcined | 13,382 | 15,357 | 22,629 | 31,488 | 34,188 | 37,580 |
| Bricks | 15,804 | 10,884 | 12,568 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Magnesium metal .. | 176 | 175 | 189 | 154 | 309 | 387 |
| Carbonate | 474 | 508 | 533 | 441 | 455 | 457 |
| Oxide and hydroxide .. | 108 | 246 | 287 | 343 | 238 | 347 |
| Sulphate | 5,426 | 5,340 | 5,365 | 6,232 | 7,122 | 8,225 |
| Chloride | 1,785 | 1,882 | 2,092 | 2,264 | 2,386 | 2,593 |

(a) Including alloys and scrap.

(b) Included with crude and calcined.

IMPORTS OF MAGNESITE, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------------|---------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Netherlands <i>(cont.)</i> — | | | | | | |
| Dolomite, crude .. | 107,285 | 180,379 | 190,471 | 157,367 | 204,108 | 210,260 |
| do. calcined .. | 38,677 | 42,407 | 43,099 | 47,007 | 45,894 | 49,478 |
| do. ground .. | 1,330 | 68 | (a) | (a) | (a) | (a) |
| Kieserite .. | 14,225 | 17,654 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Norway— | | | | | | |
| Crude and calcined .. | 368 | 383 | 2,948 | 4,864 | 7,547 | 7,221 |
| Chloride .. | 377 | 291 | 305 | 473 | 14,061 | 41,477 |
| Sulphate .. | <i>n.a.</i> | 773 | 2,974 | 5,754 | 8,445 | 482 |
| Dolomite .. | 826 | 3,089 | 3,043 | 3,414 | 3,695 | 6,657 |
| Poland— | | | | | | |
| Calcined and caustic .. | 50,900 | 62,600 | 59,200 | 78,200 | <i>n.a.</i> | 123,715 |
| Magnesium metal .. | 83 | 83 | 100 | 210 | <i>n.a.</i> | 422 |
| Chloride .. | 5,024 | 5,614 | 5,474 | 5,896 | <i>n.a.</i> | 7,860 |
| Portugal— | | | | | | |
| Crude and calcined .. | 613 | 565 | 200 | 673 | 1,066 | 750 |
| Carbonate .. | 85 | 118 | 105 | 111 | 76 | 107 |
| Chloride .. | 148 | 116 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Oxide .. | 519 | 512 | 508 | 271 | 29 | 18 |
| Sulphate .. | 1,149 | 1,344 | 1,581 | 1,141 | 1,240 | 1,586 |
| Sweden— | | | | | | |
| Crude and calcined .. | 1,504 | 1,385 | 2,397 | 5,369 | 4,417 | 6,722 |
| Bricks .. | 13,590 | 14,777 | 21,777 | 24,350 | 22,619 | 20,121 |
| Magnesium metal .. | 320 | 445 | 404 | 411 | 487 | 490 |
| Carbonate .. | 218 | 244 | 332 | 206 | 223 | 167 |
| Chloride .. | 1,137 | 1,647 | 1,609 | 1,243 | 1,243 | 1,482 |
| Sulphate .. | 1,191 | 1,515 | 1,924 | 2,443 | 2,302 | 4,512 |
| Dolomite .. | <i>n.a.</i> | 9,683 | 11,600 | 22,303 | 24,488 | 20,043 |
| Switzerland— | | | | | | |
| Magnesium metal .. | <i>n.a.</i> | <i>n.a.</i> | 417 | 465 | 689 | 573 |
| Calcined .. | } <i>n.a.</i> | } <i>n.a.</i> | 2,699 | 3,467 | 3,933 | 3,557 |
| Carbonate .. | | | 186 | 205 | 184 | 126 |
| Chloride .. | | | 4,448 | 4,991 | 5,596 | 5,547 |
| Sulphate .. | | | 1,291 | 1,327 | 1,632 | 923 |
| Dolomite, calcined .. | | | 7,198 | 7,854 | 8,094 | 7,777 |
| U.S.S.R.— | | | | | | |
| Crude .. | — | — | (b) 15,000 | (b) 55,100 | (b) 69,200 | (b) 96,000 |
| Yugoslavia— | | | | | | |
| Bricks .. | 49 | 66 | 134 | 5 | 10 | 2,015 |
| Magnesium metal .. | 231 | 179 | 292 | 574 | 153 | 269 |
| Algeria— | | | | | | |
| Calcined .. | 5 | 5 | 8 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Dolomite .. | 2,468 | 2,126 | 2,489 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Congo Republic— | | | | | | |
| Oxide .. | 901 | 1,037 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate .. | 530 | 262 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Chloride .. | 19 | 30 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt— | | | | | | |
| Magnesite and dolomite .. | 3,587 | 1,454 | 6,309 | 3,663 | 4,551 | <i>n.a.</i> |
| Sulphate .. | 727 | 785 | 494 | 197 | 696 | <i>n.a.</i> |
| Morocco— | | | | | | |
| Chloride .. | 152 | 4 | 46 | 3 | 204 | 346 |
| Sulphate .. | 26 | 35 | 92 | 147 | 123 | 227 |
| South Africa— | | | | | | |
| Carbonate .. | 166 | 164 | 6,949 | 13,285 | 10,214 | <i>n.a.</i> |
| Chloride .. | 196 | 241 | 179 | 184 | 125 | <i>n.a.</i> |
| Sulphate .. | 2,057 | 1,608 | 1,677 | 1,379 | 1,321 | <i>n.a.</i> |
| Cuba— | | | | | | |
| Oxide .. | 25 | 28 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Carbonate .. | 203 | 43 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate .. | 723 | 512 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Included with crude and calcined.

(b) Magnesite "powder", mainly from North Korea.

IMPORTS OF MAGNESITE, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|---------|--------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Mexico— | | | | | | |
| Crude | 284 | 3,548 | 4,120 | 3,418 | 8,222 | 56 |
| Magnesium metal | 319 | 346 | 350 | 322 | 357 | 586 |
| Oxide | 421 | 704 | 605 | 1,535 | 1,139 | 1,187 |
| Sulphate | 131 | 197 | 173 | 286 | 263 | 370 |
| United States— | | | | | | |
| Crude | 10 | 30 | 18 | 52 | 1,493 | <i>n.a.</i> |
| Calcined | 2,139 | 4,730 | 3,689 | 3,977 | 6,908 | 8,868 |
| Dead-burned | 70,783 | 134,199 | 102,346 | 46,437 | 87,283 | 77,348 |
| Bricks | 10,185 | 14,987 | 13,920 | 11,878 | 13,431 | 10,266 |
| Magnesium metal, etc. | 480 | 529 | 358 | 897 | 2,088 | 1,770 |
| Oxide | 317 | 244 | 238 | 221 | 163 | 83 |
| Carbonate, precipitated | 291 | 314 | 309 | 305 | 355 | 556 |
| Chloride | 612 | 848 | 1,048 | 903 | 1,316 | 596 |
| Sulphate | 6,846 | 11,027 | 9,037 | 8,956 | 8,301 | 7,628 |
| do. calcined | 29,728 | 28,500 | 24,255 | 44,803 | <i>n.a.</i> | <i>n.a.</i> |
| Kieserite | 5,049 | 5,917 | 12,561 | 6,890 | 45,366 | 21,495 |
| Argentina— | | | | | | |
| Crude | <i>n.a.</i> | 316 | 1,124 | 2,549 | 2,718 | 2,367 |
| Carbonate | 214 | 852 | 346 | 370 | 347 | 368 |
| Chloride | — | — | 183 | 100 | 50 | 25 |
| Oxide | — | 2 | 12 | 9 | 31 | 23 |
| Brazil— | | | | | | |
| Crude | 38 | — | — | — | — | — |
| Magnesium metal | 65 | 43 | 56 | 91 | 601 | 1,779 |
| Carbonate | 194 | 379 | 515 | 205 | 11 | 229 |
| Chloride | 8 | 107 | 43 | 61 | 140 | 58 |
| Oxide | 45 | 69 | 77 | 92 | 87 | 117 |
| Sulphate | 327 | 469 | 443 | 1,015 | 552 | 772 |
| Chile— | | | | | | |
| Crude | 60 | 36 | 51 | 54 | 20 | <i>n.a.</i> |
| Calcined | 847 | 1,952 | 2,628 | 2,308 | 3,579 | <i>n.a.</i> |
| Sulphate | 1 | 122 | 2 | 4 | — | <i>n.a.</i> |
| Dolomite, crude | 5,634 | — | 39 | 30,781 | 7,538 | <i>n.a.</i> |
| do. calcined | 10,476 | 1,508 | 5,333 | 36,854 | 2,955 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Crude and calcined | 4,241 | 386 | 25 | 48 | 19 | 36 |
| Carbonate | 246 | 15 | 14 | 114 | 14 | 14 |
| Chloride | 14 | 109 | 13 | 17 | 44 | 58 |
| Oxide | 86 | 44 | 45 | 118 | 121 | 159 |
| Sulphate | 408 | 446 | 297 | 513 | 338 | 600 |
| Dolomite | <i>n.a.</i> | 1,947 | 4,527 | 4,607 | 2,605 | 4,724 |
| Peru— | | | | | | |
| Crude and calcined | 14 | 1,019 | 21 | 906 | 1,172 | 941 |
| Carbonate | 28 | 31 | 28 | 34 | 41 | 46 |
| Oxide | 3 | 4 | 4 | 3 | 8 | 54 |
| Hydroxide | 55 | 35 | 45 | 49 | 16 | 27 |
| Sulphate | 35 | 153 | 121 | 153 | 301 | 67 |
| Chloride | 2 | 8 | 4 | 4 | 8 | 16 |
| Venezuela— | | | | | | |
| Crude | 1,951 | 159 | 239 | 378 | 754 | 635 |
| Sulphate | 170 | 263 | 255 | 358 | 350 | 375 |
| Israel— | | | | | | |
| Crude | <i>n.a.</i> | <i>n.a.</i> | 312 | 893 | 1,319 | 948 |
| Japan— | | | | | | |
| Crude | 1,394 | 2,198 | 1,806 | 3,396 | 2,914 | 2,849 |
| Dead-burned | 65,500 | 110,555 | 97,491 | 90,320 | 67,062 | 20,234 |
| Magnesium metal | 16 | — | — | 6 | 3 | 488 |
| Korea (South)— | | | | | | |
| Crude | 778 | 450 | 553 | 499 | 1,695 | 2,044 |

IMPORTS OF MAGNESITE, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Philippine Republic— | | | | | | |
| Crude and calcined .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 618 | 741 | 768 |
| Carbonate | 64 | 255 | 170 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 250 | 239 | 188 | <i>n.a.</i> | <i>n.a.</i> | 180 |
| Dolomite | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 3,056 | 2,263 | 2,803 |
| Syria— | | | | | | |
| Ground and calcined .. | 25 | 54 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 183 | 56 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Thailand— | | | | | | |
| Chloride | 25 | 55 | 54 | 59 | 66 | 41 |
| Sulphate | 215 | 344 | 95 | 344 | 321 | 393 |
| Turkey— | | | | | | |
| Carbonate | 24 | 137 | 17 | 35 | 70 | 43 |
| Chloride | — | 155 | 56 | 94 | 212 | 144 |
| Oxide | 4 | 41 | 59 | 57 | 12 | 10 |
| Sulphate | 14 | 215 | 292 | 141 | 535 | 422 |

MANGANESE
PRODUCTION OF MANGANESE ORE
(including Ferruginous Manganese Ore)

Long tons

| Producing Country | Estimated Manganese Content | | | | | | |
|-------------------------------|-----------------------------|-------------|-------------|-------------|-----------|-----------|-----------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1963 |
| COMMONWEALTH COUNTRIES | | | | | | | |
| Bechuanaland .. | 12,690 | 17,980 | 22,350 | 28,337 | 23,623 | 10,605 | n.a. |
| Ghana .. | 535,100 | 522,200 | 545,000 | 431,600 | 373,400 | 401,000 | 257,000 |
| Northern Rhodesia .. | 44,092 | 53,837 | 52,945 | r 50,805 | 45,983 | 34,694 | 21,200 |
| Southern Rhodesia .. | 2,243 | 1,898 | 1,496 | 183 | 7,123 | n.a. | n.a. |
| British Guiana .. | 1,255,941 | r 1,159,351 | 1,179,832 | 193,038 | 271,103 | 140,473 | 83,000 |
| India .. | 101,615 | 108,072 | 105,294 | 98,027 | 1,206,204 | 1,058,139 | r 500,000 |
| Goa .. | n.a. | 2,877 | 292 | 6,366 | 304 | 6,872 | 38,000 |
| Malaya .. | n.a. | 29 | 222 | 338 | 925 | n.a. | n.a. |
| Pakistan .. | 59,683 | 89,971 | 60,646 | 87,411 | 71,646 | 36,204 | 27,400 |
| Australia .. | 103 | 101 | 120 | — | — | — | n.a. |
| New Zealand .. | — | — | — | — | — | — | n.a. |
| Papua .. | 18,295 | 13,005 | 48 | 2 | — | 3 | 9,000 |
| Fiji .. | — | — | 11,672 | 3,455 | 1,073 | 2,100 | — |
| New Hebrides .. | — | — | — | 4,000 | 68,530 | 88,000 | — |
| TOTAL .. | r 2,030,000 | r 1,966,400 | r 2,093,100 | r 2,114,200 | 2,156,300 | 1,900,000 | — |
| OTHER COUNTRIES | | | | | | | |
| Austria .. | 300 | 424 | — | — | — | — | 40 |
| Bulgaria .. | 27,952 | 25,589 | 24,600 | 36,400 | 34,500 | 37,900 | n.a. |
| Czechoslovakia .. | 162,000 | 154,000 | 152,000 | 99,000 | 82,000 | 84,000 | 30,000 |
| France .. | 2,133 | 1,853 | 1,068 | 892 | 1,340 | 1,285 | 469 |
| Greece .. | 20,000 | 35,000 | 30,723 | 27,853 | 12,264 | 14,633 | 7,900 |
| Hungary .. | 178,966 | 151,896 | 121,329 | 122,866 | 127,185 | 118,000 | 14,000 |
| Italy .. | 43,382 | 51,357 | 48,715 | 48,389 | 43,797 | 44,572 | n.a. |
| Portugal .. | 4,896 | 6,878 | 7,319 | 11,154 | 11,309 | 8,423 | 11,800 |
| Roumania .. | 197,102 | 194,000 | 172,000 | 203,000 | 186,000 | 256,000 | r 14,600 |
| Spain .. | 35,953 | 40,110 | 21,952 | 15,261 | 12,590 | 14,849 | 3,074 |
| Sweden .. | 5,475 | 10,303 | 8,523 | 16,399 | 3,266 | n.a. | 14,500 |
| U.S.S.R. .. | 5,281,000 | 5,429,000 | 5,785,000 | 5,878,000 | 6,301,000 | 6,558,000 | 71,000 |
| Yugoslavia .. | 9,877 | 7,956 | 13,104 | 13,925 | 14,605 | 8,004 | 5,000 |
| Angola .. | 48,088 | 38,207 | 26,157 | 21,879 | 14,525 | — | 2,641 |
| | | | | | | | 2,650,000 |
| | | | | | | | 2,840,000 |
| | | | | | | | 2,950,000 |
| | | | | | | | n.a. |
| | | | | | | | 9,000 |
| | | | | | | | 15,000 |
| | | | | | | | 1,600 |
| | | | | | | | 1,000 |
| | | | | | | | 500 |
| | | | | | | | 17,000 |
| | | | | | | | n.a. |
| | | | | | | | 15,000 |
| | | | | | | | 300 |
| | | | | | | | 280 |
| | | | | | | | 6,000 |
| | | | | | | | n.a. |
| | | | | | | | 13,300 |
| | | | | | | | 4,750 |
| | | | | | | | 65,000 |
| | | | | | | | 90,000 |
| | | | | | | | 5,000 |
| | | | | | | | 572 |
| | | | | | | | 2,840,000 |
| | | | | | | | 2,950,000 |
| | | | | | | | n.a. |
| | | | | | | | 6,000 |

(a) United States Bureau of Mines' estimate.

PRODUCTION OF MANGANESE ORE (cont.)

Long tons

| Producing Country | Estimated Manganese Content | | | | | | | | | | | |
|--------------------------------|-----------------------------|------------|------------|-------------|------------|------------|----------|----------|----------|----------|---------|---------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
| OTHER COUNTRIES—(cont.) | | | | | | | | | | | | |
| Congo Republic .. | 332,804 | 380,085 | r375,599 | r312,686 | 294,257 | 311,203 | 159,700 | 182,400 | 180,000 | 150,000 | 140,000 | 150,000 |
| Egypt .. | 109,852 | 125,062 | 271,648 | 274,049 | 182,749 | n.a. | 45,000 | 50,000 | 85,000 | 80,000 | 55,000 | n.a. |
| Ethiopia .. | — | 1,300 | 9,109 | 6,889 | 5,905 | — | — | 700 | 5,000 | 3,500 | 3,000 | — |
| Gabon .. | — | — | — | — | 200,034 | 626,533 | — | — | — | — | 102,000 | 320,000 |
| Ivory Coast .. | — | — | 60,600 | 122,770 | 105,274 | 137,000 | — | — | 29,000 | 56,000 | 51,000 | 66,000 |
| Morocco .. | 403,608 | 463,135 | 475,454 | 562,064 | 461,944 | 329,658 | 180,000 | 220,000 | 220,000 | 260,000 | 210,000 | 150,000 |
| South Africa .. | 834,021 | 954,645 | 1,175,118 | 1,395,294 | 1,441,606 | 1,336,420 | r297,000 | r354,000 | r431,000 | r540,000 | 560,000 | 520,000 |
| South West Africa .. | 92,009 | 44,145 | 60,214 | 44,906 | — | — | 44,200 | 21,200 | 28,900 | 21,600 | — | — |
| Sudan .. | 1,174 | 3,169 | — | — | 1,000 | — | n.a. | n.a. | — | — | n.a. | — |
| Costa Rica .. | — | — | — | — | — | 590 | n.a. | n.a. | — | — | — | n.a. |
| Cuba (b) .. | 70,844 | 15,597 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Mexico .. | d167,300 | d162,400 | d153,000 | d139,200 | d165,100 | d169,000 | 77,408 | 75,720 | 70,721 | 67,619 | 61,876 | 53,483 |
| Panama Republic .. | 4,008 | — | — | — | — | — | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| United States (c) .. | 370,589 | 350,963 | 152,803 | 146,191 | 194,360 | 357,848 | 141,187 | 107,114 | 51,991 | 32,191 | 33,621 | 47,084 |
| Argentina .. | 14,671 | 19,070 | 21,652 | 39,274 | 28,783 | 37,949 | 6,000 | 8,000 | 9,000 | r17,000 | 12,000 | 16,000 |
| Bolivia (a) .. | — | — | — | 47 | 258 | — | — | — | — | n.a. | n.a. | — |
| Brazil .. | 868,227 | 1,016,652 | 983,383 | r1,000,301 | 1,152,199 | 1,234,579 | 391,000 | 457,000 | 443,000 | 450,000 | 518,000 | 556,000 |
| Chile .. | 37,554 | 38,164 | 45,173 | 31,260 | 42,480 | 45,746 | 16,493 | 17,656 | 20,000 | 14,000 | 19,000 | 21,000 |
| Peru .. | 2,904 | 2,503 | 1,477 | 3,463 | 6,610 | 972 | 1,502 | 1,100 | 660 | 1,600 | 3,000 | 400 |
| Venezuela .. | 8,071 | 3,013 | — | — | — | — | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Burma (b) .. | 1,255 | 541 | 289 | 175 | 190 | n.a. | 470 | 200 | 100 | 70 | 80 | n.a. |
| China (d) .. | 830,000 | r1,180,000 | r790,000 | r790,000 | 790,000 | 980,000 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Indonesia .. | 43,669 | 42,118 | 10,739 | 13,090 | 4,875 | d1,500 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Iran (e) .. | 7,091 | 2,600 | 7,600 | 2,067 | 1,969 | d1,000 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Japan .. | 291,312 | 342,588 | 318,867 | 299,318 | 303,716 | 272,347 | 110,000 | 125,000 | 122,000 | 108,000 | 105,000 | 94,000 |
| Korea (South) .. | — | 443 | 1,361 | 1,355 | 986 | 4,089 | — | 200 | 500 | 500 | 400 | 1,600 |
| Philippine Republic .. | 21,956 | 34,254 | 17,106 | 18,737 | 11,750 | 7,545 | 9,700 | 15,100 | 7,500 | 8,300 | 5,200 | 3,400 |
| Thailand .. | 984 | 404 | 520 | 524 | 2,853 | 6,505 | 520 | 210 | 280 | 280 | 1,500 | 3,400 |
| Turkey .. | 22,250 | 35,126 | 27,778 | 30,000 | 20,912 | 6,204 | 11,000 | 17,000 | 11,000 | 12,000 | 9,000 | 3,000 |
| TOTAL .. | 10,600,000 | 11,200,000 | 11,800,000 | r11,700,000 | 12,300,000 | 13,200,000 | — | — | — | — | — | — |
| WORLD'S TOTAL .. | 12,600,000 | 13,200,000 | 13,900,000 | r13,800,000 | 14,500,000 | 15,100,000 | — | — | — | — | — | — |

Manganese ore is also produced in North Vietnam.

(a) Exports.

(b) Concentrates.

(c) Shipments.

(d) United States Bureau of Mines' estimate.

(e) Years ended March 20 following that stated.

EXPORTS OF MANGANESE ORE, ETC.

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|---------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Metal | 83 | 98 | 190 | 175 | 25 | <i>n.a.</i> |
| Spiegeleisen | 611 | 596 | 1,621 | 662 | 873 | 76 |
| Ferro-manganese | | | | | | 940 |
| Ghana— | | | | | | |
| Ore | 513,099 | 526,653 | 546,715 | 385,073 | 476,379 | 387,866 |
| Rhodesia and Nyasaland— | | | | | | |
| Ore | 32,349 | 47,589 | 40,525 | 41,577 | 45,138 | 42,874 |
| Canada— | | | | | | |
| Ferro-manganese | 201 | 172 | 651 | 212 | 121 | 9 |
| British Guiana— | | | | | | |
| Ore and concentrates | — | — | 76,765 | 187,383 | 230,162 | (d) 191,892 |
| Cyprus— | | | | | | |
| Ore and concentrates | — | — | — | — | — | 104 |
| Hong Kong— | | | | | | |
| Ore | 324 | 483 | 183 | 27 | 34 | 49 |
| India— | | | | | | |
| Ore | 924,497 | 913,741 | (b) 1,025,088 | (b) 789,148 | (b) 616,843 | (b) 634,422 |
| Ferruginous manganese ore | 35,690 | 56,388 | (b) 123,449 | (b) 160,168 | (b) 121,899 | (b) 304,902 |
| Ferro-manganese | 10,553 | 8,114 | (b) 47,073 | (b) 55,406 | (b) 12,093 | (b) 21,581 |
| Goa— | | | | | | |
| Ore | 124,222 | 152,270 | 155,313 | 107,000 | 118,429 | (e) |
| Malaya— | | | | | | |
| Ore | — | — | 2,953 | — | 2,000 | 6,885 |
| Australia (a)— | | | | | | |
| Ore | 32,236 | 17,432 | 52,598 | 46,976 | 87,361 | 25,054 |
| Fiji— | | | | | | |
| Ore | 22,498 | 20,630 | 1,788 | 2,265 | 10,335 | 10,182 |
| New Hebrides— | | | | | | |
| Concentrates | — | — | — | — | 14,188 | 22,791 |
| Papua (a)— | | | | | | |
| Ore | — | — | — | 1,830 | 2 | — |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 1,475 | 32 | 2,733 | 32 | 2,188 | 2,438 |
| Ferro-manganese | 13,150 | 13,698 | 16,017 | 16,644 | 22,946 | 29,017 |
| Ferro-silico-manganese | 689 | 355 | 4,935 | 7,260 | 7,743 | 4,912 |
| Spiegeleisen | 3,533 | 4,231 | 3,290 | 4,253 | 4,163 | 1,964 |
| France— | | | | | | |
| Ore (c) | 1,145 | 899 | 4,815 | 756 | 1,596 | 1,812 |
| Metal | 205 | 42 | 108 | 29 | 20 | 199 |
| Ferro-manganese | 83,036 | 98,939 | 132,693 | 156,294 | 152,040 | 147,755 |
| Spiegeleisen | 410 | 8,041 | 12,036 | 14,142 | 17,332 | 12,733 |
| Germany (Federal)— | | | | | | |
| Ore | 4,499 | 5,078 | 5,014 | 6,477 | 5,885 | 6,600 |
| Metal | 33 | 75 | 495 | 789 | 1,163 | 1,224 |
| Ferro-manganese | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 25,764 | 30,440 | 66,252 |
| Spiegeleisen | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 9,519 | 16,771 | 17,619 |
| Greece— | | | | | | |
| Ore | 22,315 | 29,302 | 30,395 | 27,189 | 7,657 | 509 |
| Italy— | | | | | | |
| Ore (c) | 1 | 28 | 262 | 547 | 634 | 726 |
| Ferro-manganese | 322 | 4,005 | 3,123 | 2,352 | 1,276 | 2,008 |
| Netherlands— | | | | | | |
| Ore (c) | 7,357 | 8,240 | 5,190 | 5,562 | 5,590 | 6,983 |

(a) Years ended June 30 of that stated.

(c) Including manganeseiferous iron ore.

(b) Years ended March 31 following that stated.

(d) Provisional.

(e) With effect from April, 1963, figures included with those of India.

EXPORTS OF MANGANESE ORE, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Norway— | | | | | | |
| Ore | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 400 | 200 | 2,600 |
| Ferro-manganese .. | 41,844 | 61,938 | 50,497 | 47,360 | 45,844 | 59,499 |
| Ferro-silico-manganese | 44,859 | 67,411 | 80,466 | 84,891 | 70,570 | 83,022 |
| Portugal— | | | | | | |
| Ore | 2,184 | 5,047 | 4,321 | 1,976 | 866 | 6,048 |
| Roumania— | | | | | | |
| Ore | 73,600 | 76,900 | 65,500 | 73,600 | 71,000 | 70,863 |
| Sweden— | | | | | | |
| Ore | 595 | 1,086 | 717 | 743 | 484 | 1,290 |
| Metal | <i>n.a.</i> | 47 | 92 | 30 | 17 | 69 |
| Ferro-manganese .. | 1,382 | 2,693 | 1,650 | 2,540 | 2,537 | 4,281 |
| Ferro-silico-manganese | — | 226 | 25 | 15 | 25 | 20 |
| U.S.S.R.— | | | | | | |
| Ore | 819,800 | 963,500 | 957,600 | 881,800 | 947,800 | 970,427 |
| do. (dioxide) .. | 7,300 | 8,500 | 8,900 | 9,100 | 11,300 | 8,759 |
| Ferro-manganese .. | 45,000 | 49,700 | 50,000 | 50,800 | 54,800 | 56,001 |
| Yugoslavia— | | | | | | |
| Ferro-manganese .. | 7,842 | 6,538 | 10,925 | 7,037 | 7,693 | 8,130 |
| Silico-manganese .. | 197 | 886 | 1,162 | 2,504 | 1,794 | 4,564 |
| Angola— | | | | | | |
| Ore | 8,913 | 38,752 | 33,546 | 21,828 | 9,375 | 2,869 |
| Congo Republic— | | | | | | |
| Ore | 313,711 | 297,837 | (a) 300,000 | (a) 300,000 | (a) 250,000 | (a) 350,000 |
| Egypt— | | | | | | |
| Ore | 19,689 | 158,993 | 205,846 | 235,969 | 157,095 | <i>n.a.</i> |
| Gabon— | | | | | | |
| Ore | — | — | — | — | 91,108 | 594,139 |
| Ivory Coast— | | | | | | |
| Ore | — | — | 22,365 | 107,687 | 96,018 | 103,638 |
| Morocco— | | | | | | |
| Ore | 316,215 | 379,564 | 381,146 | 443,046 | 427,156 | 344,135 |
| South Africa— | | | | | | |
| Ore | 442,387 | 472,987 | 867,355 | 838,834 | 820,508 | 849,109 |
| Ferro-manganese .. | <i>n.a.</i> | <i>n.a.</i> | 103,511 | 130,214 | 77,444 | <i>n.a.</i> |
| Sudan— | | | | | | |
| Ore | 1,273 | — | 394 | — | — | — |
| Costa Rica— | | | | | | |
| Ore | — | — | — | — | — | 590 |
| Cuba— | | | | | | |
| Ore | 67,624 | 54,735 | 8,500 | 13,216 | <i>n.a.</i> | <i>n.a.</i> |
| Mexico— | | | | | | |
| Ore | 225,000 | 158,102 | 162,816 | 174,359 | 130,322 | 108,024 |
| <i>Mn content</i> | 77,120 | 75,720 | 70,686 | 58,872 | 61,060 | 53,085 |
| Panama Republic— | | | | | | |
| Ore | 4,008 | — | — | — | — | <i>n.a.</i> |
| United States— | | | | | | |
| Ore | 4,359 | 5,091 | 4,588 | 6,722 | 7,717 | 7,407 |
| Metal | 551 | 1,133 | 2,182 | 1,997 | 1,976 | 1,841 |
| Ferro-manganese .. | 1,255 | 845 | 670 | 419 | 3,673 | 605 |
| Spiegeleisen | 745 | 339 | 132 | 469 | 638 | 1,050 |
| Bolivia— | | | | | | |
| Ore | — | — | — | 47 | 258 | — |
| Brazil— | | | | | | |
| Ore | 653,207 | 899,776 | 852,636 | 857,784 | 747,913 | 827,431 |
| Ferro-manganese .. | — | — | — | 49 | 4,937 | — |
| Chile— | | | | | | |
| Ore | 19,648 | 23,858 | 20,735 | 7,511 | 9,723 | <i>n.a.</i> |
| Ferro-manganese .. | 5,822 | 2,735 | 2,971 | 3,673 | 13,509 | <i>n.a.</i> |
| Silico-manganese .. | 869 | 3,129 | 869 | 644 | — | <i>n.a.</i> |
| Peru— | | | | | | |
| Ore | 4,448 | 1,022 | — | 913 | 6,858 | 694 |

(a) Estimated.

EXPORTS OF MANGANESE ORE, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|--------|--------|--------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Venezuela— | | | | | | |
| Ore | <i>n.a.</i> | <i>n.a.</i> | 1 | — | — | — |
| Burma— | | | | | | |
| Ore | 426 | — | — | — | — | — |
| Indonesia— | | | | | | |
| Ore | 43,660 | 31,832 | 24,400 | 4,200 | 6,517 | <i>n.a.</i> |
| Iran (a)— | | | | | | |
| Ore | 4,232 | 5,062 | 5,708 | 1,250 | 246 | 11,950 |
| Japan— | | | | | | |
| Ore | — | 398 | 842 | 960 | 805 | 478 |
| Ferro-manganese .. | 47,900 | 33,269 | 38,914 | 14,249 | 21,091 | 14,158 |
| Ferro-silico-manganese | 21,611 | 9,633 | 2,684 | 772 | 6,463 | 3,701 |
| Korea (South)— | | | | | | |
| Ore | 98 | 709 | 198 | 492 | — | — |
| Philippine Republic— | | | | | | |
| Ore | 30,532 | 26,042 | 17,405 | 24,720 | 8,370 | 5,257 |
| Thailand— | | | | | | |
| Ore | 378 | 98 | 58 | 108 | 296 | 2,712 |
| Turkey— | | | | | | |
| Ore | 23,922 | 22,847 | 28,282 | 19,011 | 22,127 | 11,854 |

(a) Years ended March 20 following that stated.

IMPORTS OF MANGANESE ORE, ETC.

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|---------|---------|-----------|-----------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore | 347,433 | 342,839 | 528,856 | 470,929 | 342,390 | 305,196 |
| Metal | 649 | 1,101 | 1,511 | 1,655 | 1,056 | 2,061 |
| Ferro-manganese | 18,087 | 28,807 | 35,375 | 41,830 | 44,206 | 54,205 |
| Spiegeleisen .. .. . |  |  |  |  |  |  | 345 |
| Silico-manganese | 16,122 | 22,685 | 29,185 | 26,497 | 28,056 | 27,297 |
| Canada— | | | | | | |
| Ore | 37,553 | 105,763 | 50,313 | 67,871 | 81,004 | 95,439 |
| Ferro-manganese | 2,217 | 2,084 | 13,835 | 10,772 | 13,332 | 20,211 |
| Silico-manganese | 1,950 | 2,669 | 2,112 | 1,940 | 2,434 | 2,102 |
| Hong Kong— | | | | | | |
| Ore | 93 | 468 | 53 | 56 | 35 | 49 |
| India— | | | | | | |
| Ore | 8,771 | 5,846 | (c) 5,442 | (c) 6,412 | (c) 14,430 | (c) 12,673 |
| Ferro-manganese | 200 | 150 | (c) 155 | (c) 519 | (c) 453 | (c) 677 |
| Malaya— | | | | | | |
| Ore | 2,532 | 2,668 | 6,634 | 3,643 | 2,295 | 2,726 |
| Australia (b)— | | | | | | |
| Ore | 3,028 | 1,189 | 404 | 1,520 | 12,151 | 54,365 |
| Metal | 42 | 76 | 96 | 78 | 177 | 208 |
| Ferro-manganese | 4,908 | 3,650 | 18,634 | 36,026 | 31,300 | 6,364 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 4,661 | 6,115 | 65,414 | 55,408 | 14,018 | 681 |
| Spiegeleisen | n.a. | 493 | 1,728 | 1,698 | 2,255 | 2,331 |
| Ferro-manganese | 8,268 | 5,818 | 9,473 | 8,679 | 8,481 | 9,407 |
| Belgium-Luxemburg | | | | | | |
| E. U.— | | | | | | |
| Ore (a) | 153,364 | 146,434 | 219,132 | 268,274 | 205,208 | 219,683 |
| Ferro-manganese | 46,626 | 55,300 | 58,558 | 52,644 | 56,141 | 60,318 |
| Ferro-silico-manganese | 2,317 | 2,494 | 3,378 | 3,766 | 3,578 | 3,601 |
| Spiegeleisen | 20,666 | 7,118 | 7,099 | 16,143 | 22,537 | 19,108 |
| Czechoslovakia— | | | | | | |
| Ore | 122,000 | 138,000 | 179,000 | 215,000 | 206,000 | n.a. |
| Denmark— | | | | | | |
| Ore | 4,287 | 3,032 | 7,134 | 1,712 | 5,660 | 6,327 |
| Ferro-manganese | 2,219 | 1,187 | 1,248 | 1,241 | 1,599 | 1,242 |
| Ferro-silico-manganese | | 1,088 | 1,389 | 1,187 | 710 | 1,690 |
| Finland— | | | | | | |
| Ferro-manganese and spiegeleisen | 1,363 | 2,176 | 3,338 | 2,194 | 2,545 | 2,598 |
| France— | | | | | | |
| Ore (a) | 545,171 | 596,088 | 765,232 | 690,313 | 705,956 | 701,050 |
| Metal | 44 | — | 45 | 315 | 302 | 953 |
| Ferro-manganese | 3,405 | 4,665 | 6,333 | 7,276 | 7,626 | 9,963 |
| Spiegeleisen | 16,552 | 10,786 | 7,317 | 2,151 | 2,022 | 2,658 |
| Germany (Federal)— | | | | | | |
| Ore | 335,690 | 312,140 | 350,870 | 500,742 | 440,778 | 639,156 |
| do. (ferruginous) | n.a. | n.a. | n.a. | 44,407 | 69,350 | 79,987 |
| Metal | 1,124 | 1,312 | 1,892 | 1,577 | 1,638 | 1,452 |
| Ferro-manganese | n.a. | n.a. | n.a. | 81,005 | 78,794 | 70,203 |
| Spiegeleisen | n.a. | n.a. | n.a. | 15,223 | 14,930 | 13,697 |
| Germany (East)— | | | | | | |
| Ore (d) | 74,159 | 86,795 | 95,677 | 77,748 | 86,511 | 85,199 |
| Hungary— | | | | | | |
| Ferro-manganese | 5,834 | 6,672 | 6,649 | 7,621 | 10,485 | 11,208 |

(a) Including manganiferous iron ore.

(c) Years ended March 31 following that stated.

(b) Years ended June 30 of that stated.

(d) Mn. content.

IMPORTS OF MANGANESE ORE, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-----------|-----------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Italy— | | | | | | |
| Ore (a) | 56,735 | 72,323 | 136,729 | 136,582 | 101,760 | 165,732 |
| Metal | 29 | 82 | 156 | 172 | 113 | 144 |
| Spiegeleisen | 4,431 | 2,265 | 6,778 | 12,335 | 13,281 | 19,064 |
| Ferro-manganese | 18,136 | 20,182 | 27,526 | 30,620 | 42,949 | 53,853 |
| Ferro-silico-manganese | 2,001 | 1,767 | 1,991 | 2,913 | 2,670 | 5,535 |
| Netherlands— | | | | | | |
| Ore (a) | 25,722 | 75,110 | 47,271 | 83,177 | 36,650 | 12,723 |
| Ferro-manganese | 9,102 | 8,806 | 12,807 | 14,210 | 8,297 | 12,009 |
| Ferro-silico-manganese | 229 | 372 | 452 | 896 | 405 | 282 |
| Spiegeleisen | 512 | 1,672 | 6,199 | 935 | 483 | 1,075 |
| Norway— | | | | | | |
| Ore | 193,757 | 214,651 | 303,505 | 225,348 | 279,620 | 229,759 |
| Poland— | | | | | | |
| Ore | 242,645 | 263,522 | 328,208 | 261,736 | 294,277 | 299,494 |
| Spain— | | | | | | |
| Ore | 18,046 | 50,171 | 37,497 | 66,369 | 60,762 | 100,754 |
| Ferro-manganese | 120 | 629 | 140 | 1,421 | 1,397 | 1,483 |
| Sweden— | | | | | | |
| Ore | 72,299 | 79,490 | 54,006 | 86,962 | 56,894 | 76,151 |
| Metal | <i>n.a.</i> | 772 | 799 | 605 | 918 | 1,115 |
| Ferro-manganese | 3,176 | 5,765 | 6,138 | 10,806 | 9,982 | 12,170 |
| Spiegeleisen | 59 | 98 | 118 | 139 | 100 | 200 |
| Ferro-silico-manganese | 308 | 1,287 | 2,559 | 3,279 | 3,583 | 7,369 |
| Yugoslavia— | | | | | | |
| Ore | 24,642 | 32,143 | 46,540 | 37,539 | 44,225 | 35,465 |
| Metal | — | — | — | 92 | 41 | 17 |
| Ferro-manganese | 300 | 359 | 575 | 253 | 265 | 334 |
| Algeria— | | | | | | |
| Ore | 25 | 31 | 30 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico— | | | | | | |
| Ferro-manganese | 1,192 | 730 | 158 | 106 | 97 | 530 |
| United States— | | | | | | |
| Ore (over 35% Mn) | 1,605,913 | 1,676,843 | 2,033,009 | 1,917,136 | 1,764,840 | 2,133,500 |
| <i>Mn content</i> | 747,411 | 792,572 | 966,395 | 920,591 | 842,553 | 1,003,669 |
| Ore (10% to 35% Mn) | 4,497 | 7,013 | 2,400 | 5,500 | 6,536 | 7,373 |
| <i>Mn content</i> | 1,406 | 2,162 | 817 | 1,763 | 2,101 | <i>n.a.</i> |
| Metal | — | 29 | 217 | 504 | 1,343 | 2,108 |
| Ferro-manganese | 57,082 | 80,412 | 107,341 | 198,157 | 112,156 | 132,705 |
| <i>Mn content</i> | 44,215 | 62,707 | 82,673 | 151,963 | 86,643 | 103,015 |
| Silico-manganese | — | — | — | — | — | — |
| <i>Mn content</i> | 7,954 | 11,156 | 8,970 | 12,027 | 15,315 | 12,883 |
| Argentina— | | | | | | |
| Ferro-manganese | — | — | 292 | 415 | 452 | 178 |
| Brazil— | | | | | | |
| Ferro-manganese | 63 | 819 | 45 | 171 | 44 | 58 |
| Chile— | | | | | | |
| Ferro-manganese | — | — | 1 | 3 | <i>n.a.</i> | <i>n.a.</i> |
| Silico-manganese | 5 | 1 | 8 | 8 | 3 | <i>n.a.</i> |
| Japan— | | | | | | |
| Ore | 170,245 | 274,188 | 238,172 | 362,774 | 316,740 | 361,922 |
| Manganiferous iron ore | 28,748 | 50,132 | 61,265 | 134,594 | 169,237 | 96,698 |
| Turkey— | | | | | | |
| Ferro-manganese | 134 | 248 | 306 | 3,030 | 3,502 | 766 |

(a) Including manganiferous iron ore.

MERCURY
PRODUCTION OF MERCURY

Lb. avdp

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Italy | 4,504,000 | r 3,494,000 | r 4,198,000 | 4,211,000 | 4,145,000 | 4,037,000 |
| Roumania | 26,830 | 29,440 | 31,370 | 26,590 | 16,890 | 14,780 |
| Spain | 4,209,056 | 3,927,689 | 4,056,099 | 3,891,355 | 4,012,668 | c 4,000,000 |
| U.S.S.R. (c) | 1,900,000 | 1,900,000 | 1,900,000 | 1,900,000 | 2,700,000 | 2,700,000 |
| Yugoslavia | 933,000 | 1,010,000 | 1,070,000 | 1,210,000 | 1,240,000 | 1,200,000 |
| Tunisia | 2,976 | 15,070 | 12,590 | 4,100 | — | — |
| Mexico | 1,714,303 | 1,247,910 | 1,528,670 | 1,380,000 | 1,430,000 | 1,240,000 |
| United States | 2,893,092 | 2,375,500 | 2,524,900 | 2,406,300 | 1,997,100 | 1,451,900 |
| Bolivia (a) | 772 | 881 | — | — | n.a. | n.a. |
| Chile | 254,039 | 152,500 | 218,560 | 114,700 | 60,131 | 46,623 |
| Colombia | 15,000 | 7,200 | 11,320 | 14,525 | — | — |
| Peru | 150,680 | 192,000 | 230,600 | 228,100 | 265,000 | n.a. |
| China (c) | 1,300,000 | 1,700,000 | 1,700,000 | 2,000,000 | 2,000,000 | 2,000,000 |
| Japan | 828,411 | 1,230,000 | 2,553,000 | 1,930,860 | 1,250,000 | 1,410,000 |
| Philippine Republic | 252,396 | 269,000 | 231,100 | 240,700 | 210,300 | 201,500 |
| Turkey | 112,936 | 42,000 | 101,800 | 141,800 | 202,400 | 226,800 |
| WORLD'S TOTAL (b) .. | 19,100,000 | 17,700,000 | 20,400,000 | 20,000,000 | 19,000,000 | 19,000,000 |

Mercury is also produced in Czechoslovakia; an allowance has been made for this in the total.

(a) Exports.

(b) Estimated.

(c) United States Bureau of Mines' estimate.

EXPORTS OF MERCURY, ETC.

Lb. avdp.

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada— | | | | | | |
| Mercury | 2,830 | 10,458 | 1,918 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Hong Kong— | | | | | | |
| Mercury | 380 | 4,090 | 2,715 | 9,920 | 16,133 | 1,151 |
| Malaya— | | | | | | |
| Mercury | 383 | 2,543 | 3,104 | 915 | 1,444 | 724 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Mercury | 15,000 | 23,100 | 17,400 | 18,300 | 63,100 | 27,778 |
| Mercury compounds .. | 2,200 | 3,700 | — | 200 | <i>n.a.</i> | <i>n.a.</i> |
| Denmark— | | | | | | |
| Mercury oxide | <i>n.a.</i> | 2,205 | 1,543 | 882 | 882 | 2,646 |
| France— | | | | | | |
| Mercury | 9,000 | 10,800 | 22,300 | 24,700 | 18,000 | 24,251 |
| Mercury compounds .. | 13,900 | 11,200 | 14,800 | 16,300 | 4,000 | 8,818 |
| Germany (Federal)— | | | | | | |
| Mercury | 15,000 | 34,200 | 996,900 | 467,400 | 78,500 | 57,982 |
| Italy— | | | | | | |
| Mercury | 873,875 | 2,670,818 | 4,057,532 | 2,483,700 | 2,715,200 | 5,755,387 |
| Mercury compounds .. | 27,040 | 2,822 | 68,083 | <i>n.a.</i> | <i>n.a.</i> | 220 |
| Netherlands— | | | | | | |
| Mercury | 2,000 | 40,000 | 1,074,000 | 463,000 | 40,000 | 8,818 |
| Mercury oxide | <i>n.a.</i> | <i>n.a.</i> | 28,660 | 30,865 | 17,637 | 6,614 |
| Portugal— | | | | | | |
| Mercury | — | 44 | — | — | — | — |
| Spain— | | | | | | |
| Mercury | 3,855,541 | 3,269,470 | 3,998,964 | 3,654,583 | 3,487,713 | 3,733,598 |
| Mercury compounds .. | 64,767 | 101,329 | 224,228 | 259,455 | 285,106 | 394,003 |
| Sweden— | | | | | | |
| Mercury | 29,000 | <i>n.a.</i> | <i>n.a.</i> | 13,000 | 7,000 | 6,600 |
| Switzerland— | | | | | | |
| Mercury | 1,404 | 1,025 | 1,453 | 1,572 | 6,609 | 1,435 |
| U.S.S.R.— | | | | | | |
| Mercury | 789,000 | 783,000 | 1,186,000 | 1,378,000 | 1,323,000 | 1,102,311 |
| Yugoslavia— | | | | | | |
| Mercury | 312,666 | 380,260 | 520,899 | 735,916 | 724,452 | 800,928 |
| Mercury compounds .. | 137,628 | 144,334 | 460,001 | 301,509 | 381,483 | 199,018 |
| Mexico— | | | | | | |
| Mercury | 1,988,210 | 1,587,465 | 1,720,776 | 1,462,837 | 1,651,791 | 1,433,005 |
| United States— | | | | | | |
| Mercury | 24,298 | 48,652 | 27,166 | 21,626 | 17,053 | 14,212 |
| Bolivia— | | | | | | |
| Mercury | 772 | 881 | — | — | <i>n.a.</i> | <i>n.a.</i> |
| Chile— | | | | | | |
| Mercury | 293,202 | 202,038 | 207,316 | 183,171 | 80,826 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Mercury | 10,251 | 1,984 | — | 9,193 | — | — |
| Peru— | | | | | | |
| Mercury | 131,146 | 206,236 | 183,854 | 183,125 | 279,365 | 196,095 |
| Japan— | | | | | | |
| Mercury | 384 | 11,460 | 2,873 | 1,554 | 1,786 | 3,492 |
| Philippine Republic— | | | | | | |
| Mercury | 306,760 | 348,436 | 235,632 | 128,479 | 261,753 | 146,579 |
| Turkey— | | | | | | |
| Mercury | 129,960 | 52,600 | 143,300 | 162,000 | 166,000 | 208,462 |

IMPORTS OF MERCURY, ETC.

Lb. avdp

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Mercury | 1,071,272 | 1,578,819 | 1,592,576 | 1,418,269 | 1,136,261 | 1,575,810 |
| Rhodesia and Nyasaland— | | | | | | |
| Mercury | 6,591 | 17,380 | 10,615 | 11,655 | 11,079 | 10,402 |
| Canada— | | | | | | |
| Mercury | 193,007 | 141,100 | 243,091 | 312,913 | 245,059 | 447,592 |
| Mercury compounds .. | (£3,999) | (£2,281) | (£2,542) | (£1,326) | (£1,284) | (£3,153) |
| Hong Kong— | | | | | | |
| Mercury | 11,163 | 26,720 | 32,115 | 43,486 | 54,377 | 41,311 |
| India— | | | | | | |
| Mercury | 148,073 | 134,752 | (b) 284,354 | (b) 273,373 | (b) 477,625 | (b) 398,545 |
| Mercury compounds .. | 19,588 | 37,334 | (b) 17,603 | (b) 17,633 | (b) 47,329 | (b) 26,579 |
| Malaya— | | | | | | |
| Mercury | 1,874 | 2,945 | 2,873 | 3,112 | 3,778 | 4,615 |
| Pakistan— | | | | | | |
| Mercury | — | 2,499 | 8,477 | 31,605 | 22,343 | 70,336 |
| Australia (a)— | | | | | | |
| Mercury | 59,447 | 76,106 | 97,726 | 156,164 | 128,728 | 139,623 |
| Mercury compounds .. | 184,087 | 356,674 | 707,004 | 549,459 | 26,178 | 34,645 |
| New Zealand— | | | | | | |
| Mercury | 6,250 | 10,906 | 10,545 | 5,804 | 8,360 | n.a. |
| Mercury compounds .. | 3,900 | 3,800 | 3,500 | 6,000 | n.a. | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Mercury | 28,700 | 35,100 | 102,100 | 103,600 | 61,300 | 52,690 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Mercury | 89,900 | 81,400 | 73,600 | 75,000 | 46,500 | 235,674 |
| Mercury compounds .. | 15,200 | 15,400 | 14,100 | 13,900 | 15,900 | 15,212 |
| Denmark— | | | | | | |
| Mercury | 242,100 | 655,400 | 234,400 | 207,000 | 44,000 | 57,320 |
| Mercury compounds .. | n.a. | 114,640 | 92,595 | 55,115 | 52,911 | 70,547 |
| Finland— | | | | | | |
| Mercury | 57,552 | 150,468 | 92,594 | 55,000 | 62,000 | 57,320 |
| France— | | | | | | |
| Mercury | 697,300 | 673,100 | 946,900 | 1,155,900 | 1,138,000 | 1,164,041 |
| Mercury compounds .. | 8,200 | 13,400 | 12,600 | 40,600 | 29,000 | 77,162 |
| Germany (Federal)— | | | | | | |
| Mercury | 1,148,200 | 1,194,500 | 2,844,200 | 2,056,700 | 1,789,900 | 1,241,202 |
| Greece— | | | | | | |
| Mercury | 1,323 | 2,125 | 1,843 | 2,584 | 6,598 | 7,919 |
| Italy— | | | | | | |
| Mercury | 705 | 167,933 | 16,539 | 2,600 | 46,300 | 29,762 |
| Mercury compounds .. | 47,115 | 46,712 | 35,069 | 16,093 | 14,991 | 40,124 |
| Netherlands— | | | | | | |
| Mercury | 106,000 | 163,000 | 1,162,000 | 578,000 | 110,000 | 138,891 |
| Mercury compounds .. | 84,000 | 60,000 | 126,000 | 121,000 | 126,000 | 132,277 |
| Norway— | | | | | | |
| Mercury | 12,599 | 20,000 | 35,000 | 101,000 | 64,000 | 55,116 |
| Poland— | | | | | | |
| Mercury | 401,700 | 293,400 | 420,400 | 403,200 | n.a. | 342,378 |
| Portugal— | | | | | | |
| Mercury | 26,103 | 12,346 | 15,000 | 28,900 | 33,300 | 23,000 |
| Mercury compounds .. | 2,815 | 4,409 | n.a. | 4,600 | 4,400 | 4,900 |
| Sweden— | | | | | | |
| Mercury | 154,000 | 194,000 | 159,000 | 196,000 | 282,000 | 308,647 |
| Switzerland— | | | | | | |
| Mercury | 40,827 | 97,616 | 132,052 | 102,001 | 81,606 | 97,089 |
| Yugoslavia— | | | | | | |
| Mercury | n.a. | n.a. | n.a. | 37 | n.a. | 227,764 |
| Mercury compounds .. | n.a. | n.a. | n.a. | 992 | 53 | 78,055 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

IMPORTS OF MERCURY, ETC. (cont.)

Lb. avdp.

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|---------|-----------|-----------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Algeria— | | | | | | |
| Mercury | 5,100 | 6,800 | 9,000 | n.a. | n.a. | n.a. |
| Mercury compounds .. | 200 | 200 | 200 | n.a. | n.a. | n.a. |
| Angola— | | | | | | |
| Mercury | 31 | 172 | 194 | 298 | 212 | 18,365 |
| Mercury compounds .. | 24 | 99 | 42 | 637 | 119 | 538 |
| Congo Republic— | | | | | | |
| Mercury | 606 | 3,309 | n.a. | n.a. | n.a. | n.a. |
| Mercury compounds .. | 159 | 152 | n.a. | n.a. | n.a. | n.a. |
| Egypt— | | | | | | |
| Mercury | 38,801 | 11,912 | 9,916 | 322 | 38,638 | n.a. |
| Morocco— | | | | | | |
| Mercury | 1,292 | 697 | 840 | 1,528 | 2,405 | 7,994 |
| Mozambique— | | | | | | |
| Mercury | 11 | 168 | 88 | 165 | 123 | n.a. |
| South Africa— | | | | | | |
| Mercury | 51,963 | 44,716 | 122,125 | 43,946 | 72,191 | n.a. |
| Sudan— | | | | | | |
| Mercury | 46 | 317 | 146 | 359 | — | — |
| Tunisia— | | | | | | |
| Mercury | 220 | 397 | 400 | 747 | 1,499 | n.a. |
| Costa Rica— | | | | | | |
| Mercury | n.a. | n.a. | n.a. | n.a. | n.a. | 3,968 |
| Cuba— | | | | | | |
| Mercury | 3,075 | 2,679 | n.a. | n.a. | n.a. | n.a. |
| Guatemala— | | | | | | |
| Mercury | 430 | 337 | — | — | n.a. | n.a. |
| United States— | | | | | | |
| Mercury | 2,294,896 | 2,290,715 | 1,481,076 | 935,813 | 2,395,216 | 3,277,576 |
| Mercury compounds .. | 8,685 | 40,302 | 114,305 | 90,700 | 46,368 | 14,899 |
| Argentina— | | | | | | |
| Mercury | 72,215 | 127,163 | 36,654 | 13,532 | 24,332 | 38,116 |
| Mercury compounds .. | 2,824 | 1,625 | 2,930 | 1,453 | 3,840 | 4,810 |
| Brazil— | | | | | | |
| Mercury | 106,622 | 58,180 | 84,146 | 192,089 | 101,071 | 255,134 |
| Chile— | | | | | | |
| Mercury | 409 | 435 | 451 | 693 | 232 | n.a. |
| Mercury compounds .. | 1,661 | 1,987 | 1,834 | 1,780 | 2,821 | n.a. |
| Colombia— | | | | | | |
| Mercury | 2,712 | 7,215 | 4,634 | 2,127 | 6,764 | 14,162 |
| Mercury compounds .. | 9,546 | 15,895 | 15,053 | 9,156 | 14,597 | 14,511 |
| Peru— | | | | | | |
| Mercury | 1,484 | 915 | 562 | 1,512 | n.a. | 1,239 |
| Mercury compounds .. | 500 | 659 | 686 | 397 | 419 | 456 |
| Uruguay— | | | | | | |
| Mercury | 14,072 | 90 | 551 | n.a. | n.a. | n.a. |
| Venezuela— | | | | | | |
| Mercury | 38,590 | 14,121 | 14,383 | 8,682 | 10,225 | 31,337 |
| Mercury compounds .. | 7,317 | 18,415 | 9,815 | 24,736 | 6,740 | 15,849 |
| Formosa— | | | | | | |
| Mercury | 17,070 | 15,946 | 46,116 | 11,579 | 19,941 | 20,979 |
| Indonesia— | | | | | | |
| Mercury | 5,463 | 9,129 | 8,278 | 3,691 | n.a. | n.a. |
| Iran (a)— | | | | | | |
| Mercury | 132 | 33 | 2,004 | n.a. | n.a. | n.a. |
| Japan— | | | | | | |
| Mercury | 22,260 | 1,032 | 825 | 700,025 | 1,570,328 | 1,961,444 |
| Korea (South)— | | | | | | |
| Mercury | 29,000 | 22,000 | 22,000 | 37,000 | 55,000 | 848,780 |
| Lebanon— | | | | | | |
| Mercury | 351 | 315 | n.a. | n.a. | n.a. | n.a. |

(a) Years ended March 20 of year following that stated.

IMPORTS OF MERCURY, ETC. (cont.)

Lb. avdp.

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|-------|-------|-------|--------|-------|-------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Philippine Republic— | | | | | | |
| Mercury | 873 | 295 | 888 | 9,405 | 276 | 606 |
| Thailand— | | | | | | |
| Mercury | 8,375 | 1,411 | 4,645 | 17,170 | 1,179 | 2,427 |
| Mercury compounds .. | 791 | 985 | 915 | 2,304 | 2,434 | 2,663 |
| Turkey— | | | | | | |
| Mercury compounds .. | 1,131 | 3,973 | 2,866 | 3,697 | 2,942 | 3,399 |

MICA
PRODUCTION OF MICA

Lb. avdp.

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|------------|------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya— | | | | | | |
| Block and sheet .. | 16,000 | 21,908 | 1,244 | 222 | 2,293 | 1,760 |
| Northern Rhodesia— | | | | | | |
| Sheet | 1,940 | 248 | 530 | — | — | — |
| Southern Rhodesia— | | | | | | |
| Crude | — | — | 752,000 | 102,300 | 172,888 | 224,000 |
| Block and sheet .. | 106,000 | 1,220,000 | 90,000 | 64,011 | 33,136 | 56,000 |
| Tanganyika— | | | | | | |
| Sheet | 110,000 | 120,000 | 180,000 | 190,000 | 210,000 | 235,000 |
| Waste | 25,000 | 190,000 | — | — | — | — |
| Uganda | — | — | — | 850 | 180 | — |
| Canada (a)— | | | | | | |
| Rough mine-run or | | | | | | |
| rified | 4,608 | 8,641 | 118,407 | 73,541 | 72,187 | } 1,068,650 |
| Trimmed | 29,834 | 16,336 | 28,862 | 56,585 | 33,437 | |
| Splittings | — | — | — | 22,556 | — | |
| Sold for mechanical | | | | | | |
| splitting | 54,717 | 23,250 | 27,900 | 24,577 | 26,400 | |
| Ground | 1,380,530 | 591,356 | 791,994 | 1,434,097 | 609,968 | |
| Scrap | 35,244 | 174,251 | 696,886 | 204,804 | } 462,042 | |
| Ungraded | — | — | 38,556 | — | | |
| By varieties— | | | | | | |
| Phlogopite and | | | | | | |
| biotite | 1,061,972 | 813,509 | 1,580,605 | 1,565,740 | n.a. | 1,068,650 |
| Muscovite and schist | 442,961 | 325 | 122,000 | 250,420 | n.a. | — |
| India(d)— | | | | | | |
| Block | 5,244,500 | 6,306,400 | c 5,036,165 | c 4,676,619 | c 4,274,029 | c 3,896,919 |
| Splittings | 14,273,300 | 15,998,800 | c18,043,635 | c18,479,395 | c18,562,593 | c17,408,950 |
| Ground and waste .. | 23,945,500 | 29,082,000 | c39,484,982 | c39,293,188 | c52,112,644 | c43,961,185 |
| Other unmanufactured | 48,000 | 160,900 | (c) 39,787 | (c) 35,382 | (c) 404,958 | (c) 216,734 |
| Australia (b)— | | | | | | |
| Crude | 35,840 | 170,000 | 649,600 | 185,920 | — | — |
| Block | 42,479 | 44,665 | 9,500 | — | — | — |
| Scrap | 37,408 | 7,000 | — | — | — | 15,680 |
| OTHER COUNTRIES | | | | | | |
| Austria | 130,000 | 220,000 | 317,000 | 194,000 | 33,000 | — |
| France | 459,000 | 670,000 | 686,000 | 304,000 | 190,000 | 381,000 |
| Germany (Federal) .. | 29,000 | 31,000 | 22,000 | 18,000 | 20,000 | 11,000 |
| Italy | 22,000 | 22,000 | 66,000 | n.a. | n.a. | n.a. |
| Norway— | | | | | | |
| Crude | 4,900,000 | 11,500,000 | 5,700,000 | 7,700,000 | — | — |
| Waste | 240,000 | 1,100,000 | 900,000 | 2,200,000 | n.a. | — |
| Spain | 20,371 | 10,200 | 400 | — | — | — |
| Sweden (a)— | | | | | | |
| Ground | 421,000 | 328,000 | 348,000 | 110,000 | 130,000 | n.a. |
| Yugoslavia | 4,000 | 4,000 | 4,000 | 9,000 | 22,000 | 9,000 |
| Angola— | | | | | | |
| Sheet | 47,181 | 20,258 | 26,863 | 3,571 | — | — |
| Waste and splittings .. | 716,943 | 383,400 | 720,069 | 45,966 | 108,000 | — |
| Malagasy Republic— | | | | | | |
| Phlogopite (block and | | | | | | |
| splittings) | 2,390,000 | 2,193,000 | 2,227,000 | 2,224,000 | 2,961,000 | 2,120,000 |
| Mozambique | 4,572 | 12,165 | 2,080 | 1,150 | 1,214 | — |
| South Africa— | | | | | | |
| Sheet | 1,088 | 492 | 1,724 | 1,341 | 2,608 | } 4,680,000 |
| Waste | 4,254,000 | 3,762,000 | 6,712,000 | 5,440,000 | 4,900,000 | |

(a) Sales.

(b) The following amounts of damourite were also produced (lb. avdp.): 1958—1,080,000; 1959—1,100,000; 1960—1,250,000; 1961—1,140,000; 1962—1,090,000; 1963—1,100,000.

(c) Years ended March 31 following that stated.

(d) Exports.

PRODUCTION OF MICA (cont.)

Lb. avdp

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| South West Africa .. | — | 234,000 | — | — | 150,000 | 1,200,000 |
| Sudan— | | | | | | |
| Block | 225,900 | } 882,000 | — | — | — | — |
| Scrap | 154,000 | | | | | |
| United States (a)— | | | | | | |
| Sheet (uncut) .. | 661,344 | 706,395 | 587,401 | 526,007 | 363,016 | 102,961 |
| Scrap (b) | 186,694,000 | 203,082,000 | 195,820,000 | 198,090,000 | 215,404,000 | 218,646,000 |
| Argentina— | | | | | | |
| Sheet | 127,030 | } 110,000 | 110,000 | 120,000 | 110,000 | 75,000 |
| Waste | 3,265 | | | | | |
| Brazil | 2,829,000 | 2,553,000 | 4,440,000 | 9,101,000 | 3,885,000 | 3,289,000 |
| Uruguay | n.a. | n.a. | n.a. | n.a. | n.a. | 95,000 |
| Formosa | 700 | 45 | — | — | — | — |
| TOTAL* | 249,700,000 | 282,000,000 | 284,700,000 | 291,000,000 | 307,000,000 | 298,000,000 |

* Excluding mica known to have been produced in Roumania, U.S.S.R. and China.

(a) Sold or used by producers.

(b) Including mica recovered from kaolin and mica schists.

EXPORTS OF MICA

Lb. avdp.

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|------------|--------------|--------------|--------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Splittings | } 2,948,000 | 2,964,000 | 4,435,000 | 5,652,000 | 6,279,000 | 7,728,000 |
| Ground and waste | | | | | | |
| Kenya— | | | | | | |
| Unmanufactured (a) | — | 8,400 | 6,000 | — | 500 | 1,800 |
| Rhodesia and Nyasaland— | | | | | | |
| Unmanufactured (a) | 1,104,842 | 986,423 | 313,417 | 122,378 | 33,327 | 139,877 |
| Tanganyika— | | | | | | |
| Unmanufactured (a) | 132,400 | 309,000 | 180,400 | 197,100 | 218,600 | 241,100 |
| Canada— | | | | | | |
| Rough | — | 107,100 | 30,200 | 181,100 | 97,900 | — |
| Trimmed block or sheet | 51,900 | 24,200 | 67,000 | 41,300 | 102,300 | — |
| Ground | 78,000 | 46,000 | 24,000 | — | — | — |
| Waste | 170,200 | 246,500 | 367,600 | (d) | (d) | — |
| Hong Kong— | | | | | | |
| Unmanufactured (a) | 79,900 | 14,700 | 1,200 | 2,600 | — | 2,000 |
| Manufactured | (£1,367) | 2,300 | 4,400 | 2,500 | 2,500 | 1,300 |
| India— | | | | | | |
| Block | 5,244,500 | 6,306,400 | c 5,036,165 | c 4,676,619 | c 4,274,029 | c 3,896,919 |
| Splittings | 14,273,300 | 15,998,800 | c 18,043,635 | c 18,479,395 | c 18,562,593 | c 17,408,950 |
| Ground and waste | 23,945,500 | 29,082,000 | c 39,484,982 | c 39,293,188 | c 52,112,644 | c 43,961,185 |
| Other unmanufactured | 48,000 | 160,900 | c 39,787 | c 35,382 | c 404,958 | c 216,734 |
| Manufactured | 402,246 | 479,054 | c 377,577 | c 449,194 | c 175,113 | c 459,205 |
| Australia (b)— | | | | | | |
| Unmanufactured | 29,535 | 33,818 | 86,332 | 98,096 | 57,344 | 60,397 |
| Manufactured | (£10,638) | (£13,434) | (£13,738) | (£23,599) | (£12,858) | (£16,367) |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unmanufactured | 111,100 | (a) 54,700 | (a) 3,300 | (a) 10,600 | (a) 11,000 | 66,800 |
| Manufactured | n.a. | 11,700 | 31,300 | 28,200 | 40,800 | 17,000 |
| Belgium-Luxemburg E.U.— | | | | | | |
| Unmanufactured (a) | 266,300 | 161,000 | 49,200 | 55,600 | 45,000 | 19,600 |
| Manufactured | 36,400 | 58,400 | 114,200 | 131,200 | 257,900 | 285,500 |
| Denmark— | | | | | | |
| Ground | 31,300 | 7,500 | 200 | 1,100 | 2,000 | 2,200 |
| Manufactured | 5,300 | 15,900 | 3,600 | 900 | 2,000 | — |
| France— | | | | | | |
| Unmanufactured (a) | 253,500 | 183,400 | 312,000 | 138,200 | 110,000 | 53,000 |
| Ground | 294,500 | 298,900 | 303,100 | 224,000 | 254,000 | n.a. |
| Manufactured | 303,100 | 316,800 | 480,800 | 504,400 | 518,000 | 615,100 |
| Germany (Federal)— | | | | | | |
| Unmanufactured (a) | 465,500 | 578,700 | 675,900 | 713,000 | 945,100 | 1,072,300 |
| Manufactured | 160,500 | 169,500 | 213,400 | 241,000 | 220,700 | 187,600 |
| Finland— | | | | | | |
| Unmanufactured (a) | — | — | n.a. | 121,000 | 165,000 | 132,000 |
| Italy— | | | | | | |
| Ground | — | 101,693 | 54,384 | } 134,300 | 82,200 | 106,000 |
| Waste | 11,023 | 16,535 | 44,092 | | | |
| Manufactured | 17,139 | 32,439 | 33,283 | 32,400 | 48,900 | 52,700 |
| Netherlands— | | | | | | |
| Unmanufactured | 236,000 | 194,000 | 229,000 | 117,000 | 247,000 | 346,000 |
| Manufactured | 2,200 | 4,400 | 6,600 | 13,200 | 15,400 | 24,300 |
| Norway— | | | | | | |
| Unmanufactured | 4,379,440 | 5,176,000 | 5,553,000 | 6,437,000 | 6,446,000 | 7,917,000 |
| Waste | 226,812 | — | 134,500 | 26,000 | 214,000 | — |
| Sweden— | | | | | | |
| Unmanufactured | 22,000 | 37,000 | 2,000 | 4,000 | 18,000 | 13,000 |

(a) Including waste.

(c) Years ended March 31 following that stated.

(b) Years ended June 30 of that stated.

(d) Included with "Rough".

EXPORTS OF MICA (cont.)

Lb. avoirdupois

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Switzerland— | | | | | | |
| Unmanufactured (a) .. | <i>n.a.</i> | <i>n.a.</i> | 13,913 | 54,057 | 44,509 | 45,102 |
| Manufactured | <i>n.a.</i> | <i>n.a.</i> | 357,603 | 458,815 | 528,302 | 367,881 |
| U.S.S.R.— | | | | | | |
| Unmanufactured | 223,000 | 373,000 | 22,000 | 4,000 | — | 15,432 |
| Yugoslavia— | | | | | | |
| Waste | 69,710 | 252,932 | 35,693 | 70,394 | — | — |
| Angola— | | | | | | |
| Unmanufactured | 36,467 | 20,020 | 17,472 | 11,720 | <i>n.a.</i> | } 5,732 |
| Waste | 789,290 | 2,486,371 | 1,316,779 | 3,660 | <i>n.a.</i> | |
| Egypt— | | | | | | |
| Unmanufactured | 77,757 | 136,025 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Unmanufactured | 1,850,705 | 2,006,716 | 2,192,431 | 2,715,173 | 2,356,741 | 1,856,881 |
| Mozambique— | | | | | | |
| Unmanufactured | 661 | 9,623 | 3,014 | 2,923 | 1,214 | — |
| South Africa— | | | | | | |
| Unmanufactured (a) .. | 2,268,000 | 2,256,000 | 3,166,000 | 6,756,000 | 5,312,000 | 3,208,000 |
| Mexico— | | | | | | |
| Unmanufactured | — | 31,667 | 26,636 | 33,669 | 16,405 | — |
| Waste | 44,485 | — | — | — | — | — |
| United States— | | | | | | |
| Unmanufactured | 1,030,540 | 1,072,894 | 701,926 | 334,211 | 430,856 | 594,427 |
| Ground | 8,198,367 | 8,915,109 | 7,077,245 | 7,074,850 | 7,427,420 | 7,244,428 |
| Manufactured | 254,198 | 216,040 | 243,354 | 190,320 | 197,441 | 204,246 |
| Argentina— | | | | | | |
| Unmanufactured | 191,176 | 404,061 | 396,722 | 727,459 | 650,088 | 1,067,716 |
| Brazil— | | | | | | |
| Unmanufactured | 1,783,352 | 1,742,201 | 1,595,944 | 1,969,263 | 1,944,902 | 2,759,680 |
| Manufactured | 35,025 | 51,471 | 59,869 | 51,099 | 60,197 | 33,600 |
| Japan— | | | | | | |
| Unmanufactured (a) .. | 29,000 | 13,000 | 57,000 | 692,000 | 40,000 | 33,000 |
| Manufactured | 14,465 | 37,232 | 54,132 | 56,780 | 88,851 | 33,788 |

(a) Including waste.

IMPORTS OF MICA

Lb. avdp.

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Block | 954,000 | 1,033,000 | 858,000 | 856,000 | 473,000 | 677,000 |
| Splittings | 2,482,000 | 1,541,000 | 2,910,000 | 2,999,000 | 1,693,000 | 2,556,000 |
| Ground and waste | 7,150,000 | 6,933,000 | 14,531,000 | 11,872,000 | 10,385,000 | 21,726,000 |
| Manufactured | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 81,000 |
| Kenya— | | | | | | |
| Unmanufactured (a) | 3,100 | 7,500 | 20,100 | 35,300 | 15,500 | 29,400 |
| Mauritius— | | | | | | |
| Unmanufactured | 4 | 9 | 31 | 4 | <i>n.a.</i> | — |
| Manufactured | 2 | 5,016 | 8,962 | 981 | <i>n.a.</i> | 271 |
| Tanganyika— | | | | | | |
| Unmanufactured (a) | 33,600 | 81,800 | 75,400 | 13,200 | 24,500 | 16,700 |
| Canada— | | | | | | |
| Unmanufactured | 1,047,700 | 1,340,400 | 1,838,800 | 1,475,800 | 2,296,300 | 1,737,600 |
| Manufactured | (£139,476) | (£156,720) | (£116,582) | (£126,259) | (£146,920) | (£212,806) |
| Jamaica— | | | | | | |
| Unmanufactured | 40,922 | 125,579 | 78,801 | 118,046 | 187,889 | 142,779 |
| Manufactured | 409 | 548 | 192 | 473 | 147 | 842 |
| Trinidad and Tobago— | | | | | | |
| Unmanufactured (a) | 25,300 | 55,000 | 66,000 | — | 2,500 | <i>n.a.</i> |
| Manufactured | 1,102 | 488 | — | 125 | 165 | <i>n.a.</i> |
| Hong Kong— | | | | | | |
| Unmanufactured (a) | 51,100 | 130,400 | 11,000 | 19,000 | 9,000 | 8,700 |
| Manufactured | (£249) | 11,200 | 1,700 | 4,100 | 14,800 | 12,300 |
| India— | | | | | | |
| Unmanufactured | 29,318 | 560 | 30,483 | 48,828 | 8,800 | — |
| Manufactured | — | 5,719 | 8,951 | 423 | 2,200 | 4,400 |
| Malaya— | | | | | | |
| Manufactured | 2,800 | 2,341 | 3,144 | 2,366 | 7,558 | 21,625 |
| Sarawak— | | | | | | |
| Unmanufactured (a) | 4,000 | (c) 2,000 | (c) 4,000 | 4,000 | — | — |
| Australia (b)— | | | | | | |
| Block or sheet | 21,653 | 21,215 | 26,772 | 43,859 | 15,150 | 40,393 |
| Splittings | 222,469 | 130,356 | 228,914 | 237,818 | 144,714 | 178,034 |
| Ground | 184,091 | 204,008 | 335,482 | 394,876 | 310,592 | 590,616 |
| Waste | 572,320 | 543,656 | 1,818,880 | 531,280 | 663,261 | 575,472 |
| Manufactured | (£11,002) | (£8,471) | (£4,267) | (£15,054) | (£8,583) | (£5,828) |
| New Zealand— | | | | | | |
| Unmanufactured | (£NZ20,283) | (£NZ17,898) | (£NZ26,766) | (£NZ23,910) | } £NZ12,407 | <i>n.a.</i> |
| Waste | (£NZ 1,186) | (£NZ 2,457) | (£NZ 1,077) | (£NZ 4,094) | | |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unmanufactured | 788,200 | (a) 564,600 | (a) 424,200 | (a) 436,500 | (a) 515,700 | (a) 817,700 |
| Manufactured | <i>n.a.</i> | 43,400 | 49,600 | 74,500 | 56,000 | 45,000 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unmanufactured (a) | 1,682,300 | 2,231,300 | 1,694,700 | 1,568,400 | 1,965,400 | 1,675,300 |
| Manufactured | 54,900 | 46,300 | 83,800 | 70,800 | 89,100 | 72,500 |
| Denmark— | | | | | | |
| Unmanufactured | 19,000 | 22,300 | 48,700 | 12,300 | 13,000 | 26,500 |
| Ground | 1,480,000 | 1,509,100 | 234,400 | 338,000 | 245,000 | 482,800 |
| Manufactured | 55,600 | 92,600 | 150,600 | 123,500 | 152,000 | 108,000 |
| Finland— | | | | | | |
| Unmanufactured (a) | — | — | <i>n.a.</i> | 574,298 | 686,709 | 1,091,337 |
| Manufactured | 41,535 | 41,337 | 78,600 | 57,000 | 62,000 | 59,500 |
| France— | | | | | | |
| Unmanufactured (a) | 5,004,100 | 2,491,200 | 4,437,900 | 5,193,200 | 4,409,000 | 4,334,300 |
| Ground | 2,763,300 | 1,962,300 | 2,166,500 | 2,587,600 | 2,919,000 | 3,661,900 |
| Manufactured | 65,000 | 32,800 | 28,200 | 58,000 | 88,000 | 68,300 |

(a) Including waste.

(c) Excess of re-exports.

(b) Years ended June 30 of that stated.

IMPORTS OF MICA (cont.)

Lb. advp.

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Unmanufactured (a) .. | 7,684,200 | 8,921,000 | 11,559,100 | 10,260,300 | 9,882,700 | 9,886,800 |
| Manufactured .. | 215,800 | 195,300 | 286,800 | 229,700 | 181,200 | 237,400 |
| Greece— | | | | | | |
| Unmanufactured .. | 19,352 | 8,459 | 36,471 | 24,341 | 63,160 | 50,797 |
| Italy— | | | | | | |
| Unmanufactured .. | 1,286,816 | 1,004,263 | 3,284,411 | 2,656,800 | 3,670,000 | 1,475,300 |
| Ground .. | 887,731 | 1,225,045 | 1,556,761 | } 3,355,900 | 4,481,000 | 2,568,400 |
| Waste .. | 34,270,431 | 4,068,461 | 6,245,234 | | | |
| Manufactured .. | 444,860 | 404,112 | 630,725 | 788,800 | 533,700 | 283,000 |
| Netherlands— | | | | | | |
| Unmanufactured (a) .. | 1,660,000 | 1,329,000 | 1,052,000 | 1,257,000 | 1,565,000 | 1,389,000 |
| Manufactured .. | 104,000 | 119,000 | 128,000 | 137,000 | 123,000 | 126,000 |
| Norway— | | | | | | |
| Unmanufactured .. | } 5,294,511 | 37,000 | 42,000 | 791,000 | 55,000 | 71,000 |
| Waste .. | | 4,833,000 | 7,613,000 | 5,767,000 | 9,231,000 | 7,520,000 |
| Manufactured .. | | 83,394 | 66,000 | 64,000 | 71,000 | 368,000 |
| Poland— | | | | | | |
| Unmanufactured .. | 916,200 | 769,600 | 916,900 | 1,322,300 | <i>n.a.</i> | 1,351,200 |
| Portugal— | | | | | | |
| Unmanufactured .. | 175,327 | 172,448 | 203,000 | 226,600 | 284,400 | 205,500 |
| Manufactured .. | 9,817 | 10,615 | 4,000 | 11,900 | 15,000 | 15,200 |
| Spain .. | 4,500,337 | 271,052 | 287,816 | 409,284 | 838,257 | 1,467,831 |
| Sweden— | | | | | | |
| Unmanufactured (a) .. | 2,123,000 | 1,720,000 | 2,540,000 | 2,648,000 | 2,496,000 | 2,544,000 |
| Manufactured .. | 53,000 | 53,000 | 51,000 | 71,000 | 93,000 | 90,000 |
| Switzerland— | | | | | | |
| Unmanufactured (a) .. | <i>n.a.</i> | <i>n.a.</i> | 1,578,267 | 1,773,683 | 2,042,483 | 2,027,829 |
| Manufactured .. | <i>n.a.</i> | <i>n.a.</i> | 143,140 | 190,687 | 228,820 | 130,218 |
| U.S.S.R.— | | | | | | |
| Unmanufactured .. | 922,000 | 2,621,000 | 2,441,000 | 1,404,000 | 730,000 | 441,000 |
| Yugoslavia— | | | | | | |
| Unmanufactured .. | — | 11,830 | 15,677 | — | 13,227 | 50,521 |
| Manufactured .. | 3,732 | 3,849 | 2,423 | 20,682 | 21,314 | 73,921 |
| Algeria— | | | | | | |
| Unmanufactured (a) .. | 155,000 | 70,100 | 1,100 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ground .. | 257,700 | 261,000 | 154,100 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Manufactured .. | 4,900 | 5,700 | 7,500 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Congo Republic— | | | | | | |
| Unmanufactured .. | 265 | 2,154 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Manufactured .. | 2,359 | 2,088 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt— | | | | | | |
| Unmanufactured .. | 222,931 | 371,576 | 2,204 | 55,676 | 15,926 | <i>n.a.</i> |
| Manufactured .. | 4,301 | 5,959 | 13,946 | 10,143 | 3,865 | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Unmanufactured .. | 6,724 | 15,276 | 5,481 | 25,353 | 17,637 | 1,653 |
| Morocco— | | | | | | |
| Unmanufactured (a) .. | 11,431 | 2,204 | 2,205 | — | — | — |
| Ground .. | 452 | — | 500 | 3,000 | 2,425 | 7,055 |
| Manufactured .. | 2,315 | 2,718 | 2,427 | 2,659 | 2,383 | 2,077 |
| South Africa— | | | | | | |
| Mica and micanite sheets | 33,500 | 31,364 | 46,623 | 60,910 | 64,146 | <i>n.a.</i> |
| Sudan— | | | | | | |
| Unmanufactured .. | 1,124 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 16,199 |
| Manufactured .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 35,713 |
| Tunisia— | | | | | | |
| Unmanufactured .. | 22,700 | } 4 | 110 | 15 | 11,023 | <i>n.a.</i> |
| Ground .. | 9 | | | | | |
| Manufactured .. | 900 | | 700 | 1,300 | 6,600 | 1,700 | n.a. |
| Guatemala— | | | | | | |
| Unmanufactured .. | <i>n.a.</i> | 7,520 | 26,762 | 6,931 | 7,857 | <i>n.a.</i> |
| Manufactured .. | <i>n.a.</i> | 853 | 897 | 22 | 18 | <i>n.a.</i> |

(a) Including waste.

IMPORTS OF MICA (cont.)

Lb. avdp.

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Mexico— | | | | | | |
| Unmanufactured .. | 57,347 | 98,703 | 21,231 | 91,558 | 201,474 | 177,126 |
| Waste | 272,231 | 484,724 | 248,318 | 309,077 | 417,604 | 263,946 |
| United States— | | | | | | |
| Unmanufactured .. | 2,181,056 | 3,220,412 | 1,088,021 | 852,648 | 1,110,739 | 1,133,521 |
| Ground | 48,238 | 46,049 | 46,000 | 23,000 | 69,000 | 31,488 |
| Waste | 8,128,613 | 9,287,998 | 12,480,715 | 6,047,586 | 8,916,421 | 16,075,434 |
| Films and splittings .. | 9,937,286 | 9,866,427 | 8,256,530 | 7,457,035 | 10,460,437 | 8,442,887 |
| Other manufactures .. | 120,728 | 171,039 | 231,993 | 164,179 | 276,196 | 231,283 |
| Argentina | <i>n.a.</i> | 342 | 6,766 | 11,054 | 4,031 | 28,590 |
| Bolivia | <i>n.a.</i> | <i>n.a.</i> | 21,513 | 37 | 265 | 31,200 |
| Brazil— | | | | | | |
| Unmanufactured .. | 5,044 | — | 119 | 60 | 2,244 | 661 |
| Manufactured | 2,119 | 8,649 | 11,711 | 7,247 | 11,188 | 58,784 |
| Chile— | | | | | | |
| Unmanufactured .. | 9,180 | 9,886 | 11,813 | 51,399 | 64,146 | <i>n.a.</i> |
| Manufactured | 9,764 | 15,322 | 13,327 | 14,808 | 6,942 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Unmanufactured .. | 27,760 | 198,696 | 300,910 | 391,331 | 425,915 | 300,587 |
| Manufactured | 3,338 | 9,703 | 14,059 | 16,435 | 12,807 | 22,306 |
| Peru— | | | | | | |
| Ground and waste .. | 127,790 | 167,296 | 140,000 | 210,283 | 205,594 | 225,046 |
| Venezuela— | | | | | | |
| Unmanufactured .. | 2,420,012 | 855,457 | 578,879 | 905,387 | 733,473 | 312,657 |
| Manufactured | <i>n.a.</i> | 15,346 | 4,301 | 40,812 | 21,308 | 4,366 |
| Formosa— | | | | | | |
| Unmanufactured .. | 13,673 | 2,751 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Indonesia— | | | | | | |
| Manufactured | 2,866 | 51,456 | 8,490 | 21,213 | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Unmanufactured .. | 983,000 | 1,881,000 | 1,812,000 | 4,057,000 | } 3,851,000 | } 4,21,000 |
| Ground | 816,000 | 1,978,000 | 128,000 | 207,000 | | |
| Waste | 2,030,000 | 4,074,000 | 5,130,000 | 5,456,000 | 3,538,000 | 3,28,000 |
| Manufactured | 183 | 137 | 79 | 1,208 | 2,185 | 1,468 |
| Lebanon— | | | | | | |
| Unmanufactured .. | 1,336 | 10,803 | 13,228 | 6,523 | 8,234 | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Unmanufactured .. | 77,473 | 81,721 | 42,099 | 149,264 | 84,957 | 109,989 |
| Thailand— | | | | | | |
| Unmanufactured .. | 4 | 7 | 73 | 5,364 | 1,107 | 4,273 |
| Manufactured | 847 | 1,614 | 2,544 | 1,325 | 3,565 | 7,824 |
| Turkey— | | | | | | |
| Unmanufactured .. | 7,707 | 19,590 | 75 | 7 | 25,026 | 39,979 |
| Manufactured | 10,055 | 6,003 | 4,343 | 2,297 | 5,150 | 16,506 |

MOLYBDENUM
PRODUCTION OF MOLYBDENUM ORE
(MoS₂ content or equivalent)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-----------------|-----------------|-----------------|-----------------|---------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Nigeria | — | — | — | — | — | 2 |
| Canada (a) | 662 | 557 | 572 | 574 | 609 | 745 |
| Australia | 4 | — | — | 1 | 1 | 10 |
| OTHER COUNTRIES | | | | | | |
| Norway | 360 | 379 | 403 | 396 | 427 | 345 |
| U.S.S.R. (b) | 6,900 | 7,400 | 8,200 | 8,900 | 9,300 | 9,300 |
| Yugoslavia | 3 | (b) 3 | — | — | — | — |
| South Africa | 7 | — | — | — | — | — |
| Mexico | 42 | 44 | 99 | 3 | 96 | 68 |
| United States | 30,579 | 37,941 | 50,809 | 49,563 | 38,156 | 48,407 |
| Chile | 2,109 | 3,771 | 3,041 | 3,004 | 3,913 | 4,765 |
| Peru | 2 | — | — | — | n.a. | 985 |
| China (b) | 1,600 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 |
| Japan | 190 | 627 | 625 | 600 | 613 | 544 |
| Korea (South) | 60 | 36 | 73 | 52 | 122 | 115 |
| Philippine Republic | — | 72 | 46 | 185 | 186 | 176 |
| TOTAL* | r 42,500 | r 53,300 | r 66,400 | r 65,800 | 55,900 | 68,000 |

*Excluding molybdenum ore known to have been produced in Roumania, Spain, Argentina, North Korea and Turkey.

(v) Shipments.

(a) United States Bureau of Mines' estimate.

EXPORTS OF MOLYBDENUM ORE, ETC.

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------|--------|--------|--------|--------|--------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ferro-molybdenum .. | 296 | 333 | 245 | 246 | 229 | 160 |
| Canada— | | | | | | |
| Oxide | r 845 | 1,673 | n.a. | n.a. | n.a. | n.a. |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ferro-molybdenum .. | — | — | 61 | 246 | 143 | 2 |
| France— | | | | | | |
| Ferro-molybdenum .. | 165 | 261 | 555 | 375 | 412 | 569 |
| Oxide and molybdates .. | 7 | 4 | 7 | 2 | 10 | 57 |
| Germany (Federal)— | | | | | | |
| Metal | 9 | 35 | 34 | 27 | 22 | 35 |
| Netherlands— | | | | | | |
| Metal | n.a. | n.a. | n.a. | 58 | 70 | 55 |
| Norway— | | | | | | |
| Ore | 390 | 414 | 467 | 394 | 480 | 417 |
| Sweden— | | | | | | |
| Ferro-molybdenum .. | 353 | 266 | 292 | 261 | 326 | 271 |
| U.S.S.R.— | | | | | | |
| Ferro-molybdenum .. | n.a. | n.a. | 2,700 | 4,400 | 2,500 | 3,000 |
| Mexico— | | | | | | |
| Ore and concentrates | | | | | | |
| (MoS ₂ content) .. | 26 | 44 | 97 | 3 | 96 | 68 |
| United States— | | | | | | |
| Ore and concentrates | | | | | | |
| (MoS ₂ content) .. | 8,910 | 14,037 | 22,520 | 26,553 | 11,582 | 19,765 |
| Metal, alloys and scrap .. | 6 | 7 | 132 | 197 | 34 | 62 |
| Ferro-molybdenum .. | 101 | 111 | 190 | 160 | 85 | 107 |
| Wire, powder and semi- | | | | | | |
| fabricated | 16 | 15 | 11 | 14 | 21 | 25 |
| Chile— | | | | | | |
| Ore | 1,788 | 3,894 | 4,002 | 3,918 | 5,049 | n.a. |
| Peru— | | | | | | |
| Ore (MoS ₂ content) .. | 4 | — | — | — | 8 | 264 |
| Japan— | | | | | | |
| Ore | 339 | — | — | — | n.a. | n.a. |
| Philippine Republic— | | | | | | |
| Concentrates | — | — | 67 | 203 | 235 | 169 |

IMPORTS OF MOLYBDENUM ORE, ETC.

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------|-------|-------|-------|-------|-------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore | 3,713 | 4,658 | 7,783 | 7,961 | 5,510 | 5,780 |
| Metal | 10 | 19 | 23 | 22 | 30 | 42 |
| Canada— | | | | | | |
| Oxide | 136 | 137 | 293 | 119 | 147 | 116 |
| Australia (a)— | | | | | | |
| Oxide | 46 | 3 | 4 | 26 | 66 | 61 |
| Ferro-molybdenum .. | 129 | 140 | 106 | 525 | 74 | 77 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Oxide | 86 | 172 | 184 | 208 | 237 | 291 |
| Ferro-molybdenum .. | 65 | 50 | 119 | 51 | 121 | 65 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Oxide | 11 | 46 | 21 | — | 14 | 9 |
| Molybdates | 42 | 17 | n.a. | n.a. | n.a. | n.a. |
| Ferro-molybdenum .. | 109 | 265 | 482 | 532 | 498 | 297 |
| Denmark— | | | | | | |
| Ferro-molybdenum .. | n.a. | 12 | 31 | 38 | 42 | 15 |
| Finland— | | | | | | |
| Ferro-molybdenum .. | 40 | 102 | 173 | 185 | 133 | 59 |
| France— | | | | | | |
| Ore | 3,295 | 2,984 | 5,066 | 5,641 | 3,190 | 4,547 |
| Metal and alloys | 11 | 7 | 24 | 33 | 26 | 34 |
| Oxide and molybdates.. | 16 | 10 | 15 | 32 | 42 | 39 |
| Germany (Federal)— | | | | | | |
| Ore | 5,149 | 6,041 | 8,626 | 9,047 | 4,790 | 9,227 |
| Metal | 25 | 35 | 87 | 120 | 88 | 64 |
| Hungary— | | | | | | |
| Ferro-molybdenum .. | 49 | 70 | 45 | 193 | 195 | 158 |
| Italy— | | | | | | |
| Ore | 444 | 680 | 1,479 | 1,500 | 1,150 | 1,115 |
| Metal | 6 | 5 | 48 | 15 | 52 | 20 |
| Netherlands— | | | | | | |
| Metal | n.a. | n.a. | 17 | 21 | 14 | 12 |
| Ferro-molybdenum .. | 35 | 21 | 46 | 51 | 99 | 56 |
| Oxide and molybdates.. | n.a. | n.a. | 10 | 269 | 206 | 183 |
| Norway— | | | | | | |
| Ferro-molybdenum .. | n.a. | 29 | 59 | 61 | 50 | 43 |
| Sweden— | | | | | | |
| Ore | 1,444 | 1,643 | 2,590 | 2,751 | 1,891 | 2,295 |
| Metal | n.a. | 14 | 20 | 12 | 24 | 22 |
| Ferro-molybdenum .. | 133 | 394 | 967 | 1,141 | 351 | 596 |
| United States— | | | | | | |
| Ore (MoS ₃ content) .. | 1 | — | — | — | — | — |
| Metal | — | 30 | 69 | 1 | 20 | 154 |
| Semi-fabricated | 10 | 20 | 9 | 8 | 14 | 8 |
| Japan— | | | | | | |
| Ore and concentrates .. | 27 | 1,624 | 3,824 | 5,149 | 1,285 | 1,619 |

(a) Years ended June 30 of that stated.

NICKEL
PRODUCTION OF NICKEL ORE
(Metal content)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|----------------|----------------|----------------|------------------|----------------|----------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Southern Rhodesia | 3 | — | 25 | 65 | 105 | 159 |
| Canada (b) | 124,606 | 166,567 | 191,524 | 208,028 | 207,359 | 195,222 |
| TOTAL | 124,609 | 166,567 | 191,549 | 208,093 | 207,464 | 193,381 |
| OTHER COUNTRIES | | | | | | |
| Finland (c) | 112 | 371 | 2,228 | 2,100 | 2,550 | 3,040 |
| Greece (i) | 500 | — | — | — | — | — |
| Poland (l) | 1,329 | 1,254 | 1,234 | 1,297 | 1,302 | 1,200 |
| U.S.S.R. (d) | 52,000 | 52,000 | 57,000 | 75,000 | 80,000 | 80,000 |
| Morocco (l) | 182 | 237 | 250 | 254 | 282 | 270 |
| South Africa (a) | 1,137 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cuba (e) | 17,662 | (l) 17,700 | (l) 12,600 | (l) r 14,570 | (l) 16,340 | (l) 16,400 |
| United States (f) | 10,482 | 10,362 | 11,187 | 9,979 | 10,015 | 10,207 |
| Bolivia (j) | — | 2 | — | — | <i>n.a.</i> | <i>n.a.</i> |
| Brazil | 70 | r 70 | r 95 | 100 | 105 | (l) 105 |
| Venezuela | 37 | 26 | 12 | — | — | — |
| Burma (g) | 328 | 136 | 69 | 135 | 106 | 100 |
| Iran (k) | (l) 15 | — | — | — | <i>n.a.</i> | <i>n.a.</i> |
| Korea (South) | 20 | 6 | — | 280 | 260 | 250 |
| Philippine Republic | — | — | — | 9 | 11 | — |
| New Caledonia (h) | 13,966 | 32,274 | 52,000 | 53,000 | 33,000 | (i) 45,000 |
| TOTAL* | 100,000 | 120,000 | 140,000 | r 160,000 | 150,000 | 160,000 |
| WORLD'S TOTAL* .. | 230,000 | 290,000 | 330,000 | r 370,000 | 360,000 | 350,000 |

*Nickel ores are also produced in Albania, East Germany and Indonesia. Totals are approximate.

(a) Nickel content of platinum matte plus refined nickel.

(b) Refined nickel and nickel in oxide and salts plus nickel in matte exported.

(c) Nickel content of nickel sulphate. Figures for 1959 to 1963 also include nickel in concentrates.

(d) Source: Metallgesellschaft.

(e) Estimated nickel content of nickel oxide and sulphide.

(f) Metal from domestic ore plus nickel produced as a by-product in the electrolytic refining of copper (partly from imported blister copper).

Secondary metal was recovered in the United States as follows:

| | Long tons | | | |
|------------|-----------|------------|-------|--|
| 1958 | 6,617 | 1961 | 9,543 | |
| 1959 | 8,427 | 1962 | 9,918 | |
| 1960 | 8,421 | 1963 | 9,610 | |

(g) Nickel content of nickel speiss.

(h) Content of dry ore mined. The estimated content of matte and ferro-nickel produced was:

| | Long tons | | | |
|------------|-----------|------------|--------|--|
| 1958 | 8,685 | 1961 | 25,000 | |
| 1959 | 11,642 | 1962 | 15,062 | |
| 1960 | 21,524 | 1963 | 22,000 | |

(i) Estimated.

(j) Exports.

(k) Years ended March 20 of year following that stated.

(l) United States Bureau of Mines' estimate.

EXPORTS OF NICKEL*

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|------------|--------|--------|---------|---------|--------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unwrought (a) | 12,044 | 20,215 | 21,714 | 21,918 | 20,129 | 23,604 |
| Semi-manufactures | 2,111 | 1,647 | 2,113 | 2,396 | 2,273 | 2,910 |
| do. alloys | 2,508 | 2,162 | 2,917 | 3,390 | 3,292 | 3,528 |
| Scrap (a) | 1,574 | 1,415 | 1,309 | 2,088 | 2,141 | 2,738 |
| Nickel oxide | 373 | 452 | 595 | 519 | 476 | 481 |
| Rhodesia and Nyasaland— | | | | | | |
| Ore | 8 | 32 | 158 | 224 | 262 | 570 |
| Canada— | | | | | | |
| Matte or speiss (Ni content) | 60,410 | 58,623 | 65,991 | 82,980 | 69,116 | 74,457 |
| Unwrought | 76,043 | 91,171 | 96,741 | 119,200 | 108,672 | 97,461 |
| Scrap (a) | n.a. | n.a. | n.a. | 552 | 865 | 854 |
| Nickel oxide (Ni content) | 1,244 | 3,712 | 11,837 | 16,090 | 9,929 | 13,579 |
| Hong Kong— | | | | | | |
| Semi-manufactures (a) | 162 | 114 | 16 | 12 | 19 | 8 |
| Scrap | n.a. | n.a. | 9 | 95 | 20 | 62 |
| Australia (c) | | | | | | |
| Unwrought and semi-manufactures (a) | 24 | 77 | 131 | 133 | 103 | 115 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unwrought | — | 479 | 545 | — | 4 | — |
| do. alloys | 4 | 5 | 115 | 29 | 6 | 5 |
| Scrap | 272 | 276 | 73 | 920 | 367 | 606 |
| Semi-manufactures (a) (b) | 130 | 467 | 468 | 94 | 141 | 126 |
| Denmark— | | | | | | |
| Unwrought | 11 | 2 | 2 | — | — | — |
| Scrap (a) | 70 | 47 | 65 | 43 | 199 | 221 |
| Finland— | | | | | | |
| Unwrought | — | — | n.a. | 1,519 | 2,190 | 2,329 |
| France— | | | | | | |
| Matte and speiss | — | 59 | — | 50 | 429 | 1,201 |
| Unwrought | 612 | 3,548 | 3,667 | 3,255 | 5,231 | 5,494 |
| do. alloys | — | 11 | 15 | 26 | 20 | — |
| Scrap (a) | 12 | 406 | 969 | 1,639 | 1,077 | 3,099 |
| Semi-manufactures (a) | 134 | 417 | 949 | 730 | 961 | 1,066 |
| Germany (Federal)— | | | | | | |
| Unwrought and scrap (a) | 1,372 | 1,332 | 1,883 | 644 | 913 | 824 |
| Semi-manufactures (a) | 1,544 | 2,846 | 4,056 | 4,586 | 5,031 | 4,312 |
| Italy— | | | | | | |
| Semi-manufactures (a) | 386 | 317 | 562 | 722 | 716 | 972 |
| Netherlands— | | | | | | |
| Scrap (a) | 709 | 613 | 711 | 797 | 976 | 1,524 |
| Semi-manufactures (a) | 55 | 45 | 110 | 124 | 181 | 90 |
| Norway— | | | | | | |
| Unwrought | (a) 21,079 | 25,518 | 27,759 | 29,207 | 27,243 | 23,559 |
| Scrap | n.a. | 167 | 230 | 337 | 244 | 212 |
| Semi-manufactures (a) | 682 | 515 | 643 | 648 | 602 | 500 |

*In these tables the description "unwrought" nickel corresponds to item 683.1 of the Standard International Trade Classification (Revised) which excludes all electro-plating anodes. "Semi-manufactures" corresponds to S.I.T.C. (R) 683.2 and includes electro-plating anodes as well as sheets, bars, rods, etc.

(a) Including alloys.

(b) Excluding anodes.

(c) Years ended June 30 of that stated.

EXPORTS OF NICKEL (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sweden— | | | | | | |
| Unwrought | 73 | 2 | — | 6 | 122 | 9 |
| Scrap | <i>n.a.</i> | 17 | 55 | 48 | 75 | 55 |
| Semi-manufactures (a) | <i>n.a.</i> | 195 | 281 | 585 | 588 | 703 |
| Switzerland— | | | | | | |
| Unwrought and scrap (a) | 836 | 466 | 406 | 467 | 517 | 474 |
| Semi-manufactures (a) | 641 | 971 | 992 | 868 | 675 | 775 |
| South Africa— | | | | | | |
| Matte (<i>Ni content</i>) .. | 1,791 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cuba— | | | | | | |
| Nickel oxide | 22,274 | 22,913 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States— | | | | | | |
| Ore, concentrates and matte | — | — | 1 | 1,576 | 41 | 11 |
| Unwrought and semi-manufactures (a) .. | 12,159 | 6,216 | 10,246 | 8,258 | 8,996 | 10,534 |
| Scrap (a) .. .. . |  |  |  |  |  |  | 5,456 | 38,065 | 39,714 | 15,643 | 43,854 |
| Bolivia— | | | | | | |
| Ore (<i>Ni content</i>) .. | — | 2 | — | — | <i>n.a.</i> | <i>n.a.</i> |
| Burma— | | | | | | |
| Unwrought | 396 | 324 | 253 | 434 | <i>n.a.</i> | 706 |
| Indonesia— | | | | | | |
| Ore | <i>n.a.</i> | 6,107 | 13,541 | 14,763 | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Ferro-nickel | 408 | — | 1 | 289 | — | 11 |
| Unwrought | 272 | 2 | — | 1 | — | — |
| do. alloys | — | 1 | — | — | — | — |
| Semi-manufactures (a) | 181 | 14 | 3 | 60 | 176 | 133 |
| Korea (South)— | | | | | | |
| Ore | 310 | — | — | 738 | 902 | 537 |
| Philippine Republic— | | | | | | |
| Ore | — | — | — | 43 | 54 | 34 |
| New Caledonia— | | | | | | |
| Ore | 177,122 | 760,310 | 941,047 | 997,330 | 607,603 | 606,969 |
| Matte | 8,494 | 7,998 | 14,298 | 15,276 | 11,377 | 17,581 |
| Ferro-nickel | 9,395 | 17,905 | 42,960 | 45,791 | 20,943 | 29,003 |

(a) Including alloys.

IMPORTS OF NICKEL*

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------------|-----------|---------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore, concentrates and matte | 36,748 | 33,308 | 55,087 | 63,057 | 53,712 | 61,621 |
| Unwrought | 10,195 | 11,644 | 23,319 | 19,769 | 7,594 | 7,485 |
| do. alloys | (d) 1,068 | 1,068 | 36 | 11 | 10 | 934 |
| Semi-manufactures (a) | 3,984 | 1,448 | 6,111 | 4,799 | 4,162 | 3,078 |
| Scrap (a) | 1,896 | 1,219 | 2,533 | 2,888 | 2,349 | 2,508 |
| Nickel oxide | 918 | 552 | 1,667 | 1,273 | 1,064 | 1,027 |
| Rhodesia and Nyasaland— | | | | | | |
| Semi-manufactures (a) | n.a. | 8 | 57 | 18 | 12 | 10 |
| Canada— | | | | | | |
| Unwrought (a) | 183 | 220 | 23 | 12 | 132 | 8,212 |
| Semi-manufactures (a) | 1,741 | 1,439 | 1,550 | 3,831 | 6,559 | 1,586 |
| Cyprus— | | | | | | |
| Semi-manufactures (a) | — | 7 | 8 | 4 | 5 | 1 |
| Hong Kong— | | | | | | |
| Semi-manufactures (a) | 265 | 220 | 72 | 97 | 111 | 111 |
| India— | | | | | | |
| Unwrought | 393 | 695 | (c) 1,040 | (c) 1,316 | (c) 1,304 | (c) 1,663 |
| do. alloys | 56 | 26 | (c) 61 | (c) 47 | (c) 45 | (c) 39 |
| Scrap | 324 | 176 | (c) 181 | (c) 120 | (c) 431 | (c) 190 |
| Semi-manufactures (a) | 167 | 106 | (c) 268 | (c) 385 | (c) 202 | (c) 266 |
| Australia (b)— | | | | | | |
| Unwrought | 772 | 641 | 1,212 | 825 | 355 | 624 |
| do. alloys (f) | n.a. | n.a. | n.a. | 143 | 96 | 162 |
| Semi-manufactures (a) | (e) 356 | (e) 350 | (e) 364 | 963 | 845 | 1,054 |
| New Zealand— | | | | | | |
| Unwrought (a) | 21 | 41 | 26 | 26 | 34 | n.a. |
| Semi-manufactures (a) | 60 | 60 | 42 | 71 | 140 | n.a. |
| Irish Republic— | | | | | | |
| Unwrought (a) | 70 | 83 | 95 | 147 | 155 | 10 |
| Semi-manufactures (a) |  |  |  |  |  |  | 141 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Matte and speiss | n.a. | 15 | 263 | 244 | 120 | 293 |
| Unwrought | 1,329 | 2,572 | 2,767 | 2,615 | 2,049 | 3,020 |
| Scrap | — | — | — | — | 1 | 2 |
| Semi-manufactures (a) | 208 | 164 | 323 | 358 | 365 | 341 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unwrought | 714 | 1,390 | 1,839 | 1,082 | 1,098 | 984 |
| do. alloys | 152 | 277 | 234 | 201 | 232 | 137 |
| Scrap | 146 | 93 | 91 | 179 | 287 | 403 |
| Semi-manufactures (a) | 273 | 207 | 306 | 467 | 536 | 611 |
| Denmark— | | | | | | |
| Unwrought | 130 | 68 | 105 | 137 | 93 | 69 |
| do. alloys | 18 | 28 | 14 | 28 | 38 | 8 |
| Semi-manufactures (a) | 238 | 324 | 372 | 523 | 613 | 568 |

*See footnote on p.228 concerning the descriptions "unwrought" nickel and "semi-manufactures" used in these tables.

- (a) Including alloys. (d) Included with "Semi-manufactures".
- (b) Years ended June 30 of that stated. (e) Excluding anodes.
- (c) Years ended March 31 following that stated. (f) Including scrap.

IMPORTS OF NICKEL (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|------------------------------------|--------|--------|--------|--------|--------|--------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Finland— | | | | | | |
| Unwrought (a) .. | 335 | 276 | 468 | 473 | 387 | 145 |
| France— | | | | | | |
| Matte and speiss .. | 7,781 | 7,881 | 13,312 | 14,511 | 13,554 | 12,501 |
| Ferro-nickel | 11,195 | 10,005 | 23,248 | 20,957 | 12,238 | 19,587 |
| Unwrought | 2,821 | 3,974 | 5,650 | 4,159 | 4,057 | 4,783 |
| do. alloys | 27 | 47 | 3 | 5 | 4 | 27 |
| Scrap (a) | 392 | 1,284 | 1,102 | 1,745 | 1,641 | 1,804 |
| Semi-manufactures (a) | 913 | 709 | 1,628 | 1,598 | 1,704 | 1,727 |
| Germany (Federal)— | | | | | | |
| Ore | — | 35 | — | 16 | 20 | 682 |
| Matte and speiss .. | 863 | 349 | 530 | 1,205 | 481 | 1,240 |
| Unwrought (a) .. | 14,718 | 20,355 | 31,580 | 19,278 | 18,610 | 18,914 |
| Scrap (a) | | | | 3,409 | 3,758 | 4,257 |
| Semi-manufactures (a) | | | | 1,440 | 1,201 | 893 |
| Italy— | | | | | | |
| Matte and speiss .. | 815 | 270 | 542 | 1,006 | 1,008 | 1,046 |
| Unwrought (a) .. | 2,517 | 2,203 | 5,307 | 5,008 | 4,363 | 6,067 |
| Scrap | 806 | 473 | 1,127 | 988 | 634 | 598 |
| Semi-manufactures (a) | 541 | 587 | 1,024 | 1,213 | 1,836 | 1,457 |
| Nickel oxide | 569 | 518 | 1,355 | 1,267 | 142 | 232 |
| Netherlands— | | | | | | |
| Unwrought | 292 | 328 | 599 | 464 | 405 | 528 |
| do. alloys | 65 | 188 | 72 | 76 | 42 | 57 |
| Scrap (a) | 378 | 293 | 231 | 304 | 446 | 862 |
| Semi-manufactures (a) | 1,208 | 1,079 | 1,313 | 1,545 | 1,514 | 1,343 |
| Nickel oxide | n.a. | n.a. | n.a. | 169 | 166 | 206 |
| Norway— | | | | | | |
| Ore | — | 49 | 49 | 90 | 211 | — |
| Matte (copper-nickel) .. | 48,398 | 54,159 | 60,695 | 63,328 | 59,896 | 55,559 |
| Scrap (a) | n.a. | 390 | 2,631 | 3,938 | 524 | 165 |
| Semi-manufactures (a) | 174 | 212 | 212 | 323 | 333 | 283 |
| Portugal— | | | | | | |
| Unwrought and semi-manufactures .. | 124 | 77 | 47 | 112 | 200 | 82 |
| Spain— | | | | | | |
| Matte and speiss .. | 807 | 602 | 873 | 819 | 374 | 291 |
| Unwrought (a) .. | | | | 174 | 691 | 817 |
| Semi-manufactures (a) | | | | 334 | 537 | 765 |
| Sweden— | | | | | | |
| Matte and speiss .. | n.a. | 1,264 | 1,823 | 898 | 358 | 340 |
| Unwrought | 4,858 | 6,512 | 8,729 | 8,592 | 6,980 | 8,047 |
| do. alloys | n.a. | 230 | 498 | 374 | 398 | 405 |
| Scrap (a) | | 173 | 439 | 225 | 94 | 266 |
| Semi-manufactures (a) | | 538 | 718 | 930 | 965 | 968 |
| Switzerland— | | | | | | |
| Unwrought and scrap (a) | 1,085 | 1,177 | 1,381 | 1,636 | 1,591 | 1,084 |
| Semi-manufactures (a) | 907 | 537 | 503 | 751 | 743 | 637 |
| Yugoslavia— | | | | | | |
| Unwrought | 132 | 168 | 300 | 216 | 353 | 566 |
| Semi-manufactures (a) | 58 | 11 | 22 | 19 | 17 | 82 |
| Algeria— | | | | | | |
| Semi-manufactures (a) | 22 | 13 | 89 | n.a. | n.a. | n.a. |
| Egypt— | | | | | | |
| Semi-manufactures .. | 54 | 40 | 225 | 181 | 45 | n.a. |
| Cuba— | | | | | | |
| Semi-manufactures .. | 128 | 141 | n.a. | n.a. | n.a. | n.a. |
| Mexico— | | | | | | |
| Unwrought | 129 | 43 | 103 | 296 | 240 | 146 |
| Semi-manufactures .. | 177 | 150 | 220 | 182 | 209 | 253 |

(a) Including alloys.

IMPORTS OF NICKEL (*cont.*)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|---------|-----------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States— | | | | | | |
| Ore and matte | 4,084 | 3,635 | 164 | — | 21 | 30 |
| Unwrought and scrap .. | 56,307 | 74,560 | 71,247 | 103,806 | 104,083 | 97,170 |
| Semi-manufactures | 70 | 101 | 119 | 287 | 362 | <i>n.a.</i> |
| Nickel oxide | 26,449 | 26,841 | 21,950 | 13,048 | 7,733 | 11,506 |
| Argentina— | | | | | | |
| Unwrought | 160 | 18 | 105 | 69 | 62 | 73 |
| Semi-manufactures | 108 | 40 | 101 | 288 | 136 | 127 |
| Brazil— | | | | | | |
| Unwrought (<i>a</i>) | 288 | 201 | 346 | 741 | 866 | 322 |
| Semi-manufactures (<i>a</i>) .. | 142 | 99 | 198 | 192 | 307 | 267 |
| Chile— | | | | | | |
| Unwrought | 11 | 36 | 41 | 38 | 19 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Unwrought (<i>a</i>) | 36 | 16 | 21 | 30 | 34 | 48 |
| Semi-manufactures (<i>a</i>) .. | 276 | 349 | 213 | 193 | 101 | 340 |
| Formosa— | | | | | | |
| Unwrought (<i>a</i>) | <i>n.a.</i> | <i>n.a.</i> | 55 | 91 | 99 | 177 |
| Iran— | | | | | | |
| Semi-manufactures | 255 | 797 | 346 | 388 | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Ore | 200,316 | 712,242 | 930,731 | 1,030,024 | 664,212 | 668,764 |
| Matte | — | — | 253 | 707 | 676 | 3,869 |
| Unwrought (<i>a</i>) | 56 | 36 | 176 | 251 | 1,054 | 169 |
| Semi-manufactures (<i>a</i>) .. | 381 | 131 | 199 | 544 | 669 | 776 |
| Philippine Republic— | | | | | | |
| Semi-manufactures (<i>a</i>) .. | 17 | 19 | 65 | 37 | 21 | 12 |
| Turkey— | | | | | | |
| Semi-manufactures (<i>a</i>) .. | 5 | 18 | 47 | 44 | 86 | 101 |

 (*a*) Including alloys.

NITROGEN COMPOUNDS
PRODUCTION OF NITROGEN COMPOUNDS*

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a)— Nitrogenous fertilizers expressed as 25% NH ₃ | 1,632,700 | 1,784,400 | 2,086,700 | 2,235,900 | 2,257,300 | 2,630,200 |
| Actual ammonium sulphate | 1,098,000 | 1,020,200 | 1,066,000 | 1,084,000 | 1,090,000 | 1,152,600 |
| Canada— Ammonium sulphate .. | 288,686 | 291,345 | 268,501 | 269,070 | 253,589 | 246,740 |
| Trinidad (b)— (N content) Nitrogen fertilizers .. | — | — | — | 12,028 | 25,546 | n.a. |
| India— Ammonium sulphate .. | 384,228 | 378,504 | 382,813 | 389,000 | 411,000 | 436,000 |
| Pakistan— Ammonium sulphate .. | 20,140 | 42,078 | 44,711 | 50,506 | 51,964 | 49,724 |
| Ammonium nitrate .. | — | — | — | 1,321 | 41,884 | 66,955 |
| Australia— Ammonium sulphate .. | 131,630 | 105,380 | 100,750 | 103,840 | 103,918 | 86,583 |
| OTHER COUNTRIES | | | | | | |
| Austria (b)— (N content) Nitrogen fertilizers .. | 154,800 | 151,800 | 159,400 | 159,400 | 169,600 | 171,100 |
| Belgium— (N content)— Synthetic ammonia, etc. | 270,578 | 298,840 | 314,280 | 271,310 | 276,710 | 309,740 |
| Ammonium sulphate .. | 17,964 | 15,970 | 15,710 | 14,300 | 16,950 | 13,520 |
| Mixed fertilizers .. | 21,259 | 21,150 | 26,430 | 31,260 | 38,450 | 50,690 |
| Technical products .. | 6,330 | 9,610 | 11,700 | 12,800 | 14,520 | 19,760 |
| Bulgaria— (N content) Nitrogen fertilizers .. | 42,778 | 61,156 | 82,274 | 86,341 | 92,530 | n.a. |
| Czechoslovakia— Nitrogen fertilizers (N content) | 106,370 | 131,159 | 137,672 | 143,891 | 151,485 | 152,000 |
| Finland (b)— (N content) Cyanamide | 350 | 477 | 657 | 29 | — | — |
| Ammonium nitrate .. | 21,390 | 27,402 | — | 16,300 | 13,778 | — |
| Other nitrogen fertilizers | — | — | 25,458 | 30,418 | 30,451 | 52,900 |
| Mixed fertilizers .. | — | — | 4,461 | 5,639 | 6,029 | — |
| France (b)— (N content) Ammonium sulphate .. | 69,400 | 74,300 | 70,800 | 74,200 | 79,600 | 73,100 |
| Cyanamide | 2,400 | 1,776 | 2,331 | 2,881 | 2,533 | 2,915 |
| Sodium nitrate | 2,700 | 1,400 | 500 | — | — | — |
| Calcium nitrate | 38,700 | 38,800 | 37,600 | 37,700 | 39,200 | 31,600 |
| Ammonium nitrate .. | 277,300 | 292,800 | 329,200 | 394,800 | 451,000 | 432,800 |
| Ammonium phosphate | 2,000 | 993 | 1,400 | (c) | (c) | (c) |
| Other nitrogen fertilizers | 19,500 | 17,400 | 20,300 | 31,800 | 47,100 | 58,100 |
| Mixed fertilizers .. | 90,000 | 102,600 | 103,800 | 118,800 | 140,900 | 142,900 |
| Germany (Federal)— Chemical nitrogen (N content)— Fertilizer | 1,060,254 | 1,001,229 | 1,108,141 | 1,124,441 | 1,154,680 | 1,201,683 |
| Technical use | 159,823 | 193,228 | 235,311 | 231,775 | 258,164 | 277,163 |

*Includes by-product ammonium sulphate which is separately recorded as far as available on pages 86-89.

(a) Source: British Sulphate of Ammonia Federation.

(b) Years ended June 30 of the year stated.

(c) Included with mixed fertilizers.

PRODUCTION OF NITROGEN COMPOUNDS (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Germany (East)— | | | | | | |
| (N content)— | | | | | | |
| Ammonium sulphate | 168,249 | 173,165 | 175,614 | 172,350 | 170,405 | 173,669 |
| Cyanamide | 15,774 | 17,869 | 16,196 | 15,752 | 16,401 | 15,947 |
| Lime ammonium nitrate | 113,445 | 116,312 | 120,081 | 117,687 | 119,377 | 117,790 |
| Potassium ammonium nitrate | 12,025 | 11,910 | 12,416 | 12,614 | 13,420 | 12,492 |
| Hungary— | | | | | | |
| Nitrogen fertilizers .. | 156,842 | 241,079 | 273,695 | r 324,870 | 347,533 | 380,819 |
| Iceland (a)— | | | | | | |
| Ammonium nitrate (N content) | 6,400 | 5,300 | 6,300 | 7,000 | 7,300 | 6,400 |
| Italy— | | | | | | |
| Ammonium sulphate .. | 901,636 | 1,147,817 | 1,240,055 | 1,342,846 | 1,311,284 | 1,312,500 |
| Ammonium sulpho-nitrate | — | — | — | — | 28,299 | 59,110 |
| Cyanamide | 185,635 | 166,570 | 125,007 | 77,449 | 119,299 | 111,750 |
| Sodium nitrate | 6,488 | 6,551 | 6,899 | 9,418 | 7,534 | 6,873 |
| Potassium nitrate | — | 107 | 1,993 | 6,762 | 9,441 | 17,419 |
| Calcium nitrate | 323,348 | 287,788 | 361,441 | 334,189 | 324,875 | 331,488 |
| Ammonium nitrate | 589,313 | 681,490 | 799,939 | 793,523 | 779,442 | 707,020 |
| Di-ammonium phosphate | 163,056 | 198,398 | 200,039 | 243,097 | 339,535 | 387,151 |
| Ammonium phosphate | | | | | | |
| Netherlands (a)— | | | | | | |
| (N content) | | | | | | |
| Ammonium sulphate .. | 74,700 | 75,000 | 69,600 | 75,200 | 79,800 | 69,900 |
| Ammonium nitrate .. | 220,900 | 233,400 | 229,800 | 219,400 | 214,000 | 200,800 |
| Calcium nitrate | 25,400 | 22,300 | 26,700 | 28,100 | 20,500 | 23,600 |
| Other nitrogen fertilizers | 53,300 | 56,800 | 47,600 | 56,600 | 79,500 | 81,700 |
| Mixed fertilizers | | | | | | |
| Norway— | | | | | | |
| Cyanamide | 13,660 | 7,665 | 4,990 | 4,058 | 2,788 | 4,104 |
| Ammonium nitrate | 8,793 | 11,237 | 10,784 | 12,350 | 13,856 | 14,034 |
| Calcium nitrate | 1,038,646 | 1,068,734 | 1,125,418 | 1,145,270 | 1,576,278 | 1,161,066 |
| Sodium nitrate | 820 | 1,389 | 1,724 | 2,740 | 3,015 | 1,402 |
| Lime ammonium nitrate | 63,555 | 39,736 | 46,478 | 94,535 | 115,266 | 95,265 |
| Poland— | | | | | | |
| Ammonium sulphate .. | 110,600 | 116,000 | 127,000 | r 145,000 | 159,000 | n.a. |
| Cyanamide | 160,000 | 170,000 | 173,000 | 178,000 | 151,000 | n.a. |
| "Saletrzak" | 527,000 | 401,000 | 423,000 | 537,000 | 571,000 | n.a. |
| Portugal— | | | | | | |
| Cyanamide | 10,778 | 9,774 | 7,529 | 14,875 | 5,511 | 10,369 |
| Ammonium sulphate .. | 131,593 | 186,525 | 177,557 | 177,721 | 178,479 | 244,985 |
| Ammonium nitrate | n.a. | n.a. | n.a. | 62,723 | 82,766 | 166,092 |
| Calcium nitrate | n.a. | n.a. | n.a. | 5,475 | 17,042 | 15,499 |
| Roumania— | | | | | | |
| Nitrogen fertilizers (N content) | 9,447 | 8,335 | 18,641 | 29,461 | 43,256 | 83,510 |
| Spain— | | | | | | |
| Cyanamide | 2,428 | 1,415 | 4,615 | 2,403 | 2,215 | n.a. |
| Ammonium nitrate | 45,291 | 49,216 | 86,071 | 114,242 | 141,190 | n.a. |
| Ammonium sulphate .. | 180,933 | 213,482 | 324,737 | 403,243 | 392,330 | n.a. |
| Sweden— | | | | | | |
| Ammonium nitrate | n.a. | 11,076 | 11,880 | 11,699 | 12,672 | n.a. |
| Ammonium sulphate | n.a. | 6,600 | 5,687 | 3,326 | 10,059 | n.a. |
| Cyanamide | n.a. | 23,810 | 23,345 | 26,150 | 17,977 | n.a. |
| Lime ammonium nitrate | n.a. | 119,632 | 134,865 | 169,101 | 150,440 | n.a. |

(a) Years ended June 30 of the year stated.

PRODUCTION OF NITROGEN COMPOUNDS (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Switzerland (a)— | | | | | | |
| (N content)— | | | | | | |
| Cyanamide | 1,200 | 1,800 | 2,000 | 2,100 | 2,100 | 2,000 |
| Ammonium sulphate | 2,000 | 2,500 | 4,100 | 5,100 | 4,100 | 4,200 |
| Ammonium nitrate .. | 4,900 | 5,100 | 5,400 | 5,300 | 5,700 | 7,200 |
| Calcium nitrate .. | 2,600 | 3,000 | 3,000 | 3,000 | 3,000 | 3,700 |
| Mixed fertilizers .. | 800 | 1,000 | 1,500 | 1,800 | 2,100 | 2,500 |
| U.S.S.R. (a)— | | | | | | |
| Nitrogen fertilizers | | | | | | |
| (N content) | 738,000 | 704,000 | 729,000 | n.a. | n.a. | n.a. |
| Yugoslavia— | | | | | | |
| Ammonium nitrate .. | 22,820 | 23,620 | 24,971 | 24,255 | 20,440 | 11,356 |
| Ammonium sulphate .. | 8,654 | 10,627 | 12,098 | 12,279 | 10,954 | n.a. |
| Cyanamide | 21,367 | 12,078 | 7,266 | 10,572 | 29,274 | n.a. |
| Egypt— | | | | | | |
| (N content) | | | | | | |
| Calcium nitrate | 33,760 | 37,476 | r 39,014 | r 41,018 | n.a. | n.a. |
| South Africa (a)— | | | | | | |
| Nitrogen fertilizers | | | | | | |
| (N content) | 15,974 | 20,692 | 21,900 | 37,600 | 58,400 | n.a. |
| Mexico (a)— | | | | | | |
| Nitrogen fertilizers | | | | | | |
| (N content) (b) .. | r 17,000 | 19,000 | 25,000 | 31,000 | 31,000 | n.a. |
| United States— | | | | | | |
| Sulphate equivalent of ammonia produced (coke-ovens) .. | | | | | | |
| | 660,036 | 639,913 | 656,644 | 618,807 | 598,777 | 641,766 |
| Actual ammonium | | | | | | |
| sulphate (coke-ovens) | 571,802 | 547,087 | 563,967 | 529,980 | 523,000 | 552,000 |
| Actual ammonium sulphate (synthetic plants) | 974,068 | 981,640 | 768,000 | 849,000 | 992,000 | 1,042,000 |
| Anhydrous ammonia (synthetic plants) .. | 3,463,195 | 4,035,451 | 4,301,521 | 4,649,000 | 5,187,000 | 5,934,000 |
| Ammonium nitrate, original | 2,304,743 | 2,557,947 | 2,780,000 | 2,888,000 | 3,041,000 | 3,517,000 |
| Brazil— | | | | | | |
| Ammonium sulphate .. | 4,547 | 7,338 | 7,255 | 6,695 | 8,151 | n.a. |
| Lime ammonium nitrate | 7,708 | 47,764 | 68,465 | 58,696 | 56,144 | n.a. |
| Chile— | | | | | | |
| Sodium and potassium nitrate (natural) .. | | | | | | |
| | 1,259,848 | 1,243,901 | 915,612 | 1,092,868 | 1,085,127 | 1,117,941 |
| Peru (a)— | | | | | | |
| Nitrogen fertilizers | | | | | | |
| (N content) (c) .. | 16,600 | 36,059 | 45,100 | 49,000 | 61,800 | 65,200 |
| Formosa— | | | | | | |
| Cyanamide | 68,843 | 64,323 | 61,443 | 62,858 | 77,364 | 63,064 |
| Ammonium sulphate .. | 17,124 | 21,754 | 21,086 | 28,751 | 67,104 | 105,958 |
| Nitro-phosphate .. | 17,096 | 19,733 | 20,688 | 19,802 | — | — |
| Nitro-chalk | 31,979 | 42,674 | 42,430 | 52,177 | 56,743 | 54,221 |
| Israel— | | | | | | |
| Ammonium sulphate .. | 61,705 | 63,690 | 60,381 | 32,475 | 65,438 | 68,252 |
| Japan— | | | | | | |
| Ammonium sulphate .. | 2,569,074 | 2,591,993 | 2,385,070 | 2,464,079 | 2,470,000 | 2,224,000 |
| Cyanamide | 436,574 | 404,524 | 351,720 | 329,104 | 297,000 | 314,000 |
| Ammonium nitrate .. | 46,273 | 49,884 | 51,262 | 51,584 | 51,210 | n.a. |
| Ammonium chloride .. | 137,840 | 141,290 | 237,510 | 363,039 | 332,531 | 485,965 |
| Philippine Republic (a)— | | | | | | |
| (N content) | | | | | | |
| Ammonium sulphate .. | r 7,263 | r 9,079 | n.a. | 7,300 | 7,300 | } 7,600 |
| Ammonium phosphate | 1,008 | 4,700 | n.a. | — | — | |
| Turkey— | | | | | | |
| Ammonium sulphate .. | 4,314 | 2,948 | 4,549 | 4,200 | 4,030 | 6,595 |

In addition, natural nitrate of potash is known to have been produced in India and Spain and nitrified earth in China.

(a) Years ended June 30 of the year stated.

(c) Including guano.

(b) Estimated.

EXPORTS OF NITROGEN COMPOUNDS

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ammonium sulphate .. | 304,287 | 213,968 | 187,419 | 166,711 | 359,439 | 384,722 |
| Ammonium chloride .. | 10,626 | 11,042 | 15,310 | 16,227 | 11,162 | 11,248 |
| Ammonium nitrate .. | 1,181 | 1,043 | 496 | 487 | 454 | 3,104 |
| Other manufactured nitrogen fertilizers .. | 2,023 | 3,174 | 1,894 | 1,097 | | |
| Liquid ammonia .. | 4,507 | 4,727 | 4,396 | 3,852 | 4,346 | 3,736 |
| Anhydrous ammonia .. | | | | | | |
| Canada— | | | | | | |
| Ammonium sulphate .. | (£3,012,328) | (£3,162,368) | (£3,151,628) | (£2,612,495) | (£2,376,851) | (£2,167,006) |
| Ammonium nitrate .. | n.a. | n.a. | n.a. | n.a. | (£3,891,663) | (£4,352,326) |
| Other nitrogen fertilizers .. | (£6,266,116) | (£5,375,164) | (£7,035,149) | (£7,880,620) | (£4,654,386) | (£5,241,100) |
| Trinidad and Tobago— | | | | | | |
| Ammonium sulphate .. | — | 8,128 | 69,663 | 87,642 | 73,733 | n.a. |
| Hong Kong— | | | | | | |
| Potassium nitrate .. | 368 | 356 | 190 | 286 | 307 | 283 |
| Sodium nitrate .. | — | 34 | 31 | 23 | 28 | 31 |
| Ammonium sulphate .. | 62,838 | 26,421 | 976 | 59,120 | 27,190 | 100,429 |
| Synthetic nitrate .. | 55,105 | — | — | 36,867 | 9,795 | 25,744 |
| Ammonium chloride .. | 128 | 47 | 38 | 27,124 | 16 | 173 |
| India— | | | | | | |
| Potassium nitrate .. | 16 | 44 | (a) 39 | (a) 8 | (a) 8 | (a) 5 |
| Sodium nitrate .. | 45 | 11 | (a) 40 | (a) 31 | (a) 32 | (a) 4 |
| Malaya— | | | | | | |
| Anhydrous ammonia .. | 4 | 33 | 176 | 415 | 461 | 420 |
| Other nitrogen fertilizers | 823 | 767 | 1,200 | 1,315 | 1,307 | 1,392 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Anhydrous ammonia .. | 561 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Potassium nitrate .. | 32 | 25 | 36 | — | 1 | 1 |
| Sodium nitrate .. | 68 | — | 20 | 56 | 60 | 246 |
| Calcium nitrate .. | — | — | 5 | 344 | — | — |
| Ammonium sulphate .. | 650,857 | 747,867 | 553,855 | 552,353 | 390,206 | 390,893 |
| Ammonium chloride .. | 19 | 128 | 159 | 34 | 106 | 23 |
| Ammonium nitrate .. | 289,443 | 164,709 | 174,220 | 139,345 | 167,488 | 195,161 |
| Ammonium phosphate .. | 33,917 | 53,302 | n.a. | n.a. | n.a. | n.a. |
| Cyanamide .. | 3,160 | 7,844 | 5,114 | 3,900 | 3,794 | 2,988 |
| Anhydrous ammonia .. | 46 | 4,197 | 6,389 | n.a. | n.a. | 25,887 |
| France— | | | | | | |
| Potassium nitrate .. | 2,876 | 2,149 | 1,653 | 2,079 | 2,322 | 2,762 |
| Sodium nitrate .. | 2,022 | 1,725 | 7,580 | 1,298 | 455 | 800 |
| Calcium nitrate .. | 12,485 | 10,598 | 19,439 | 17,100 | 15,450 | 16,667 |
| Ammonium sulphate .. | 133,514 | 86,478 | 100,252 | 169,582 | 149,272 | 250,820 |
| Ammonium chloride .. | 315 | 23 | 44 | 58 | 4 | 4 |
| Ammonium nitrate .. | 124,638 | 76,343 | 253,731 | 124,102 | 206,484 | 46,514 |
| Cyanamide .. | 838 | 158 | 188 | 471 | 195 | 57 |
| Anhydrous ammonia .. | 264 | 305 | 307 | 18,294 | 5,138 | 16,040 |
| Germany (Federal)— | | | | | | |
| Potassium nitrate .. | 11,790 | 9,633 | 13,082 | 11,582 | 12,254 | 12,746 |
| Sodium nitrate .. | 19,214 | 24,745 | 11,452 | 24,883 | 19,881 | 10,706 |
| Calcium nitrate .. | 84,399 | 173,985 | 113,140 | 125,679 | 104,923 | 109,446 |
| Ammonium nitrates .. | 682,456 | 892,138 | 864,779 | 780,638 | 886,430 | 1,012,752 |
| Ammonium chloride .. | 9,719 | 11,405 | 10,810 | n.a. | n.a. | n.a. |
| Other nitrogen fertilizers | 929,217 | 862,376 | 796,054 | 831,309 | 759,096 | 814,711 |
| Germany (East)— | | | | | | |
| Nitrogen fertilizers (b) | 94,123 | 100,657 | 112,167 | 104,222 | 99,512 | 91,245 |

(a) Years ended March 31 following that stated.

(b) N content.

EXPORTS OF NITROGEN COMPOUNDS (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Hungary— | | | | | | |
| Nitrogen fertilizers .. | 50,079 | <i>n.a.</i> | <i>n.a.</i> | 40,835 | 25,313 | — |
| Italy— | | | | | | |
| Potassium nitrate .. | 264 | 235 | 606 | 971 | 925 | 910 |
| Sodium nitrate .. | — | — | 89 | 38 | 15 | 477 |
| Calcium nitrate .. | 1,163 | 4,876 | 15,455 | 9,635 | 12,795 | 16,999 |
| Ammonium nitrate .. | 256,261 | 434,903 | 385,538 | 432,115 | 553,468 | 411,979 |
| Ammonium sulphate .. | 312,959 | 609,206 | 570,986 | 808,354 | 669,886 | 908,035 |
| Cyanamide .. | 4 | 751 | 15,359 | 1,282 | 513 | 3,451 |
| Netherlands— | | | | | | |
| Potassium nitrate .. | 65 | 53 | 68 | 84 | 134 | 70 |
| Sodium nitrate .. | 530 | 776 | 254 | 188 | 63 | 274 |
| Calcium nitrate .. | 54,582 | 67,268 | 64,003 | 63,887 | 47,774 | 37,502 |
| Ammonium sulphate .. | 317,290 | 307,377 | 261,387 | 183,802 | 296,552 | 363,209 |
| Ammonium chloride .. | 89 | 100 | 220 | 110 | 66 | 22 |
| Ammonium nitrate .. | 3 | 24 | 354,375 | 342,237 | 314,819 | 154,942 |
| Lime ammonium nitrate | 331,986 | 413,483 | | | | |
| Anhydrous ammonia .. | 1,846 | 2,023 | 9,975 | 3,881 | 2,053 | 2,140 |
| Norway— | | | | | | |
| Sodium nitrate .. | 1,453 | 1,903 | 2,120 | 2,405 | 1,912 | 83 |
| Calcium nitrate .. | 906,955 | 1,043,797 | 1,099,000 | 1,117,534 | 1,119,803 | 1,174,156 |
| Ammonium nitrate .. | 3,197 | 2,537 | 2,979 | 1,630 | 2,624 | 7,422 |
| Cyanamide .. | 8,678 | 5,391 | 1,808 | 1,372 | 536 | 1,718 |
| Anhydrous ammonia .. | 1,255 | 820 | 462 | 385 | 185 | 849 |
| Poland— | | | | | | |
| Ammonium chloride .. | 1,718 | 1,509 | 1,569 | 3,105 | <i>n.a.</i> | 4,335 |
| Nitrogen fertilizers .. | 167,660 | 125,553 | 17,044 | 46,105 | <i>n.a.</i> | 19,979 |
| Portugal— | | | | | | |
| Ammonium sulphate .. | 11,305 | 13,256 | 19,277 | 36,928 | 36,726 | 39,294 |
| Sweden— | | | | | | |
| Ammonium nitrate .. | 1,650 | 124 | 147 | 187 | 185 | 278 |
| Switzerland— | | | | | | |
| Potassium nitrate (crude) | 2,927 | 15 | — | — | — | — |
| Potassium and sodium nitrates (purified) .. | 1 | 2 | — | 3 | — | — |
| Ammonium sulphate, etc. .. | 9,058 | 11,114 | 10,807 | 10,041 | 11,883 | 20,046 |
| U.S.S.R.— | | | | | | |
| Ammonium nitrate .. | 87,900 | 80,000 | 86,500 | 126,900 | 75,400 | 157,000 |
| Ammonium sulphate .. | 66,300 | 67,900 | 167,500 | 265,900 | 397,400 | 404,000 |
| Yugoslavia— | | | | | | |
| Cyanamide .. | — | — | — | — | 598 | 2,181 |
| United States— | | | | | | |
| Sodium nitrate .. | 2,827 | 1,402 | 928 | 1,087 | 852 | 2,129 |
| Ammonium nitrate .. | 80,733 | 79,211 | 35,170 | 26,676 | 37,699 | 22,386 |
| Ammonium sulphate .. | 345,391 | 356,853 | 211,883 | 128,973 | 480,816 | 437,812 |
| Other nitrogen fertilizers .. | 35,514 | 35,178 | 56,445 | 16,201 | 55,962 | 11,877 |
| Nitrogen phosphatic fertilizers .. | 44,234 | 61,671 | 95,867 | 69,202 | 107,607 | 165,430 |
| Anhydrous ammonia (a) | 59,490 | 75,015 | 97,018 | 91,444 | 53,096 | 67,215 |
| Chile— | | | | | | |
| Sodium nitrate .. | 1,109,327 | 1,027,701 | 713,191 | 1,012,080 | 822,000 | <i>n.a.</i> |
| Potassium nitrate .. | 54,635 | 86,018 | 53,545 | 67,301 | 60,422 | <i>n.a.</i> |
| Israel— | | | | | | |
| Ammonium sulphate .. | 1,575 | — | <i>n.a.</i> | <i>n.a.</i> | — | <i>n.a.</i> |
| Anhydrous ammonia .. | <i>n.a.</i> | <i>n.a.</i> | 971 | 1,156 | 2,762 | <i>n.a.</i> |
| Japan— | | | | | | |
| Cyanamide .. | 4,282 | 45,616 | 295 | 313 | 280 | 13 |
| Ammonium nitrate .. | 6,172 | 9,723 | 1,463 | 2,359 | 11,392 | 5,892 |
| Ammonium chloride .. | 24,542 | 132 | 2,646 | 52,670 | 63,207 | 322 |
| Ammonium sulphate .. | 805,481 | 1,019,287 | 870,435 | 792,563 | 850,923 | 1,207,225 |
| Anhydrous ammonia .. | 428 | 318 | 191 | 134 | 50 | 81 |
| Other nitrogen fertilizers | 99 | 1,575 | 1,222 | 3,042 | 60,805 | 6,456 |

(a) Ammonia content.

IMPORTS OF NITROGEN COMPOUNDS

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|---------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Natural sodium nitrate .. | 12,891 | 9,320 | 13,073 | 19,775 | 15,201 | 13,347 |
| Manufactured fertilizers— | | | | | | |
| Nitrogenous | 1,343 | 309,095 | 191,825 | 204,663 | 199,274 | 314,539 |
| Ammonium phosphate .. | 8,123 | 10,834 | 11,730 | 17,912 | 14,820 | 10,904 |
| Potassium nitrate .. | 2,639 | 2,740 | 2,683 | 3,368 | 3,434 | 2,793 |
| Malta— | | | | | | |
| Ammonium sulphate .. | 1,734 | 2,351 | 2,111 | 2,468 | 1,131 | 2,367 |
| Gambia— | | | | | | |
| Ammonium sulphate .. | 130 | 1 | 1 | 2 | — | — |
| Ghana— | | | | | | |
| Ammonium sulphate .. | 619 | 551 | 271 | 207 | 513 | 79,436 |
| Other nitrogen fertilizers | — | 45 | 19 | 426 | 94 | 7 |
| Kenya— | | | | | | |
| Ammonium sulphate .. | 4,469 | 5,647 | 9,757 | 7,544 | 6,814 | 4,652 |
| Other nitrogen fertilizers | 737 | 2,333 | 4,975 | 7,914 | 10,317 | 12,916 |
| Mauritius— | | | | | | |
| Nitrogen fertilizers .. | 26,487 | 38,352 | 37,188 | 34,860 | 41,861 | 36,743 |
| Nigeria— | | | | | | |
| Ammonium sulphate .. | 2,246 | 567 | 878 | 996 | 3,448 | } 3,040 |
| Other nitrogen fertilizers | 200 | 33 | 870 | 129 | 218 | |
| Rhodesia and Nyasaland— | | | | | | |
| Nitrates | 189 | 202 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium sulphate .. | 27,161 | 19,270 | 25,923 | 33,528 | 35,720 | 31,964 |
| Other nitrogen fertilizers | <i>n.a.</i> | 24,609 | 32,671 | 42,038 | 47,856 | 53,668 |
| Sierra Leone— | | | | | | |
| Ammonium sulphate .. | 2 | 43 | 20 | 126 | 322 | 571 |
| Tanganyika— | | | | | | |
| Ammonium sulphate .. | 2,073 | 1,995 | 2,804 | 3,036 | 3,113 | 3,465 |
| Other nitrogen fertilizers | 229 | 345 | 501 | 631 | 1,959 | 3,180 |
| Uganda— | | | | | | |
| Ammonium sulphate .. | 2,701 | 2,482 | 2,436 | 3,868 | 1,579 | 2,905 |
| Other nitrogen fertilizers | 102 | 1,369 | 1,623 | 2,940 | 2,040 | 505 |
| Canada— | | | | | | |
| Potassium nitrate .. | 607 | 662 | 662 | 818 | 815 | 760 |
| Sodium nitrate .. | 20,293 | 19,361 | 16,324 | 14,604 | 15,195 | 14,955 |
| Ammonium sulphate .. | 5,261 | 5,304 | 7,755 | 8,875 | 12,635 | 12,731 |
| Ammonium chloride .. | 520 | 541 | 414 | 276 | 261 | 229 |
| Ammonium nitrate .. | 26 | 23 | 27 | 578 | 67 | 45 |
| Anhydrous ammonia .. | 15,308 | 4,994 | 3,035 | 6,027 | 1,095 | 2,903 |
| Other nitrogen fertilizers | 36 | 336 | 537 | 592 | 888 | 691 |
| Antigua— | | | | | | |
| Nitrogen fertilizers .. | 237 | 35 | 666 | 808 | — | <i>n.a.</i> |
| Barbados— | | | | | | |
| Sodium nitrate .. | 5 | — | — | — | — | — |
| Nitrogen fertilizers .. | 8,657 | 10,424 | 11,516 | 11,024 | 12,303 | 12,118 |
| Grenada— | | | | | | |
| Ammonium sulphate .. | 686 | 591 | 419 | 450 | 595 | 827 |
| Other nitrogen fertilizers | 115 | 16 | 30 | 1,076 | 855 | 690 |
| Jamaica— | | | | | | |
| Ammonium sulphate | 16,314 | 14,566 | 13,834 | 24,137 | 22,522 | 25,756 |
| Other nitrogen fertilizers .. | 7,385 | 2,210 | 1,391 | 2,606 | 1,099 | 2,831 |
| St. Kitts— | | | | | | |
| Nitrogen fertilizers .. | 2,308 | 2,380 | 1,815 | 2,155 | 2,306 | 2,202 |
| St. Lucia— | | | | | | |
| Nitrogen fertilizers .. | <i>n.a.</i> | 331 | 350 | 640 | 445 | 899 |
| St. Vincent— | | | | | | |
| Ammonium sulphate .. | 785 | 653 | 325 | 1,135 | 868 | 420 |
| Trinidad and Tobago— | | | | | | |
| Ammonium sulphate .. | 13,431 | 14,043 | 660 | — | (a) 390 | <i>n.a.</i> |
| British Guiana— | | | | | | |
| Ammonium sulphate .. | 17,755 | 18,531 | 17,927 | 19,855 | 20,703 | <i>n.a.</i> |

(a) Excess of re-exports.

IMPORTS OF NITROGEN COMPOUNDS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|----------|----------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Ceylon— | | | | | | |
| Natural sodium nitrate .. | 25 | — | 45 | 25 | 59 | 99 |
| Ammonium sulphate .. | 97,638 | 142,029 | 128,863 | 138,588 | 170,669 | 166,419 |
| Ammonium nitrate .. | 15 | 55 | 465 | 220 | 181 | 180 |
| Cyanamide .. | 58 | 49 | 121 | 78 | 24 | — |
| Cyprus— | | | | | | |
| Ammonium sulphate .. | 17,529 | 13,798 | 15,586 | 21,256 | 21,798 | 26,660 |
| Ammonium chloride .. | — | — | — | — | — | — |
| Other nitrogen fertilizers | 8,076 | 14,627 | 6,217 | 10,819 | 9,293 | 15,945 |
| Hong Kong— | | | | | | |
| Potassium nitrate .. | 1,079 | 621 | 378 | 585 | 991 | 908 |
| Sodium nitrate .. | — | 363 | 401 | 539 | 559 | 628 |
| Ammonium sulphate .. | 60,602 | 27,889 | 2,179 | 64,472 | 32,052 | 100,670 |
| Synthetic nitrates .. | 65,281 | 16 | 21 | 37,103 | 9,805 | 25,839 |
| Ammonium chloride .. | 909 | 709 | 763 | 26,971 | 1,067 | 1,392 |
| India— | | | | | | |
| Potassium nitrate .. | — | 5 | (a) 11 | (a) 6 | (a) 19 | (a) 2 |
| Sodium nitrate .. | 7,528 | 36,876 | (a) 13,261 | (a) 19,844 | (a) 21,771 | (a) 18,929 |
| Ammonium sulphate .. | 182,535 | 248,158 | (a) 248,589 | (a) 238,243 | (a) 564,238 | (a) 444,729 |
| Ammonium nitrate .. | 156 | 986 | (a) 2,140 | (a) 12,881 | (a) 10,114 | (a) 1,486 |
| Ammonium phosphate | 47 | 228 | (a) 5 | (a) 8 | (a) 9,846 | (a) 23,581 |
| Ammonium chloride .. | 257 | 190 | (a) 17 | (a) 11 | (a) 1 | (a) 7 |
| Other nitrogen fertilizers | r 15,145 | r 27,700 | r 43,322 | r 43,380 | 20,365 | (a) 26,826 |
| Malaya— | | | | | | |
| Nitrogen fertilizers .. | 72,425 | 91,785 | 106,863 | 118,936 | 120,383 | 143,225 |
| Anhydrous ammonia .. | 1,895 | 2,956 | 4,242 | 3,878 | 4,905 | 4,678 |
| Pakistan— | | | | | | |
| Sodium nitrate .. | — | — | 55,224 | 160 | 241 | 88 |
| Ammonium sulphate .. | n.a. | — | 29,683 | 103,860 | 107,164 | 150,873 |
| Ammonium chloride .. | 8 | — | 128 | 523 | 443 | 329 |
| Anhydrous ammonia .. | 34 | 14 | 100 | 83 | 24 | 46 |
| Sabah— | | | | | | |
| Ammonium sulphate .. | 320 | 363 | 531 | 327 | 728 | n.a. |
| Other nitrogen fertilizers | 1 | — | 31 | 115 | 35 | n.a. |
| Sarawak— | | | | | | |
| Ammonium sulphate .. | 1,239 | 1,570 | 539 | 290 | 3,698 | 3,568 |
| Other nitrogen fertilizers | 158 | 63 | 55 | 177 | 358 | 244 |
| Australia (b)— | | | | | | |
| Potassium nitrate .. | 470 | 354 | 451 | 519 | 355 | 424 |
| Sodium nitrate .. | 14,430 | 7,505 | 6,837 | 5,670 | 7,709 | 5,611 |
| Ammonium chloride .. | 104 | 150 | 50 | 90 | 1,162 | 1,424 |
| Ammonium sulphate .. | 20,945 | 19,979 | 11 | 110 | 17,493 | } 37,458 |
| Ammonium nitrate .. | 461 | 478 | 162 | 469 | 576 | |
| Other nitrogen fertilizers | 2,121 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Fiji— | | | | | | |
| Nitrogen fertilizers .. | n.a. | n.a. | n.a. | n.a. | n.a. | 18,648 |
| New Zealand— | | | | | | |
| Potassium nitrate .. | 138 | 144 | 128 | 196 | 116 | n.a. |
| Sodium nitrate .. | 2,995 | 1,829 | 2,971 | 3,781 | 2,320 | 2,573 |
| Ammonium sulphate .. | 5,314 | 5,818 | 7,736 | 8,226 | 6,608 | 10,339 |
| Ammonium chloride .. | 276 | 512 | 407 | 784 | n.a. | n.a. |
| Ammonium nitrate .. | 2,952 | 3,194 | 5,696 | 5,624 | 1,913 | n.a. |
| Anhydrous ammonia .. | 54 | 66 | 62 | 38 | 83 | n.a. |
| Cyanamide .. | 49 | — | — | — | 23 | n.a. |
| Irish Republic— | | | | | | |
| Sodium nitrate .. | 4,001 | 6,150 | r 4,265 | 4,316 | 4,350 | 2,865 |
| Ammonium sulphate .. | 70,195 | r 72,564 | r 83,136 | 94,378 | 97,135 | 124,531 |
| Anhydrous ammonia .. | 95 | 100 | 107 | 110 | 113 | 119 |
| Ammonium nitrate .. | 17,353 | 20,471 | 20,253 | 26,449 | 29,063 | 39,147 |
| Other nitrogen fertilizers | 377 | 422 | 650 | 699 | 427 | 3,267 |

(a) Years ended March 31 following that stated. (b) Years ended June 30 of that stated.

IMPORTS OF NITROGEN COMPOUNDS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Calcium nitrate .. | 1,871 | 1,050 | 1,303 | 927 | 798 | 861 |
| Potassium nitrate .. | 264 | 279 | 367 | 428 | 320 | 399 |
| Cyanamide .. | 1,844 | 1,875 | 1,640 | 2,251 | 2,949 | 2,758 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Potassium nitrate .. | 1,962 | 2,053 | 2,007 | 2,279 | 2,156 | 2,631 |
| Sodium nitrate .. | 22,808 | 27,252 | 21,356 | 22,876 | 23,910 | 22,619 |
| Calcium nitrate .. | 1,309 | 9,010 | 15,804 | 5,816 | 10,299 | 7,437 |
| Cyanamide .. | 292 | 359 | 486 | 479 | 384 | 455 |
| Ammonium sulphate .. | 3,938 | 8,668 | 9,754 | 7,808 | 11,142 | 12,105 |
| Ammonium chloride .. | 1,359 | 2,213 | 2,462 | 1,892 | 2,314 | 2,064 |
| Ammonium nitrate .. | 15,876 | 32,216 | 14,856 | 24,162 | 21,705 | 82,758 |
| Anhydrous ammonia .. | 252 | 4 | 57 | n.a. | n.a. | 1,178 |
| Czechoslovakia— | | | | | | |
| Nitrogen fertilizers (a) | 13,000 | 16,000 | 33,630 | 37,000 | 21,000 | n.a. |
| Denmark— | | | | | | |
| Potassium nitrate .. | 956 | 843 | 1,188 | 879 | 1,034 | 1,206 |
| Sodium nitrate .. | 8,918 | 16,379 | 20,134 | 16,092 | 11,079 | 25,567 |
| Calcium nitrate .. | 577,035 | 582,172 | 685,176 | 728,911 | 727,037 | 669,238 |
| Ammonium sulphate .. | 11,043 | 13,568 | 14,298 | 10,501 | 9,975 | 9,312 |
| Ammonium chloride .. | 575 | 864 | 832 | 966 | 695 | 1,086 |
| Ammonium nitrates .. | 12,326 | 6,970 | 7,904 | 14,728 | 25,279 | 23,718 |
| Cyanamide .. | 110 | 221 | 117 | 160 | 120 | 174 |
| Finland— | | | | | | |
| Potassium nitrate .. | 115 | 249 | 140 | 263 | 383 | 168 |
| Sodium nitrate .. | 352 | 325 | 307 | 386 | 356 | 3,078 |
| Calcium nitrate .. | 29,393 | 39,621 | 95,534 | 69,352 | 60,311 | 61,758 |
| Ammonium nitrate .. | 4,534 | 3,855 | 4,232 | 33,327 | 2,918 | 13,657 |
| Ammonium sulphate .. | 50,254 | 32,098 | 42,478 | 34,221 | 34,336 | 40,031 |
| Ammonium chloride .. | 300 | 791 | 671 | 1,002 | 694 | 606 |
| France— | | | | | | |
| Sodium nitrate .. | 99,229 | 69,216 | 72,163 | 66,823 | 63,885 | 49,685 |
| Calcium nitrate .. | 65 | 20 | — | — | 119 | 485 |
| Ammonium sulphate .. | 1,982 | 22,045 | 25,090 | 22,977 | 25,007 | 43,270 |
| Ammonium nitrate .. | 161 | 43 | 5 | 3,768 | 39,402 | 14,010 |
| Ammonium chloride .. | 2,093 | 1,859 | 1,554 | 1,572 | 1,710 | 1,961 |
| Anhydrous ammonia .. | 316 | 1,651 | 4,809 | 7,030 | 9,530 | 27,224 |
| Cyanamide .. | 14,781 | 7,346 | 27 | 192 | 492 | 2,582 |
| Germany (Federal)— | | | | | | |
| Potassium nitrate .. | 186 | 331 | 337 | 756 | 1,069 | 1,188 |
| Sodium nitrate .. | 20,543 | 16,661 | 15,025 | 13,021 | 12,859 | 11,712 |
| Ammonium nitrates .. | 20 | 2,756 | 10,088 | 21,074 | 26,817 | 81,006 |
| Ammonium chloride .. | n.a. | n.a. | n.a. | 21 | 158 | 359 |
| Other nitrogen fertilisers | n.a. | n.a. | 30 | 25 | 2,182 | 517 |
| Greece— | | | | | | |
| Potassium nitrate .. | 132 | 109 | 123 | 89 | 95 | 79 |
| Sodium nitrate .. | 17,675 | 6,593 | 1,972 | 2,362 | 2,882 | 6,084 |
| Ammonium nitrate .. | 86,688 | 96,387 | 77,670 | 49,145 | 40,174 | 56,869 |
| Ammonium sulphate .. | 202,264 | 141,028 | 130,834 | 129,696 | 159,907 | 182,772 |
| Ammonium chloride .. | 193 | 162 | 186 | 186 | 250 | 206 |
| Lime ammonium nitrate | 11,546 | 1,847 | 34,068 | 56,778 | 74,484 | 74,049 |
| Other nitrogen fertilizers | 25,860 | 35,918 | | | | |
| Hungary— | | | | | | |
| Nitrogen fertilizers .. | 163,635 | 180,798 | 150,249 | 147,779 | 299,208 | 463,763 |
| Iceland— | | | | | | |
| Calcium nitrate .. | 44 | — | 30 | 177 | 198 | — |
| Lime ammonium nitrate | — | 8,857 | 1,968 | — | 30 | 6,308 |
| Nitrophoska .. | 1,230 | 1,526 | 1,673 | 2,116 | — | — |

(a) N content.

IMPORTS OF NITROGEN COMPOUNDS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Italy— | | | | | | |
| Potassium nitrate .. | 638 | 964 | 1,240 | 758 | 727 | 1,027 |
| Sodium nitrate .. | 45,933 | 40,428 | 8,500 | 15,571 | 9,723 | 4,724 |
| Calcium nitrate .. | 6,552 | — | — | — | — | — |
| Ammonium chloride .. | 766 | 489 | 373 | 444 | 488 | 1,492 |
| Ammonium nitrate .. | 3,448 | 3,284 | 2,341 | 3,284 | 3,397 | 2,999 |
| Ammonium sulphate .. | 3,248 | 1,586 | 114 | 853 | 3,256 | 4,043 |
| Cyanamide .. | 15 | 21 | 81 | — | 324 | 1,372 |
| Netherlands— | | | | | | |
| Potassium nitrate .. | 1,470 | 1,755 | 1,293 | 1,841 | 2,477 | 2,807 |
| Sodium nitrate .. | 36,267 | 32,768 | 10,660 | 24,643 | 29,357 | 34,238 |
| Calcium nitrate .. | — | 1 | 3,730 | 1 | 13 | 14,042 |
| Ammonium sulphate .. | 1,045 | 83 | 1,330 | 2,009 | 245 | 9,347 |
| Ammonium chloride .. | 1,254 | 1,463 | 1,787 | 1,401 | 1,460 | 586 |
| Ammonium nitrate .. | 9,707 | 20,212 | 56,249 | 67,371 | 78,408 | 95,343 |
| Lime ammonium nitrate | 6,478 | 16,619 | | 872 | 3,221 | 3,300 | 1,369 |
| Cyanamide .. | 3,062 | 4,404 | 872 | 3,221 | 3,300 | 1,369 |
| Anhydrous ammonia .. | 1,139 | 9,968 | 1,585 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium phosphates | 10,563 | 6,515 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Other nitrogen fertilizers | 22,950 | 17,051 | 17,330 | 17,797 | 16,060 | 7,113 |
| Norway— | | | | | | |
| Potassium nitrate .. | 155 | 146 | 164 | 156 | 215 | 178 |
| Ammonium chloride .. | <i>n.a.</i> | 210 | 242 | 331 | 336 | 412 |
| Ammonium sulphate .. | 246 | 319 | 343 | 354 | 456 | 479 |
| Anhydrous ammonia .. | 19,380 | 1,481 | — | — | 13,612 | 9,310 |
| Poland— | | | | | | |
| Nitrogen fertilizers .. | 47,200 | 8,500 | 64,000 | 27,400 | <i>n.a.</i> | 49,309 |
| Portugal— | | | | | | |
| Potassium nitrate .. | 415 | 377 | 321 | 402 | 291 | 296 |
| Sodium nitrate .. | 17,145 | 14,529 | 9,056 | 8,050 | 4,594 | 12,524 |
| Calcium nitrate .. | 14,886 | 11,318 | 7,984 | 6,681 | — | — |
| Ammonium sulphate .. | 84,999 | 39,551 | 46,828 | 28,145 | — | 10,039 |
| Ammonium chloride .. | 133 | 101 | 145 | 167 | 102 | 137 |
| Ammonium nitrate .. | 4,003 | 13,009 | 11,283 | 5,918 | 1,575 | 443 |
| Cyanamide .. | 486 | 974 | 974 | — | — | — |
| Lime ammonium nitrate | 68,794 | 67,756 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Nitrophoska .. | 6,625 | 10,443 | 9,727 | 11,853 | 15,022 | 14,672 |
| Anhydrous ammonia .. | 85 | 84 | 3 | 15,849 | 2,872 | 12,823 |
| Roumania— | | | | | | |
| Nitrogen fertilizers (a) | 9,300 | 7,800 | 8,500 | 4,400 | 1,200 | 3,445 |
| Spain— | | | | | | |
| Sodium nitrate .. | 158,308 | 144,268 | 72,429 | 83,605 | 135,790 | 118,147 |
| Ammonium sulphate .. | 455,143 | 710,688 | 297,570 | 513,250 | 591,856 | 454,349 |
| Calcium nitrate .. | 77,987 | 176,581 | 123,149 | 83,422 | 131,325 | 126,785 |
| Other nitrogen fertilizers | 95,505 | 89,868 | 60,378 | 59,974 | 38,802 | 55,740 |
| Sweden— | | | | | | |
| Potassium nitrate .. | 801 | 838 | 976 | 873 | 1,129 | 1,005 |
| Sodium nitrate .. | 29,050 | 31,446 | 31,033 | 39,410 | 27,813 | 24,815 |
| Calcium nitrate .. | 309,142 | 332,304 | 340,122 | 328,165 | 352,820 | 352,660 |
| Ammonium nitrate .. | 1,143 | 168 | 75 | 79 | 36 | 156 |
| Ammonium sulphate .. | 12,213 | 12,235 | 21,647 | 16,500 | 9,281 | 11,347 |
| Ammonium chloride .. | 1,002 | 1,093 | 1,238 | 1,182 | 1,215 | 1,055 |
| Switzerland— | | | | | | |
| Potassium and sodium nitrates .. | 938 | 2,035 | 808 | 604 | 842 | 933 |
| Ammonium sulphate, etc. .. | 328 | 452 | 505 | 544 | 607 | 501 |
| Ammonium chloride .. | 630 | 689 | 1,197 | 830 | 793 | 889 |
| Ammonium and calcium nitrates .. | <i>n.a.</i> | <i>n.a.</i> | 46 | 218 | 253 | 5,266 |

(a) N content.

IMPORTS OF NITROGEN COMPOUNDS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Yugoslavia— | | | | | | |
| Potassium nitrate .. | 10 | — | — | — | — | — |
| Sodium nitrate .. | — | 9,842 | 14,763 | 40 | 207 | 162 |
| Ammonium sulphate .. | 34,095 | — | 13,811 | 19,988 | 46,480 | 95,072 |
| Ammonium nitrate .. | 10,067 | 1,120 | — | 129 | 12,861 | 10,801 |
| Lime ammonium nitrate | 356,017 | 348,888 | 333,011 | 314,847 | 467,631 | 414,818 |
| Other nitrogen fertilizers | <i>n.a.</i> | 29,467 | 18,366 | 15 | 85 | 6,107 |
| Algeria— | | | | | | |
| Potassium nitrate .. | 241 | 244 | 151 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sodium nitrate .. | 1,619 | 1,307 | 794 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Calcium nitrate .. | 5,812 | 3,410 | 3,986 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium chloride .. | 212 | 7 | 18 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium sulphate .. | 21,956 | 21,495 | 19,264 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium nitrate .. | 26,074 | 24,980 | 29,362 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cyanamide .. | 113 | 88 | 129 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Angola— | | | | | | |
| Sodium nitrate .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 268 | 221 | 136 |
| Ammonium nitrate .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,669 | 1,257 | 913 |
| Ammonium sulphate .. | 9,922 | 4,549 | 4,097 | 3,887 | 4,811 | 5,443 |
| Cameroun— | | | | | | |
| Nitrogen fertilizers .. | 4,220 | 6,678 | 5,706 | 6,319 | 10,743 | 12,976 |
| Canary Islands— | | | | | | |
| Ammonium sulphate .. | 58,506 | 67,356 | 60,085 | 51,095 | 62,688 | <i>n.a.</i> |
| Calcium nitrate .. | 3,445 | 3,876 | — | 549 | 689 | <i>n.a.</i> |
| Other nitrogen fertilizers | 3,490 | 7,421 | 1,946 | 5,722 | 6,249 | <i>n.a.</i> |
| Congo Republic— | | | | | | |
| Ammonium chloride .. | 85 | 17 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Nitrogen fertilizers .. | 4,186 | 3,695 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt— | | | | | | |
| Sodium nitrate .. | 57,492 | 49,368 | 18,715 | 36,805 | 248 | <i>n.a.</i> |
| Calcium nitrate .. | 10,051 | 11,124 | 18,211 | — | — | <i>n.a.</i> |
| Ammonium sulphate .. | 159,867 | 147,036 | 94,438 | 195,325 | 60,374 | <i>n.a.</i> |
| Ammonium chloride .. | 1,364 | 308 | 179 | 299 | — | <i>n.a.</i> |
| Ammonium nitrate .. | 440,892 | 127,880 | 432,692 | 181,313 | 44,293 | <i>n.a.</i> |
| Ammonium sulpho-nitrate .. | 30,514 | 1,968 | 20,531 | — | 187,760 | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Nitrogen fertilizers .. | 3,386 | 1,808 | 2,476 | 2,150 | 1,376 | 1,049 |
| Morocco— | | | | | | |
| Potassium nitrate .. | 111 | 21 | 26 | 62 | 308 | 231 |
| Sodium nitrate .. | 640 | 483 | 300 | 293 | 228 | 467 |
| Calcium nitrate .. | 1,154 | 1,125 | 725 | 524 | 829 | 745 |
| Ammonium nitrate .. | 12,450 | 11,579 | 11,361 | 12,467 | 16,329 | 7,156 |
| Ammonium sulphate .. | 12,130 | 13,725 | 14,126 | 18,984 | 24,240 | 24,215 |
| Other nitrogen fertilizers | 2,716 | 1,797 | 2,641 | 1,676 | 3,949 | 8,443 |
| Reunion— | | | | | | |
| Nitrogen fertilizers .. | 8,433 | 7,627 | 11,051 | 10,794 | 7,797 | 9,967 |
| South Africa— | | | | | | |
| Potassium nitrate .. | 195 | 199 | 329 | 605 | 849 | <i>n.a.</i> |
| Sodium nitrate .. | 803 | 955 | 1,010 | 1,459 | 1,008 | <i>n.a.</i> |
| Ammonium sulphate .. | 45,119 | 42,945 | 39,161 | 50,833 | 60,599 | <i>n.a.</i> |
| Ammonium chloride .. | 2,192 | 1,380 | 1,557 | 2,116 | 801 | <i>n.a.</i> |
| Ammonium nitrate .. | 11,914 | 16,020 | 49,928 | 33,626 | 21,957 | <i>n.a.</i> |
| Sudan— | | | | | | |
| Sodium, calcium and ammonium nitrates (synthetic) .. | 10,226 | 11,797 | 15,238 | 26,233 | 62,019 | 14,387 |
| Other nitrogen fertilizers | 24,742 | 21,824 | 34,162 | 41,521 | | |
| Tunisia— | | | | | | |
| Nitrogen fertilizers .. | 11,303 | 10,366 | 11,827 | 12,596 | 13,289 | <i>n.a.</i> |
| Costa Rica— | | | | | | |
| Nitrogen fertilizers .. | 13,634 | 19,796 | 14,105 | 13,416 | 16,613 | 11,487 |

IMPORTS OF NITROGEN COMPOUNDS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|---------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Cuba— | | | | | | |
| Potassium nitrate .. | 7,972 | 953 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sodium nitrate .. | 2,319 | 725 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium nitrate .. | 190 | 2,033 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium sulphate .. | 52,349 | 72,597 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Anhydrous ammonia .. | 6,420 | 4,813 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Dominican Republic— | | | | | | |
| Ammonium sulphate .. | 13,387 | 38,332 | 7,506 | 33,938 | 17,290 | <i>n.a.</i> |
| French West Indies— | | | | | | |
| Guadeloupe— | | | | | | |
| Nitrogen fertilizers .. | <i>n.a.</i> | 2,269 | 4,624 | 3,194 | 1,578 | 2,165 |
| Martinique— | | | | | | |
| Nitrogen fertilizers .. | <i>n.a.</i> | 9,219 | 11,788 | 10,436 | 8,310 | 8,132 |
| Guatemala— | | | | | | |
| Sodium nitrate .. | <i>n.a.</i> | 124 | 505 | 1,019 | 299 | <i>n.a.</i> |
| Other nitrogen fertilizers | <i>n.a.</i> | 9,005 | 13,039 | 10,872 | 7,291 | <i>n.a.</i> |
| Honduras— | | | | | | |
| Nitrogen fertilizers .. | 12,315 | 14,561 | 11,849 | 11,731 | 11,936 | 12,410 |
| Mexico— | | | | | | |
| Sodium nitrate .. | 9,698 | 15,261 | 11,276 | 8,571 | 9,125 | 3,074 |
| Ammonium chloride .. | 596 | 515 | 646 | 837 | 343 | — |
| Ammonium sulphate .. | 9,194 | 24,510 | 621 | 1 | 3 | 4 |
| Ammonium nitrate .. | 41,372 | 25,932 | 9,286 | 11,411 | 826 | 6,129 |
| Anhydrous ammonia .. | 26,038 | 39,043 | 61,452 | 62,983 | 34,785 | 51,043 |
| Nicaragua— | | | | | | |
| Sodium nitrate .. | 494 | 397 | — | 101 | <i>n.a.</i> | 389 |
| Other nitrogen fertilizers | 1,566 | 1,421 | 2,466 | 6,266 | 11,777 | 11,777 |
| Panama Republic— | | | | | | |
| Nitrogen fertilizers .. | 9,373 | 9,860 | 11,172 | 14,670 | <i>n.a.</i> | <i>n.a.</i> |
| Salvador— | | | | | | |
| Sodium nitrate .. | <i>n.a.</i> | 981 | 296 | 1,069 | 1,383 | 592 |
| Other nitrogen fertilizers | <i>n.a.</i> | 37,363 | 47,774 | 52,886 | 50,026 | 76,450 |
| United States— | | | | | | |
| Potassium and sodium | | | | | | |
| nitrates, crude .. | 20,989 | 32,561 | 16,636 | 12,322 | 27,301 | 34,000 |
| Potassium nitrate .. | 2,314 | 2,080 | 2,739 | 3,961 | 3,187 | 3,970 |
| Sodium nitrate .. | 398,304 | 412,290 | 317,064 | 441,379 | 434,000 | 106,737 |
| Calcium nitrate .. | 78,970 | 61,472 | 55,378 | 65,837 | 51,935 | 37,210 |
| Ammonium sulphate .. | 166,858 | 194,172 | 188,706 | 216,845 | 215,177 | 209,381 |
| Ammonium chloride .. | 2,781 | 4,088 | 5,789 | 5,268 | 4,607 | 2,311 |
| Ammonium nitrate .. | 299,358 | 304,497 | 219,249 | 222,521 | 302,322 | 185,375 |
| Ammonium phosphates | 141,716 | 192,596 | 107,087 | 100,887 | 75,034 | 115,812 |
| Cyanamide .. | 51,191 | 52,143 | 39,375 | 37,488 | 32,987 | 25,800 |
| Argentina— | | | | | | |
| Potassium nitrate .. | — | 15 | 156 | 68 | 2 | — |
| Sodium nitrate .. | 41,194 | 30,367 | 1,493 | 16,352 | 13,791 | 9,845 |
| Ammonium sulphate .. | 19,397 | 18,650 | 7,820 | 12,580 | 4,324 | 23,866 |
| Ammonium chloride .. | 828 | 937 | 637 | 1,234 | 1,354 | 1,003 |
| Brazil— | | | | | | |
| Potassium nitrate .. | 494 | 602 | 1,337 | 749 | 802 | 777 |
| Sodium nitrate .. | 50,092 | 48,237 | 36,151 | 53,131 | 32,122 | 34,309 |
| Potassium and sodium | | | | | | |
| nitrates .. | — | 7,690 | 15,841 | 2,989 | 12,104 | 16,429 |
| Ammonium chloride .. | 1,088 | 763 | 1,292 | 1,617 | 1,948 | 1,363 |
| Ammonium nitrate .. | 18,211 | 13,916 | 18,179 | 8,884 | 5,758 | 2,180 |
| Ammonium sulphate .. | 88,357 | 84,724 | 154,889 | 124,441 | 115,893 | 178,611 |
| Cyanamide .. | 253 | 31 | 323 | 133 | 165 | — |
| Other nitrogen fertilizers | 14,961 | 9,462 | 12,926 | 9,685 | 7,324 | 6,876 |
| Chile— | | | | | | |
| Ammonium chloride .. | 316 | 241 | 180 | 566 | 496 | <i>n.a.</i> |
| Ammonium sulphate .. | 95 | 89 | 224 | 354 | 170 | <i>n.a.</i> |
| Ammonium nitrate .. | 2,497 | 7,113 | 3,197 | 7,368 | 7,866 | <i>n.a.</i> |
| Anhydrous ammonia .. | 99 | 94 | 48 | 109 | 50 | <i>n.a.</i> |

IMPORTS OF NITROGEN COMPOUNDS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Colombia— | | | | | | |
| Potassium nitrate .. | 283 | 222 | 205 | 247 | 208 | 401 |
| Sodium nitrate .. | 143 | — | 79 | 30 | 384 | 1,551 |
| Ammonium chloride .. | 145 | 354 | 292 | 540 | 478 | 684 |
| Ammonium sulphate .. | 4,871 | 1,166 | 7,163 | 9,728 | 4,758 | 4,508 |
| Other nitrogen fertilizers | 15,216 | 10,186 | 17,145 | 19,766 | 17,047 | 14,442 |
| Anhydrous ammonia .. | 133 | 95 | 161 | 133 | 207 | 122 |
| Ecuador— | | | | | | |
| Nitrogen fertilizers .. | 3,343 | 5,814 | <i>n.a.</i> | 4,322 | 3,656 | 8,815 |
| Peru— | | | | | | |
| Potassium nitrate .. | 71 | 78 | 129 | 76 | 63 | 9 |
| Sodium nitrate .. | 14,760 | 9,507 | 10,479 | 6,254 | 5,696 | 4,651 |
| Anhydrous ammonia .. | 181 | 195 | 68 | 37 | 24 | 46 |
| Other nitrogen fertilizers | 65,706 | 84,738 | 114,414 | 107,720 | 121,955 | 93,901 |
| Uruguay— | | | | | | |
| Potassium nitrate .. | 914 | 2 | 111 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sodium nitrate .. | 2,084 | 504 | 619 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium sulphate .. | 8,974 | 4,194 | 4,921 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela— | | | | | | |
| Potassium nitrate .. | 51 | 158 | 137 | 172 | 105 | 210 |
| Sodium nitrate .. | 545 | 912 | 651 | 377 | 478 | 120 |
| Calcium nitrate .. | 1 | 32 | 1,769 | 4,090 | — | — |
| Ammonium sulphate .. | 14,880 | 21,040 | 17,333 | 18,894 | 19,146 | 18,562 |
| Anhydrous ammonia .. | <i>n.a.</i> | <i>n.a.</i> | 619 | 698 | 598 | 798 |
| Cyanamide .. | — | 103 | — | 1 | — | — |
| Burma— | | | | | | |
| Nitrogen fertilizers .. | 2,972 | 19 | 10,361 | 207 | 180 | 37,079 |
| Formosa— | | | | | | |
| Sodium nitrate .. | 545 | 483 | 237 | 287 | <i>n.a.</i> | 440 |
| Ammonium chloride .. | <i>n.a.</i> | <i>n.a.</i> | 173 | 1,322 | 633 | 3,562 |
| Ammonium sulphate .. | 418,679 | 477,107 | 291,426 | 187,826 | 231,550 | 105,704 |
| Other nitrogen fertilizers | 6,070 | 5,138 | 40,966 | 46,672 | 71,978 | 83,860 |
| Indonesia— | | | | | | |
| Potassium nitrate .. | 142 | 219 | 181 | 76 | <i>n.a.</i> | <i>n.a.</i> |
| Sodium nitrate .. | 202 | — | 219 | 23 | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium chloride .. | 389 | 301 | 311 | 575 | <i>n.a.</i> | <i>n.a.</i> |
| Ammonium sulphate .. | 106,871 | 208,573 | 139,950 | 116,902 | <i>n.a.</i> | <i>n.a.</i> |
| Anhydrous ammonia .. | 809 | 1,124 | 920 | 1,654 | <i>n.a.</i> | <i>n.a.</i> |
| Other nitrogen fertilizers | 1,736 | 662 | 6,167 | 57,216 | <i>n.a.</i> | <i>n.a.</i> |
| Iraq— | | | | | | |
| Nitrogen fertilizers .. | 1,216 | 716 | 2,859 | 3,932 | 6,680 | <i>n.a.</i> |
| Israel— | | | | | | |
| Ammonium sulphate .. | — | — | — | — | — | — |
| Nitrogen fertilizers .. | 7,944 | 6,858 | 2,954 | — | 19,916 | <i>n.a.</i> |
| Japan— | | | | | | |
| Sodium nitrate .. | 13,578 | 15,831 | 16,354 | 20,285 | 18,701 | 20,143 |
| Ammonium sulphate .. | — | — | 3,839 | 886 | 2 | <i>n.a.</i> |
| Jordan— | | | | | | |
| Nitrogen fertilizers .. | 1,275 | 1,811 | 805 | 1,958 | 2,628 | 4,521 |
| Korea (South)— | | | | | | |
| Ammonium sulphate .. | 471,998 | 391,960 | 508,218 | 573,008 | 602,762 | 600,023 |
| Ammonium nitrate .. | 32,434 | 22,613 | 24,180 | 2,416 | 14,114 | 1,604 |
| Ammonium chloride .. | 417 | 743 | 453 | 461 | <i>n.a.</i> | <i>n.a.</i> |
| Cyanamide .. | 511 | 518 | 1,380 | 1,806 | <i>n.a.</i> | <i>n.a.</i> |
| Lebanon— | | | | | | |
| Nitrogen fertilizers .. | 22,337 | 26,158 | 36,787 | 42,275 | 30,431 | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Potassium nitrate .. | 105 | 989 | 3,512 | <i>n.a.</i> | <i>n.a.</i> | 28 |
| Sodium nitrate .. | — | — | 142 | 309 | 1,123 | 732 |
| Ammonium phosphate .. | 2,781 | 24,365 | 21,301 | 24,858 | 19,708 | 6,882 |
| Ammonium sulphate .. | 19,643 | 95,269 | 47,955 | 60,050 | 102,754 | 30,844 |
| Other nitrogen fertilizers | 46,089 | 30,504 | 34,959 | 33,283 | 35,785 | 10,122 |

IMPORTS OF NITROGEN COMPOUNDS (*cont.*)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------|--------|--------|---------|---------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Syria— | | | | | | |
| Nitrogen fertilizers .. | 24,198 | 19,824 | 30,908 | 46,198 | 38,307 | <i>n.a.</i> |
| Thailand— | | | | | | |
| Potassium nitrate .. | 823 | 829 | 787 | 705 | 743 | 933 |
| Ammonium chloride .. | 513 | 595 | 741 | 1,358 | 1,297 | 1,533 |
| Ammonium sulphate .. | 17,351 | 22,321 | 28,757 | 29,621 | 28,520 | 42,349 |
| Other nitrogen fertilizers | 2,158 | 433 | 2,289 | 2,383 | 2,765 | 1,846 |
| Turkey— | | | | | | |
| Sodium nitrate .. | 440 | 5 | 1,476 | 1,434 | 348 | 952 |
| Ammonium chloride .. | 372 | 549 | 198 | 775 | 507 | 359 |
| Ammonium sulphate .. | 32,183 | 88,368 | 39,583 | 121,679 | 136,731 | 15,922 |
| Ammonium nitrate .. | 4,516 | 1,126 | 1,366 | 2,038 | 6,302 | 63 |
| Vietnam (South)— | | | | | | |
| Nitrogen fertilizers .. | 40,415 | 80,859 | 54,552 | 48,582 | 53,504 | <i>n.a.</i> |

PETROLEUM AND ALLIED PRODUCTS

PRODUCTION OF CRUDE PETROLEUM*

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Crude petroleum | 79,900 | 82,700 | 85,400 | 105,800 | 110,900 | 122,800 |
| Shale oil | 63,400 | 60,500 | 59,900 | 43,100 | 15,500 | — |
| Nigeria (b) | 270,000 | 557,000 | 867,000 | 2,302,000 | 3,357,000 | 3,824,000 |
| Canada (b) | 22,066,159 | 24,637,133 | 25,271,229 | r29,446,411 | 32,551,451 | 34,457,973 |
| Barbados (b) | — | 20 | 419 | 241 | 18 | 3 |
| Trinidad (b) | 5,336,437 | 5,845,542 | 6,051,047 | 6,538,253 | 6,982,306 | 6,953,953 |
| Abu Dhabi (c) | — | — | — | — | 729,000 | 2,350,000 |
| Bahrain Islands (c) | 2,004,000 | 2,199,000 | 2,213,000 | 2,213,000 | 2,213,000 | 2,227,000 |
| Brunei | 5,089,492 | 5,262,702 | 4,473,867 | 4,015,618 | 3,720,253 | 3,383,789 |
| India | 419,000 | 434,250 | 442,240 | r 502,000 | 1,060,200 | 1,622,410 |
| Pakistan (b) | 324,600 | 333,400 | 376,600 | 404,200 | 476,900 | 502,000 |
| Qatar (c) | 8,091,813 | 7,866,650 | 8,083,032 | 8,249,305 | 8,670,919 | 8,953,349 |
| Sarawak | 56,902 | 54,708 | 59,442 | 59,498 | 57,274 | 51,126 |
| New Zealand | 784 | 771 | 783 | 627 | 569 | 570 |
| TOTAL | 43,803,000 | 47,334,000 | 47,984,000 | r53,880,000 | 59,945,000 | 64,450,000 |
| OTHER COUNTRIES | | | | | | |
| Albania | 397,000 | 471,000 | 720,000 | 760,000 | 780,000 | 790,000 |
| Austria | 2,791,599 | 2,419,951 | 2,409,722 | 2,318,657 | 2,355,883 | 2,578,480 |
| Bulgaria | 218,000 | 189,000 | 197,000 | 203,000 | 196,000 | 171,000 |
| Czechoslovakia | 104,000 | 121,000 | 135,000 | 152,000 | 174,000 | 177,000 |
| France | 1,368,637 | 1,590,169 | 1,941,896 | 2,129,211 | 2,327,419 | 2,482,000 |
| Germany (Federal)— | | | | | | |
| Crude petroleum | 4,361,605 | 5,022,167 | 5,442,555 | 6,106,467 | 6,669,330 | 7,266,112 |
| Shale oil | 22,958 | 21,313 | 19,805 | 15,946 | 1,899 | — |
| Hungary | 817,248 | 1,019,551 | 1,197,475 | r 1,433,945 | 1,614,641 | 1,728,000 |
| Italy | 1,521,301 | 1,668,663 | r 1,966,568 | 1,940,487 | 1,779,047 | 1,805,830 |
| Netherlands | 1,595,573 | 1,745,207 | 1,887,382 | 2,014,169 | 2,123,000 | 2,180,000 |
| Poland | 172,200 | 172,100 | 191,300 | 199,400 | 199,300 | 209,000 |
| Roumania | 11,157,266 | 11,257,190 | 11,318,724 | 11,399,107 | 11,676,293 | 12,040,000 |
| U.S.S.R. | r111,428,000 | r127,511,000 | 145,524,000 | 163,445,000 | 183,301,000 | 203,000,000 |
| Yugoslavia | 454,855 | 583,128 | 928,662 | 1,319,574 | 1,501,393 | 1,585,181 |
| Algeria (e) | 432,041 | 1,215,000 | 8,395,700 | r15,419,724 | 20,174,000 | 23,273,000 |
| Angola | 49,833 | 49,721 | 65,794 | 102,780 | 463,793 | 787,028 |
| Congo (Republic of) | — | — | 51,028 | 101,313 | 121,440 | 107,495 |
| Egypt | 3,134,000 | 3,347,000 | 3,450,000 | 3,759,000 | 4,597,000 | 5,500,000 |
| Gabon | 497,000 | 741,433 | 787,470 | 762,217 | 813,958 | 876,000 |
| Libya | — | — | — | 861,000 | 8,691,000 | 21,748,000 |
| Morocco | 73,153 | 93,079 | 90,877 | 78,740 | 125,296 | 147,534 |
| Senegal | — | — | 1,600 | 2,100 | 400 | — |
| South Africa— | | | | | | |
| Shale oil (a) | 23,948 | 26,125 | 25,062 | 6,045 | — | — |
| Cuba (b) | 45,000 | 26,000 | (d) 15,000 | (d) 10,000 | (d) 12,000 | (d) 10,000 |
| Mexico (b) | 13,338,000 | 13,576,000 | 13,951,000 | 15,040,000 | 15,750,000 | 16,178,000 |
| United States (b) | 326,535,500 | 343,278,700 | 343,324,400 | 349,567,700 | 356,825,200 | 367,029,700 |
| Argentina (b) | 5,002,481 | 6,278,900 | 9,001,100 | r11,888,800 | 13,821,175 | 13,678,473 |
| Bolivia (b) | 451,700 | 416,800 | 408,900 | 355,800 | 342,200 | 414,800 |
| Brazil (b) | 2,545,552 | 3,173,389 | 3,983,298 | 4,462,400 | 4,282,000 | 4,578,000 |
| Chile | 715,000 | 825,000 | 928,000 | 1,189,000 | 1,500,000 | 1,460,000 |
| Colombia (b) | 6,605,735 | 7,545,600 | 7,855,000 | 7,500,000 | 7,311,000 | 8,485,000 |
| Ecuador (b) | 409,718 | 367,545 | 367,206 | 389,861 | 342,806 | 329,000 |

*Excluding Natural Gasoline. See page 248.

(a) Years ended June 30 of that stated.

(b) The following conversion rates have been used: 35 gallons=1 barrel, and the undermentioned barrels=1 ton—Nigeria 7·3, Canada 7·5, Barbados 8·1, Trinidad 7·0, Burma 7·4, Pakistan 7·0, Cuba 7·5, Mexico 7·1, United States 7·5, Argentina 7·1, Bolivia 7·6, Brazil 7·4 (1957—1960) 7·8 (1961 onwards), Columbia 7·1, Ecuador 7·5, Venezuela 6·95, Indonesia 7·5.

(c) British Protected State.

(d) Estimated.

(e) Including French Sahara.

PRODUCTION OF CRUDE PETROLEUM (cont.)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|------------------------------------|--------------------|---------------------|----------------------|----------------------|----------------------|----------------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Peru | 2,458,907 | 2,324,000 | 2,497,000 | r2,526,000 | 2,397,000 | 2,820,000 |
| Venezuela | 136,697,000 | 145,417,118 | 149,767,000 | 153,229,000 | 167,827,000 | 170,448,000 |
| Burma | 469,321 | 536,047 | 551,086 | 566,806 | 590,021 | 646,000 |
| China (a) | 2,220,000 | 3,400,000 | 5,000,000 | 6,600,000 | (e)6,500,000 | (e)7,000,000 |
| Formosa | 1,980 | 1,720 | 1,870 | 2,190 | 1,850 | 2,450 |
| Indonesia | 15,855,185 | 17,930,538 | 20,270,726 | 20,948,230 | 22,430,000 | 20,790,000 |
| Iran (b) | 39,780,000 | 46,709,000 | 50,991,000 | 57,094,000 | 63,461,000 | 70,497,000 |
| Iraq | 35,128,861 | 41,080,000 | r46,534,398 | r48,054,764 | 48,214,537 | 55,576,822 |
| Israel | 100,439 | 120,000 | 129,000 | 135,000 | 132,000 | 149,000 |
| Japan | 359,000 | 397,000 | 514,000 | 642,000 | 743,608 | 767,296 |
| Kuwait | 69,117,138 | 68,437,498 | 80,570,000 | 81,410,000 | 90,720,000 | 95,660,000 |
| Mongolia | 34,000 | 34,000 | 28,100 | n.a. | n.a. | n.a. |
| Netherlands New Guinea (c) | 262,782 | 241,106 | 244,579 | 164,791 | n.a. | n.a. |
| Saudi Arabia | 49,399,006 | 53,307,390 | 61,087,931 | 68,138,424 | 74,554,207 | 79,768,933 |
| Turkey | 322,700 | 367,000 | 356,760 | 418,071 | 586,004 | 716,700 |
| Neutral Zone (d) | r 4,243,000 | 6,110,000 | 7,175,000 | r9,379,000 | 12,819,000 | 16,590,000 |
| TOTAL | 852,700,000 | r921,100,000 | 992,000,000 | 1,054,000,000 | 1,141,000,000 | 1,222,000,000 |
| WORLD'S TOTAL | 896,500,000 | 968,500,000 | 1,040,000,000 | 1,108,000,000 | 1,201,000,000 | 1,287,000,000 |

(a) Including oil from shale and coal.

(b) 1954 Oil Agreement Area only.

(c) Exports.

(d) Neutral Zone of Kuwait and Saudi Arabia.

(e) Estimated.

PRODUCTION OF NATURAL GASOLINE

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | 111,146 | 158,748 | r 164,139 | 213,068 | 227,380 | n.a. |
| Trinidad (a) | 26,196 | 24,694 | 23,686 | 21,539 | 22,024 | 47,212 |
| Brunei | 71,508 | 70,793 | 64,465 | 63,289 | 65,040 | 68,565 |
| New Zealand | — | — | — | — | 374 | 398 |
| OTHER COUNTRIES | | | | | | |
| France | 34,192 | 101,895 | 159,872 | 214,272 | 254,104 | 276,000 |
| Italy | 63,873 | 58,954 | r 58,016 | 56,239 | 54,209 | 54,197 |
| Poland | 18,100 | 18,100 | 18,800 | 19,900 | 21,100 | n.a. |
| Roumania | 231,000 | 254,000 | 283,000 | 303,000 | 315,000 | n.a. |
| Yugoslavia | 4,000 | 5,000 | 6,000 | 5,000 | 5,000 | n.a. |
| Algeria | — | — | 35,000 | 134,000 | 199,000 | n.a. |
| Egypt | 8,000 | 10,000 | 10,000 | 9,000 | n.a. | n.a. |
| Mexico | 823,000 | 1,085,000 | 1,126,000 | 1,162,000 | 1,127,000 | n.a. |
| United States | b11,889,560 | b11,527,120 | 11,297,570 | 11,635,440 | 12,027,560 | 12,944,890 |
| Argentina | 9,501 | 11,000 | r 7,000 | r 6,000 | 10,000 | n.a. |
| Chile | 16,929 | 20,809 | 20,000 | 18,000 | 20,000 | n.a. |
| Colombia | 144,322 | 90,967 | 80,572 | 75,633 | 73,335 | 74,587 |
| Ecuador | 18,033 | 15,210 | 14,560 | 14,480 | 12,590 | n.a. |
| Peru | 87,419 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Venezuela | 503,629 | 525,202 | 403,096 | 399,397 | 383,911 | n.a. |
| Formosa | 259 | 236 | 229 | 570 | n.a. | n.a. |
| Japan | 1,700 | 2,000 | 6,000 | 6,000 | 10,796 | 18,461 |
| WORLD'S TOTAL (c) | 14,060,000 | 14,000,000 | 14,000,000 | 14,000,000 | 15,000,000 | 16,000,000 |

(a) Incomplete, as about half the production is blended with crude petroleum at field storage.

(b) Including isopentane.

(c) Totals refer only to those countries reported above.

PRODUCTION OF NATURAL GAS*

Million cubic feet

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|------------|---------------------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 35 | 35 | 35 | 106 | 115 | n.a. |
| Nigeria | n.a. | n.a. | n.a. | n.a. | n.a. | 1,130 |
| Canada | 337,804 | 417,335 | 522,972 | 655,738 | 946,703 | 1,117,425 |
| Barbados | 98 | 94 | 343 | 249 | 120 | 110 |
| Trinidad | r 23,303 | r 25,206 | r 27,042 | r 29,375 | 30,018 | 29,365 |
| Brunei | 2,609 | 2,694 | 2,879 | 2,844 | 2,830 | 2,377 |
| Pakistan | 19,308 | 22,365 | 29,842 | 34,665 | 42,076 | 49,459 |
| Australia | — | — | — | 12 | 56 | 96 |
| New Zealand | 5 | 5 | 5 | 5 | 4 | 5 |
| OTHER COUNTRIES | | | | | | |
| Austria | 28,968 | 39,835 | 51,844 | 54,952 | 57,734 | 59,999 |
| Czechoslovakia | 44,000 | (c) 53,000 | (c) 49,000 | n.a. | n.a. | n.a. |
| France | 37,344 | 92,318 | 158,106 | 213,966 | 247,384 | 265,500 |
| Germany (Federal) | 16,588 | 19,377 | 22,699 | 26,015 | 32,729 | 45,730 |
| Hungary | 13,374 | 11,804 | 12,065 | r 11,429 | 12,010 | 21,600 |
| Italy | 182,780 | 216,040 | 227,682 | 242,341 | 252,496 | 256,550 |
| Netherlands | 7,350 | 8,830 | 12,700 | 17,200 | 19,600 | (a) 16,500 |
| Poland | 13,564 | 14,980 | 19,400 | 25,900 | 29,000 | 35,000 |
| Roumania | r 293,600 | r 328,600 | r 358,200 | r 385,400 | 455,800 | 503,700 |
| U.S.S.R. | 991,820 | 1,249,800 | 1,599,900 | 2,082,900 | 2,596,500 | 3,172,000 |
| Yugoslavia | 1,627 | 1,765 | 1,869 | 2,428 | 3,366 | 3,570 |
| Algeria (Sahara) | — | — | — | 21,600 | 30,700 | 40,360 |
| Gabon | — | 244 | 263 | 237 | 310 | 304 |
| Morocco | 65 | r 350 | 300 | 300 | 350 | n.a. |
| Tunisia | 206 | 223 | 253 | 256 | 253 | 258 |
| Mexico | 262,662 | 329,408 | 341,311 | 360,564 | 371,358 | 402,000 |
| United States | 11,030,298 | 12,046,115 | 12,771,038 | 13,254,025 | 13,876,622 | 14,746,663 |
| Argentina | 58,400 | 25,700 | 37,400 | n.a. | 218,299 | 213,240 |
| Bolivia | 200 | 250 | 210 | n.a. | n.a. | n.a. |
| Brazil | 10,611 | 15,095 ^b | 18,889 | 18,604 | 18,056 | 17,800 |
| Chile | 47,180 | 64,100 | 77,480 | 90,020 | 125,700 | n.a. |
| Colombia | (b) 28,000 | 12,700 | 14,300 | 14,800 | 13,000 | 11,400 |
| Peru | 45,171 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Venezuela | 1,113,031 | 1,124,264 | 1,114,578 | 1,169,817 | 1,281,967 | 1,323,048 |
| Burma | 325 | 178 | 730 | 333 | 634 | n.a. |
| Formosa | 981 | 930 | 898 | 1,309 | 1,356 | 1,789 |
| Indonesia | 73,600 | 79,415 | 86,576 | 91,455 | 96,000 | 99,000 |
| Iran | 26,300 | 32,055 | 33,558 | 34,720 | 37,143 | 40,212 |
| Israel | — | — | — | 100 | 375 | 347 |
| Japan | 12,992 | 17,896 | 25,831 | 33,559 | 42,712 | 59,845 |

*So far as possible the figures represent only that part of the gas produced which is actually utilized.

NOTE.—Production and shipments of helium in the United States were as follows (million cubic feet).

Production: 1958—334; 1959—477; 1960—642; 1961—727; 1962—683; 1963—2,194.

Shipments: 1958—352; 1959—375; 1960—475; 1961—552; 1962—600; 1963—627.

(a) Deliveries for sale only.

(b) Including gas repressured prior to 1959.

(c) Estimated.

PRODUCTION OF ASPHALT ROCK

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| France | 86,048 | 89,366 | 95,451 | 94,561 | 101,800 | 103,000 |
| Germany (Federal) .. | 84,226 | 86,302 | 88,485 | 81,025 | 97,329 | 91,000 |
| Italy | 277,548 | 405,706 | 402,176 | 334,477 | 301,908 | 390,039 |
| Angola | 34,175 | 27,500 | 25,376 | 22,423 | 35,666 | n.a. |
| United States (a) .. | 1,184,369 | 1,356,040 | 1,109,709 | 1,014,000 | 1,067,200 | 1,088,900 |
| Philippine Republic .. | 2,445 | 11,601 | 18,081 | 6,546 | 6,824 | 5,104 |

(a) Shipments.

PRODUCTION OF NATURAL ASPHALT, ETC.

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|---------|---------|---------|-----------|---------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Trinidad | 133,042 | 145,418 | 154,296 | r 175,326 | 162,613 | 169,308 |
| OTHER COUNTRIES | | | | | | |
| Spain | 10,115 | 8,107 | 8,667 | 8,915 | 8,366 | 7,677 |
| United States (a)— Gilsonite | 283,286 | 338,716 | 341,997 | 377,100 | 403,300 | n.a. |
| Argentina— Grahamite ("Rafaelite") (b) | 1,832 | 1,553 | 2,125 | 1,152 | 713 | 828 |
| Impsonite | 19,226 | 10,600 | 6,200 | 3,600 | 2,200 | 4,100 |

NOTE.—This table is incomplete owing to the fact that official statistics of production of natural asphalt are published by only a few countries.*

(a) Shipments.

(b) Exports.

PRODUCTION OF OIL-SHALE

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------|-----------|-----------|-----------|-------------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 740,974 | 708,476 | 668,816 | 467,813 | 156,000 | — |
| OTHER COUNTRIES | | | | | | |
| Austria | 320 | 224 | 751 | 542 | 606 | 320 |
| France | 2,552 | 2,904 | 2,632 | 4,046 | 2,883 | 3,000 |
| Germany (Federal) (c) .. | 394,420 | 410,662 | 373,231 | 306,230 | 96,428 | 56,929 |
| Italy | 153 | 108 | 138 | n.a. | n.a. | n.a. |
| Spain | 760,908 | 831,482 | 819,361 | 842,908 | 719,077 | 798,608 |
| Sweden (b) | 2,030,390 | 2,878,763 | 3,649,767 | r 3,400,944 | 3,174,219 | 3,049,010 |
| South Africa (a) | 145,486 | 134,706 | 144,971 | n.a. | — | — |

NOTE.—Oil-shale is known to have been produced in U.S.S.R. and Manchuria.

(a) Torbanite. Years ended June 30 of that stated.

(b) Alum shale. The amounts used as retort shale were as follows (long tons): 1958—1,774,245; 1959—2,614,052; 1960—3,316,000; 1961—3,122,535; 1962—n.a.; 1963—n.a.

(c) The amounts used as retort shale were as follows (long tons): 1958—n.a.; 1959—129,237; 1960—111,039; 1961—103,648; 1962—67,898; 1963—nil.

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES*

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a)— | | | | | | |
| Aviation and motor spirit | 6,751,000 | 7,531,000 | 7,917,000 | 8,353,000 | 8,493,000 | 7,634,000 |
| Other spirit | 144,000 | 141,000 | 167,000 | 157,000 | 150,000 | 156,000 |
| Kerosine | 1,292,000 | 1,772,000 | 2,284,000 | 2,683,000 | 2,610,000 | 3,083,000 |
| Gas oil and diesel oil .. | 6,285,000 | 7,241,000 | 7,648,000 | 8,618,000 | 9,966,000 | 10,788,000 |
| Fuel oil | 12,572,000 | 15,599,000 | 18,533,000 | 21,150,000 | 21,962,000 | 21,142,000 |
| Fuel used in refineries .. | 2,503,000 | 3,032,000 | 3,290,000 | 3,470,000 | 3,619,000 | 3,803,000 |
| Lubricating oil | 751,000 | 863,000 | 912,000 | 958,000 | 899,000 | 967,000 |
| Bitumen | 860,000 | 961,000 | 1,037,000 | 1,133,000 | 1,220,000 | 1,305,000 |
| Paraffin wax | 30,000 | 31,000 | 36,000 | 39,000 | 38,000 | 55,000 |
| Ghana— | | | | | | |
| Motor spirit | — | — | — | — | — | 32,288 |
| Kerosine | — | — | — | — | — | 13,370 |
| Gas oil | — | — | — | — | — | 71,754 |
| Fuel oil | — | — | — | — | — | 48,785 |
| Barbados— | | | | | | |
| Motor spirit | — | — | 1,505 | 2,057 | 2,484 | 2,468 |
| Kerosine | — | — | 1,852 | 2,127 | 2,102 | 2,123 |
| Gas oil | — | — | — | 375 | 454 | 875 |
| Diesel oil | — | — | 1,476 | 3,752 | 3,777 | 3,211 |
| Fuel oil | — | — | 6,702 | 12,181 | 11,159 | 11,100 |
| Asphalt | — | — | — | 790 | 1,321 | 1,090 |
| Canada (b)— | | | | | | |
| Aviation spirit | 56,688 | 55,158 | 123,373 | 109,716 | 164,765 | 173,007 |
| Motor spirit | 9,883,168 | 10,947,289 | 11,412,518 | 11,654,678 | 12,389,273 | 13,321,500 |
| Napththa | 139,646 | 157,600 | 198,900 | 201,561 | 186,280 | 225,779 |
| Kerosine | 1,606,601 | 1,771,633 | 1,912,900 | 2,007,569 | 2,242,058 | 2,397,362 |
| Aviation turbine fuel .. | 544,769 | 535,093 | 611,166 | 813,779 | 868,034 | 948,340 |
| Gas oil, etc. | 5,210,764 | 6,284,988 | 6,385,447 | 6,754,731 | 6,996,664 | 8,181,244 |
| Diesel oil | 3,101,204 | 3,787,358 | 3,837,402 | 3,674,460 | 4,131,139 | 4,527,930 |
| Fuel oil | 6,103,945 | 6,743,127 | 6,496,024 | 6,866,810 | 7,639,835 | 8,369,558 |
| Lubricating oil and grease | 262,846 | 269,851 | 287,893 | 210,244 | 227,256 | 244,051 |
| Coke | 403,200 | 468,958 | 575,951 | 333,365 | 268,139 | 222,143 |
| Asphalt | 1,429,999 | 1,494,174 | 1,531,016 | 1,444,049 | 1,475,778 | 1,586,547 |
| Trinidad— | | | | | | |
| Aviation spirit | 382,456 | 441,238 | 469,935 | 432,917 | 433,791 | 415,306 |
| Motor spirit | 1,235,396 | 1,297,949 | 1,214,450 | 1,481,959 | 1,516,930 | 1,835,809 |
| White spirit | 7,180 | 7,657 | 8,577 | 9,250 | 7,650 | 8,211 |
| Kerosine | 393,953 | 355,865 | 305,828 | 486,117 | 255,160 | 226,434 |
| Aviation turbine fuel .. | (d) | (d) | (d) | (d) | 1,093,405 | 974,132 |
| Gas and diesel oil .. | 1,709,132 | 1,809,615 | 1,824,563 | 2,256,397 | 2,397,588 | 2,748,562 |
| Fuel oil | 3,919,323 | 5,374,073 | 6,845,265 | 8,668,667 | 9,301,140 | 10,206,487 |
| Lubricating oil and greases | 338 | 340 | 331 | 153 | 278 | 287 |
| Bitumen | 39,105 | 40,600 | 29,362 | 34,370 | 37,943 | 36,199 |
| Other finished products | 541,480 | 180,003 | 783,362 | 1,047,194 | 69,787 | 57,681 |
| Aden— | | | | | | |
| Motor spirit | 606,416 | 597,590 | 621,319 | n.a. | n.a. | n.a. |
| Kerosine | 309,748 | 395,489 | 321,813 | 520,000 | 648,000 | 691,000 |
| Fuel oils | 2,688,366 | 2,951,510 | 3,092,829 | 3,683,000 | 4,281,000 | 4,963,000 |
| Bahrain Islands (c)— | | | | | | |
| Motor spirit | 2,032,000 | 1,983,000 | 2,097,000 | 2,148,000 | 1,931,000 | 1,655,000 |
| Kerosine | 657,000 | 716,000 | 715,000 | 617,000 | 569,000 | 531,000 |
| Jet fuel | — | — | — | — | 746,000 | 645,000 |

*This table refers to the more important products obtained and does not include in some cases items classified as "other products". It follows, therefore, that the sum of the products shown for a particular country does not necessarily represent the total refinery production.

- (a) Including distillation plants.
- (b) Including the amount used in the refineries.
- (c) British Protected State.
- (d) Included with "Other finished products".

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|-----------|-----------|-----------|-------------|-------------|-----------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Bahrain Islands (c)— | | | | | | |
| <i>(cont.)—</i> | | | | | | |
| Gas oil and diesel oil .. | 2,029,000 | 2,097,000 | 2,240,000 | 2,443,000 | 2,700,000 | 2,618,000 |
| Fuel oil .. | 4,084,000 | 3,835,000 | 4,356,000 | 4,630,000 | 5,121,000 | 4,906,000 |
| Lubricating oil .. | — | — | 39,000 | 28,000 | n.a. | — |
| Bitumen .. | 67,000 | 75,000 | 104,000 | 109,000 | 87,000 | 28,000 |
| India— | | | | | | |
| Motor and other spirits | 971,000 | 935,960 | 1,030,600 | r 1,051,906 | 1,142,900 | n.a. |
| Kerosine .. | 633,010 | 724,340 | 916,550 | r 1,001,311 | 1,149,100 | n.a. |
| Gas and diesel oils .. | 1,173,000 | 1,396,750 | 1,574,340 | r 1,642,241 | 1,762,810 | 2,000,000 |
| Fuel oil, etc. .. | 1,623,010 | 1,656,040 | 1,666,060 | r 1,782,482 | 1,924,360 | n.a. |
| Lubricating oils .. | 18,000 | 21,190 | 21,250 | r 24,994 | 25,270 | 35,000 |
| Bitumen .. | 223,010 | 285,830 | 393,470 | r 431,434 | 362,370 | n.a. |
| Other refined products | 55,990 | 50,820 | 64,580 | r 69,697 | 126,660 | n.a. |
| Pakistan— | | | | | | |
| Motor spirit .. | 72,000 | 82,000 | 89,000 | 89,000 | 108,000 | 110,000 |
| Kerosine .. | 13,800 | 14,000 | 19,000 | 24,000 | 28,000 | 33,000 |
| Diesel oil .. | 67,000 | 69,000 | 75,000 | 93,000 | 115,000 | 123,000 |
| Fuel oil .. | 103,000 | 109,000 | 105,000 | 114,000 | 127,000 | 144,000 |
| Lubricating oil .. | 6,000 | 6,000 | 6,000 | 10,000 | 12,000 | 12,000 |
| Bitumen .. | 16,000 | 12,000 | 20,000 | 20,000 | 22,000 | 22,000 |
| Sarawak— | | | | | | |
| Motor spirit .. | 222,600 | 5,900 | — | 5,100 | 12,500 | — |
| Gas and diesel oils .. | 1,201,400 | 1,275,000 | 1,303,100 | 1,169,400 | 1,074,000 | 394,500 |
| Fuel oil .. | — | — | — | 11,100 | 43,300 | 15,700 |
| Feedstocks (a) .. | 896,400 | 1,090,900 | 1,022,600 | 1,075,100 | 1,069,800 | 1,717,800 |
| Singapore— | | | | | | |
| Motor spirit .. | — | — | — | — | (b) 775,000 | 1,071,000 |
| Kerosine .. | — | — | — | — | (b) 397,000 | 271,000 |
| Gas and diesel oils .. | — | — | — | — | b 1,257,000 | 1,376,000 |
| Fuel oil .. | — | — | — | — | b 2,849,000 | 3,234,000 |
| Australia— | | | | | | |
| Aviation spirit .. | 51,438 | 37,363 | 47,651 | 43,054 | 31,880 | 27,000 |
| Motor spirit .. | 3,223,322 | 3,247,875 | 3,571,457 | r 3,863,924 | 3,977,627 | 4,291,000 |
| Kerosine .. | 108,832 | 128,887 | 168,844 | 136,941 | 154,920 | 176,000 |
| Aviation turbine fuel .. | 121,797 | 197,660 | 239,052 | 298,573 | 271,595 | 279,000 |
| Gas and diesel oils .. | 2,120,394 | 2,059,246 | 2,522,443 | r 2,513,954 | 2,490,258 | 2,657,000 |
| Fuel oil .. | 2,743,044 | 2,849,518 | 3,205,877 | 3,737,178 | 4,273,460 | 4,783,000 |
| do. (used in refineries) | 668,236 | 775,913 | 839,058 | 930,286 | 1,078,605 | 1,312,000 |
| Lubricating oil .. | 31,718 | 31,102 | 30,235 | 22,279 | 15,363 | 80,000 |
| Bitumen .. | 237,366 | 274,399 | 279,775 | 288,485 | 290,990 | 321,000 |
| New Zealand— | | | | | | |
| Motor spirit .. | 136 | 133 | 147 | 124 | 247 | 295 |
| White spirit .. | 38 | 39 | 47 | 41 | 47 | 34 |
| Kerosine .. | 140 | 138 | 140 | 127 | 158 | 136 |
| Diesel oil .. | 153 | 149 | 140 | 123 | 176 | 165 |
| Fuel oil .. | 221 | 217 | 209 | 184 | 275 | 299 |
| Irish Republic— | | | | | | |
| Motor spirit .. | — | 108,000 | 278,000 | 301,800 | 319,000 | 332,000 |
| Kerosine .. | — | 12,000 | 26,000 | 8,000 | } 9,000 | n.a. |
| Jet fuel .. | — | 300 | 7,000 | 6,000 | | |
| Gas and diesel oils .. | — | 170,000 | 406,000 | 445,200 | 463,000 | 487,000 |
| Fuel oil .. | — | 310,000 | 598,000 | 586,500 | 636,000 | 651,000 |

(a) Mainly gasoline-type and fuel oil-type feedstocks, previously included with motor spirit and fuel oil.

(b) Estimated.

(c) British Protected State.

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|------------|------------|------------|------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| Albania— | | | | | | |
| Motor spirit | 31,000 | 47,000 | 53,000 | 55,000 | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine | 3,000 | 3,000 | 2,000 | 3,000 | <i>n.a.</i> | <i>n.a.</i> |
| Diesel oil | 49,000 | 62,000 | 67,000 | 62,000 | <i>n.a.</i> | <i>n.a.</i> |
| Austria— | | | | | | |
| Motor spirit | 221,193 | 282,087 | 277,099 | 241,041 | 273,725 | 368,220 |
| Kerosine | 122,465 | 33,013 | 38,964 | 45,237 | 36,017 | 35,870 |
| Gas oil | 487,232 | 618,975 | 596,441 | 627,668 | 771,203 | 831,370 |
| Fuel oil | 763,919 | 724,022 | 804,319 | 914,453 | 1,194,747 | 1,263,950 |
| Lubricating oil .. | 57,495 | 62,889 | 77,431 | 87,432 | 117,497 | 134,140 |
| Bitumen | 62,470 | 64,915 | 66,621 | 85,923 | 111,699 | 124,800 |
| Belgium— | | | | | | |
| Aviation spirit and aviation turbine gasoline .. | 147,650 | 135,560 | 117,240 | 177,900 | 216,650 | 224,970 |
| Motor spirit | 1,079,510 | 1,151,650 | 1,143,200 | 1,269,250 | 1,286,240 | 1,458,880 |
| White spirit, etc. .. | 75,740 | 109,410 | 157,340 | 34,010 | 52,200 | 59,950 |
| Kerosine, including aviation kerosine | 224,780 | 248,710 | 237,630 | 224,120 | 236,170 | 324,260 |
| Gas oil | 1,244,150 | 1,355,450 | 1,423,170 | 1,586,340 | 1,533,980 | 2,338,950 |
| Diesel oil | 562,720 | 551,190 | 665,710 | 766,550 | 970,160 | 1,363,670 |
| Fuel oil | 2,268,300 | 2,068,060 | 2,130,480 | 2,447,060 | 2,573,640 | 3,889,990 |
| Lubricating oil .. | 26,620 | 29,290 | 31,010 | 27,350 | 29,800 | 30,570 |
| Bitumen | 176,540 | 234,580 | 294,590 | 336,800 | 381,150 | 472,960 |
| Bulgaria— | | | | | | |
| Diesel oil | 18,000 | 29,000 | 34,000 | 38,000 | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oil | 41,409 | 54,568 | 63,830 | 46,838 | 41,413 | <i>n.a.</i> |
| Lubricating oil .. | 21,000 | 19,000 | 24,000 | 22,000 | <i>n.a.</i> | <i>n.a.</i> |
| Czechoslovakia— | | | | | | |
| Motor spirit | 349,000 | 365,000 | 421,000 | 531,000 | 526,000 | <i>n.a.</i> |
| Kerosine | 68,000 | 56,000 | 82,000 | 85,000 | 116,000 | <i>n.a.</i> |
| Diesel oil | 798,000 | 966,000 | 1,152,000 | 1,342,000 | 1,434,000 | <i>n.a.</i> |
| Denmark— | | | | | | |
| Motor spirit, gas and diesel oil | — | — | — | 47,827 | 198,929 | } 1,020,606 |
| Fuel oil | 9,284 | 11,184 | 10,872 | 115,812 | 474,469 | |
| Lubricating oil .. | 2,363 | (a) 2,116 | (a) 2,254 | (a) 2,247 | (a) 2,418 | (a) 2,453 |
| Grease | 2,019 | (a) 3,272 | 4,827 | (a) 3,302 | (a) 3,095 | (a) 1,672 |
| Asphalt | 24,136 | 26,225 | 27,823 | 28,822 | 24,740 | 23,069 |
| France— | | | | | | |
| Motor spirit | 5,745,000 | 6,126,000 | 6,325,000 | 6,946,000 | 6,927,000 | 7,783,000 |
| Kerosine and jet fuel .. | 811,000 | 1,136,000 | 1,344,000 | 1,550,000 | 1,671,000 | 1,789,000 |
| Gas and diesel oil .. | 3,334,000 | 3,272,000 | 3,315,000 | 4,274,000 | 4,422,000 | 4,406,000 |
| Fuel oil | 14,517,000 | 13,560,000 | 14,543,000 | 16,387,000 | 18,226,000 | 21,805,000 |
| Lubricating oil .. | 555,000 | 588,000 | 642,000 | 683,000 | 683,000 | 794,000 |
| Other products (b) .. | 2,474,000 | 1,958,000 | 2,242,000 | 2,494,000 | 2,890,000 | <i>n.a.</i> |
| Germany (Federal)— | | | | | | |
| Aviation spirit | 428,068 | 594,408 | 757,987 | 832,718 | 839,962 | 1,084,771 |
| Motor spirit | 3,719,034 | 4,474,066 | 5,369,545 | 6,510,549 | 7,225,298 | 8,127,307 |
| White spirit | 100,970 | 98,476 | 116,619 | 129,233 | 134,634 | 130,369 |
| Kerosine | 192,445 | 261,308 | 255,625 | 409,012 | 619,415 | 632,715 |
| Diesel oil | 3,732,383 | 4,360,504 | 4,765,109 | 5,485,114 | 6,057,543 | 7,131,679 |
| Fuel oil | 4,281,043 | 8,444,428 | 13,143,837 | 17,138,325 | 19,018,595 | 22,701,996 |
| Lubricating oil .. | 390,452 | 421,899 | 473,257 | 509,474 | 555,014 | 544,939 |
| Grease | 12,104 | 12,408 | 16,537 | 16,951 | 17,867 | 16,962 |
| Paraffin wax | 47,204 | 48,120 | 57,166 | 69,208 | 76,303 | 95,842 |
| Coke | 254,782 | 296,810 | 302,168 | 341,987 | 382,796 | 422,777 |
| Bitumen | 877,183 | 1,060,776 | 1,142,057 | 1,365,205 | 1,775,578 | 2,267,779 |
| Greece— | | | | | | |
| Motor spirit | — | 167,000 | 205,000 | 212,326 | 210,037 | 250,000 |
| Kerosine | — | 104,000 | 123,000 | 121,014 | 135,000 | 141,000 |
| Aviation turbine fuel .. | — | 88,000 | 70,000 | 66,500 | 44,488 | 24,000 |
| Diesel oil | — | 427,000 | 439,000 | 498,160 | 533,218 | 610,000 |
| Fuel oil | — | 657,000 | 703,000 | 727,606 | 688,877 | 700,000 |
| Asphalt | — | 39,000 | 41,000 | 36,956 | 46,137 | <i>n.a.</i> |

(a) Production in major establishments only.

(b) Other than butane and propane.

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|------------|------------|------------|-------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Hungary— | | | | | | |
| Motor spirit | 267,827 | 296,065 | 324,190 | 333,057 | 342,905 | 327,000 |
| Kerosine | 46,312 | 44,546 | 49,139 | 63,786 | 67,221 | n.a. |
| Diesel oil | 513,167 | 630,813 | 718,995 | 779,987 | 847,326 | 847,000 |
| Fuel oil | 671,566 | 821,478 | 972,211 | 1,121,609 | 1,262,263 | 1,381,000 |
| Lubricating oils .. | r 80,262 | r 86,279 | r 99,410 | r 98,973 | 100,112 | n.a. |
| Grease | 16,062 | 17,029 | 17,921 | 18,242 | 18,476 | n.a. |
| Bitumen | 225,874 | 284,280 | 309,511 | 339,756 | 378,064 | n.a. |
| Italy— | | | | | | |
| Motor spirit | 3,398,000 | 3,907,182 | 4,947,463 | 5,430,611 | 6,478,411 | 7,098,878 |
| White spirit | 36,075 | 31,192 | 32,460 | 36,977 | 36,730 | 46,306 |
| Kerosine | 1,174,936 | 1,011,188 | 1,043,725 | 1,356,829 | 1,350,744 | 1,504,246 |
| Gas oil | 4,596,404 | 5,107,497 | 5,850,372 | 6,276,158 | 7,487,436 | 8,811,322 |
| Fuel oil and diesel oil .. | 11,711,608 | 12,926,305 | 15,104,052 | 17,507,015 | 21,268,132 | 24,780,750 |
| Lubricating oil | 151,624 | 150,956 | 163,174 | 152,960 | 169,842 | 166,458 |
| Bitumen | 553,304 | 623,842 | 686,100 | 829,117 | 881,570 | 1,005,890 |
| Other products | 529,394 | 618,084 | 700,571 | 809,004 | 979,362 | 1,119,882 |
| Netherlands— | | | | | | |
| Motor spirit | 2,818,000 | 2,567,000 | 3,164,000 | 2,898,000 | 3,446,000 | 3,602,000 |
| White spirit and other solvents | 89,000 | n.a. | n.a. | 130,000 | n.a. | n.a. |
| Kerosine | 1,200,000 | 1,278,000 | 1,405,000 | 1,611,000 | 935,000 | 955,000 |
| Aviation fuels | n.a. | n.a. | n.a. | n.a. | 950,000 | 843,000 |
| Gas and diesel oil | 3,311,000 | 3,381,000 | 4,380,000 | 4,668,000 | 5,379,000 | 5,082,000 |
| Residual fuel oil | 5,946,000 | 6,451,000 | 7,918,000 | 8,350,000 | 9,484,000 | 9,995,000 |
| Lubricating oil | 156,000 | 189,000 | 203,000 | 255,000 | 242,000 | 241,000 |
| Bitumen | 218,000 | 261,000 | 379,000 | 462,000 | n.a. | n.a. |
| Poland— | | | | | | |
| Aviation and motor spirit .. | 84,900 | 101,100 | 116,800 | 132,900 | 240,200 | n.a. |
| Kerosine | 108,800 | 113,400 | 99,800 | 79,600 | 27,600 | n.a. |
| Gas and diesel oil | 193,500 | 200,600 | 236,000 | 276,700 | 411,500 | 470,000 |
| Fuel oil | 49,400 | 56,000 | 64,000 | 67,700 | 191,000 | n.a. |
| Lubricating oil | 142,400 | 157,100 | 139,500 | 150,300 | 155,200 | n.a. |
| Grease | 17,400 | 20,600 | 21,100 | 23,100 | 25,000 | n.a. |
| Paraffin wax | 6,200 | 7,000 | 7,700 | 9,200 | 9,900 | n.a. |
| Bitumen | 115,100 | 105,400 | 117,100 | 120,100 | 143,400 | n.a. |
| Portugal— | | | | | | |
| Motor spirit | 277,967 | 300,673 | 294,669 | 320,203 | 356,104 | 373,610 |
| Kerosine | 136,845 | 202,904 | 202,940 | 164,864 | 150,303 | 162,901 |
| Jet fuel | 15,819 | 19,197 | 16,968 | 8,901 | 11,685 | 31,282 |
| Gas and diesel oil | 236,728 | 187,677 | 254,516 | 255,056 | 250,519 | 284,965 |
| Fuel oil | 399,792 | 412,071 | 446,668 | 443,453 | 448,475 | 502,407 |
| Roumania— | | | | | | |
| Motor spirit | 2,775,993 | 2,654,958 | 2,747,883 | 2,625,182 | 2,362,293 | 2,396,000 |
| Kerosine and white spirit .. | 1,505,298 | 1,258,523 | 1,269,037 | 1,214,526 | 1,214,977 | 1,067,000 |
| Gas oil | 1,778,820 | 2,240,735 | 2,338,444 | 2,611,434 | 2,864,085 | 3,061,000 |
| Fuel oil | 3,867,862 | 3,884,991 | 3,763,158 | 3,623,280 | 3,889,435 | 3,995,000 |
| Bitumen | 181,000 | 207,000 | 245,000 | 272,000 | 264,000 | 290,000 |
| Spain— | | | | | | |
| Motor spirit | 787,000 | 603,000 | 575,000 | (a) 703,000 | 732,000 | 706,000 |
| Kerosine and jet fuel | 231,000 | 263,000 | 257,000 | (a) 294,000 | 367,000 | 369,000 |
| Gas oil | } 806,000 | 855,000 | 855,000 | a 1,213,000 | 1,373,000 | 1,380,000 |
| Diesel oil | | 855,000 | 855,000 | a 1,213,000 | 1,373,000 | 1,380,000 |
| Fuel oil | 1,981,000 | 1,943,000 | 2,000,000 | a 2,087,000 | 2,548,000 | 2,679,000 |
| Lubricating oil | 37,000 | 36,000 | 36,000 | (a) 56,000 | 94,000 | 90,000 |
| Sweden— | | | | | | |
| Motor spirit | 224,439 | 331,467 | 372,400 | 365,921 | 358,749 | n.a. |
| White spirit etc. | 7,635 | 6,905 | 14,134 | 12,999 | 13,554 | n.a. |
| Kerosine | 120,609 | 125,159 | 105,200 | 5,789 | 8,017 | n.a. |
| Fuel oil, etc. | 1,577,208 | 1,795,800 | 1,962,800 | 1,747,000 | 1,808,000 | n.a. |
| Lubricating oil | 22,754 | 31,157 | 38,828 | 53,448 | 51,768 | n.a. |
| Asphalt | 190,617 | 240,604 | 252,506 | 324,888 | 334,482 | n.a. |

(a) United States Bureau of Mines' estimate.

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Yugoslavia— | | | | | | |
| Motor spirit | 248,081 | 245,347 | 272,869 | 288,919 | 316,540 | 338,525 |
| White spirit | 6,827 | 7,924 | 8,706 | 8,297 | 10,427 | 12,107 |
| Kerosine | 60,665 | 62,301 | 72,847 | 57,936 | 79,706 | 87,458 |
| Gas oil | 293,337 | 326,224 | 348,077 | 398,152 | 523,847 | 608,119 |
| Fuel oil | 327,000 | 352,169 | 389,141 | 402,891 | 484,394 | 472,471 |
| Lubricating oil | 42,118 | 50,455 | 60,211 | 71,095 | 97,506 | 110,127 |
| Bitumen | 66,781 | 81,060 | 70,740 | 78,766 | 112,036 | n.a. |
| Other products | 6,216 | 6,958 | 7,749 | 6,151 | 6,317 | n.a. |
| Angola— | | | | | | |
| Motor spirit | 9,000 | 9,000 | 28,000 | 32,912 | 54,363 | 59,790 |
| Kerosine | 1,000 | 1,000 | 3,100 | 2,513 | 1,679 | 4,262 |
| Gas and diesel oil | 9,000 | 15,000 | 48,100 | 53,138 | 82,042 | 112,150 |
| Fuel oil | 37,000 | 39,000 | 94,900 | 110,398 | 186,765 | 261,427 |
| Asphalt | — | — | — | — | 3,321 | 5,976 |
| Canary Islands— | | | | | | |
| Motor spirit | 382,042 | 379,570 | 344,043 | 394,615 | 506,807 | 633,000 |
| Kerosine | 142,089 | 104,382 | 134,388 | 103,418 | 120,767 | 142,000 |
| Jet fuel | — | 29,752 | 31,925 | 55,634 | 44,406 | n.a. |
| Gas oil | 571,516 | 427,466 | 364,141 | 427,514 | 643,736 | 1,099,000 |
| Diesel oil | — | 241,422 | 223,121 | 207,331 | 236,325 | — |
| Fuel oil | 1,313,261 | 1,289,310 | 1,389,987 | 1,430,090 | 1,961,388 | 2,329,000 |
| Lubricating oil | 22,860 | 22,806 | 20,618 | 25,568 | 28,426 | 16,000 |
| Asphalt | 64,036 | 85,989 | 109,737 | 143,481 | 154,764 | n.a. |
| Egypt— | | | | | | |
| Motor spirit | 326,000 | 336,000 | 301,000 | 380,000 | 544,000 | 696,000 |
| Kerosine | 290,000 | 286,000 | 364,000 | 448,000 | 535,000 | 810,000 |
| Jet fuel | n.a. | 30,000 | 27,000 | 27,000 | 47,000 | 31,000 |
| Gas and diesel oil | 376,000 | 431,000 | 579,000 | 707,000 | 881,000 | 1,050,000 |
| Fuel oil | 1,977,000 | 2,025,000 | 2,694,000 | 2,609,000 | 2,778,000 | 3,295,000 |
| Morocco— | | | | | | |
| Motor spirit | 42,969 | 62,412 | 73,700 | 67,900 | 75,400 | 251,200 |
| Kerosine | 12,271 | 9,085 | 10,000 | 15,500 | 26,000 | 76,600 |
| Gas and fuel oils | 61,529 | 62,357 | 78,600 | 109,600 | 200,700 | 559,600 |
| Mozambique— | | | | | | |
| Motor spirit | — | — | — | 82,933 | 90,337 | 92,814 |
| Gas oil | — | — | — | 98,372 | 110,448 | 114,890 |
| Fuel oil | — | — | — | 211,866 | 211,025 | 227,016 |
| South Africa— | | | | | | |
| Motor spirit | 483,000 | 486,000 | r 487,000 | r 543,000 | 591,000 | 586,000 |
| Kerosine | 53,000 | r 135,000 | r 137,000 | r 130,000 | 142,000 | 184,000 |
| Jet fuel | — | 8,000 | 22,000 | 30,000 | 31,000 | — |
| Gas and diesel oil | 349,000 | 350,000 | 334,000 | 388,000 | 422,000 | 532,000 |
| Fuel oil | 320,000 | 284,000 | 270,000 | 323,000 | 343,000 | 680,000 |
| Cuba— | | | | | | |
| Motor spirit | 658,000 | 639,000 | 575,406 | n.a. | n.a. | n.a. |
| Kerosine | 131,000 | 133,000 | 142,056 | n.a. | n.a. | n.a. |
| Gas oil and diesel oil | 657,000 | 745,000 | 488,139 | n.a. | n.a. | n.a. |
| Fuel oil | 1,857,000 | 1,760,000 | 1,456,692 | n.a. | n.a. | n.a. |
| Lubricating oil | — | — | 13,145 | n.a. | n.a. | n.a. |
| Mexico— | | | | | | |
| Aviation spirit | 45,747 | 41,723 | 45,850 | 76,346 | 71,057 | 71,935 |
| Motor spirit | 2,562,559 | 2,908,540 | 2,927,226 | 3,249,296 | 3,141,662 | 3,191,105 |
| Kerosine | 1,267,747 | 1,380,740 | 1,258,026 | 1,396,092 | 1,424,619 | 1,464,242 |
| Gas and diesel oil | 1,473,299 | 1,655,635 | 1,995,777 | 2,335,114 | 2,821,797 | 3,131,505 |
| Fuel oil | 6,490,532 | 6,410,317 | 6,130,273 | 6,911,873 | 6,584,388 | 6,194,844 |
| Lubricating oil | 124,313 | 142,785 | 147,707 | 156,333 | 153,978 | 164,925 |
| Grease | 2,891 | 3,373 | 3,760 | 4,807 | 6,276 | 6,400 |
| Paraffin wax | 39,947 | 45,067 | 39,970 | 40,926 | 38,610 | 41,547 |
| Asphalt | 241,000 | 232,000 | 302,000 | 283,000 | 328,000 | 319,000 |

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Netherlands Antilles (b)- | | | | | | |
| Aviation spirit | 1,448,616 | 1,195,762 | 1,413,993 | 1,455,000 | 1,601,000 | 1,563,000 |
| Motor spirit | 3,471,890 | 2,492,642 | 2,568,964 | 2,524,000 | 2,424,000 | 2,508,000 |
| White spirit | 54,092 | 100,112 | 67,398 | 57,000 | 61,000 | 56,000 |
| Kerosine | 1,229,209 | 1,535,172 | 1,326,787 | 1,060,000 | 830,000 | 859,000 |
| Aviation turbine fuel .. | 2,340,282 | 2,006,922 | 1,660,951 | 2,155,000 | 2,264,000 | n.a. |
| Gas oil | 3,991,875 | 3,216,223 | 3,186,203 | 3,665,000 | 4,378,000 | 4,705,000 |
| Diesel oil | 1,926,428 | 1,848,607 | 1,470,405 | 1,296,000 | 1,302,000 | 1,465,000 |
| Fuel oil | 18,805,434 | 19,766,415 | 20,162,668 | 20,792,000 | 21,802,000 | 21,357,000 |
| Lubricating oil | 617,446 | 648,592 | 723,507 | 655,000 | 814,000 | 599,000 |
| Asphalt | 746,627 | 861,786 | 840,671 | 894,000 | 835,000 | 808,000 |
| Nicaragua— | | | | | | |
| Motor spirit | — | — | — | — | — | (a) 41,000 |
| Kerosine | — | — | — | — | — | (a) 15,000 |
| Gas and diesel oil .. | — | — | — | — | — | (a) 28,000 |
| Fuel oil | — | — | — | — | — | (a) 58,000 |
| Panama— | | | | | | |
| Motor spirit | — | — | — | — | (a) 135,000 | 257,000 |
| Kerosine | — | — | — | — | (a) 79,000 | 67,000 |
| Jet fuel | — | — | — | — | (a) 5,000 | 25,000 |
| Gas and diesel oil .. | — | — | — | — | (a) 187,000 | 597,000 |
| Fuel oil | — | — | — | — | (a) 451,000 | 929,000 |
| Salvador— | | | | | | |
| Motor spirit | — | — | — | — | — | 86,000 |
| Kerosine | — | — | — | — | — | 33,000 |
| Gas and diesel oil .. | — | — | — | — | — | 85,000 |
| Fuel oil | — | — | — | — | — | 125,000 |
| United States— | | | | | | |
| Aviation spirit | 13,131,000 | 13,739,000 | 12,692,000 | 13,152,000 | 13,586,000 | 13,800,000 |
| Motor spirit | 151,131,000 | 156,664,000 | 161,605,000 | 162,503,000 | 167,668,000 | 172,246,000 |
| Kerosine (c) | 14,001,000 | 14,084,000 | 17,280,000 | 17,998,000 | 19,902,000 | 20,975,000 |
| Jet fuels (military) .. | 9,377,000 | 11,828,000 | 11,232,000 | 12,118,000 | 13,016,000 | 12,568,000 |
| Distillate fuel oil .. | 85,672,000 | 92,122,000 | 90,509,000 | 94,439,000 | 97,638,000 | 103,745,000 |
| Residual fuel oil .. | 52,990,000 | 50,735,000 | 48,438,000 | 46,022,000 | 43,120,000 | 40,237,000 |
| Lubricating oil | 7,182,000 | 7,856,000 | 8,314,000 | 8,296,000 | 8,605,000 | 8,832,000 |
| Paraffin wax | 656,500 | 703,800 | 737,000 | 723,000 | 669,000 | 641,000 |
| Coke | 6,751,400 | 7,342,300 | 10,716,000 | 13,452,000 | 14,058,000 | 14,409,000 |
| Asphalt | 14,510,000 | 15,851,000 | 16,018,000 | 16,529,000 | 17,778,000 | 18,173,000 |
| Road oil | 943,000 | 1,033,000 | 950,000 | 926,000 | 1,126,000 | 1,081,000 |
| Argentina— | | | | | | |
| Aviation spirit | } 1,900,000 | 54,700 | 51,200 | r 47,000 | 44,800 | 35,200 |
| Motor spirit | | 1,609,400 | 1,903,200 | r 2,164,400 | 2,672,600 | 2,529,100 |
| Kerosine | 1,098,000 | 1,166,000 | 1,029,000 | r 1,017,200 | 1,183,600 | 974,600 |
| Gas oil | } 1,779,000 | 445,000 | 642,300 | r 739,500 | 1,053,200 | 1,429,400 |
| Diesel oil | | 1,157,600 | 950,600 | r 929,800 | 971,700 | 1,174,700 |
| Fuel oil | 5,244,000 | 5,408,600 | 6,044,000 | r 6,565,400 | 6,774,600 | 6,169,200 |
| Lubricating oil | 165,000 | 131,800 | 133,600 | r 137,500 | 129,300 | 118,000 |
| Bolivia— | | | | | | |
| Motor spirit | 270,733 | 98,608 | 103,556 | 105,494 | 117,799 | 115,719 |
| Kerosine | 43,974 | 44,245 | 50,886 | 50,774 | 54,775 | 54,736 |
| Diesel oil | 36,578 | 39,602 | 47,032 | 48,655 | 59,997 | 57,005 |
| Fuel oil | 106,290 | 91,222 | 78,959 | 73,331 | 92,193 | 106,352 |
| Brazil— | | | | | | |
| Motor spirit | 2,151,000 | 2,200,000 | 2,453,000 | 2,718,000 | 3,532,000 | 3,761,000 |
| Kerosine | 247,000 | 294,000 | 513,000 | 502,000 | 555,000 | 515,000 |
| Diesel oil | 834,000 | 996,000 | 1,355,000 | 2,061,000 | 2,683,000 | 3,087,000 |
| Fuel oil | 2,719,000 | 2,995,000 | 3,438,000 | 4,214,000 | 5,653,000 | 5,989,000 |
| Lubricating oil | — | — | 2,473 | 1,175 | 1,788 | 6,800 |
| Paraffin wax | — | — | — | — | 16,189 | 10,500 |
| Asphalt | n.a. | 177,059 | 199,443 | 202,132 | 227,216 | 254,000 |

(a) United States Bureau of Mines' estimate. (b) Exports. (c) Including commercial jet fuel.

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|------------|------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Chile— | | | | | | |
| Aviation spirit | — | — | 26,500 | 35,400 | 49,000 | 41,000 |
| Motor spirit | 405,000 | r 425,600 | r 509,900 | r 537,000 | 676,800 | 652,000 |
| Kerosine | 53,100 | r 90,700 | r 139,900 | r 150,500 | 203,900 | 234,000 |
| Diesel oil | 211,500 | 234,500 | 253,000 | 275,200 | 340,400 | 359,000 |
| Fuel oil | 347,900 | r 245,400 | r 294,300 | r 375,700 | 583,000 | 563,000 |
| Colombia— | | | | | | |
| Aviation spirit | 46,329 | 50,804 | 57,812 | 59,668 | 66,803 | 62,861 |
| Motor spirit | (a) 845,469 | (a) 923,511 | 1,029,681 | 1,166,584 | 1,181,487 | 1,190,552 |
| Other spirit | 12,400 | 14,900 | 14,900 | 56,200 | 65,100 | 58,400 |
| Kerosine | 197,454 | 207,097 | 206,374 | 203,163 | 236,223 | 230,285 |
| Jet fuel | 2,514 | 3,033 | 5,553 | 15,448 | 22,152 | 19,539 |
| Gas oil | — | 18,772 | 12,990 | 1,229 | — | 7,431 |
| Diesel oil | 380,729 | 425,655 | 467,674 | 513,758 | 556,314 | 549,533 |
| Fuel oil | 1,389,819 | 1,367,658 | 1,394,089 | 1,296,779 | 1,528,069 | 1,340,586 |
| Lubricating oil and grease | 11,497 | 14,224 | 13,603 | 17,048 | 19,443 | 20,107 |
| Coke | 88,638 | 99,485 | 96,885 | 96,345 | 91,835 | 93,549 |
| Asphalt | 50,692 | 46,333 | 53,388 | 49,895 | 67,528 | 53,757 |
| Ecuador— | | | | | | |
| Motor spirit | 84,000 | 100,940 | 172,310 | 139,870 | 110,160 | n.a. |
| Kerosine | 29,415 | 32,305 | 38,218 | 40,444 | 40,822 | 56,000 |
| Gas and diesel oils | 57,284 | 87,535 | 94,417 | 102,240 | 95,374 | 110,000 |
| Residual fuel oil | 124,375 | 99,910 | 180,520 | 224,950 | 177,550 | 170,000 |
| Peru— | | | | | | |
| Aviation spirit | 9,964 | 26,000 | 11,000 | 6,000 | 7,000 | 5,000 |
| Motor spirit | 578,465 | 538,000 | 557,000 | 572,900 | 616,000 | 625,000 |
| Kerosine | 392,237 | 408,000 | 464,000 | 389,500 | 381,800 | 380,000 |
| Aviation turbine fuel | 7,520 | 8,000 | 32,000 | 41,900 | 62,700 | 62,000 |
| Diesel oil | 680,103 | 670,000 | 692,000 | 748,900 | 818,800 | 792,000 |
| Fuel oil | 376,219 | 337,000 | 358,000 | 351,500 | 404,000 | 661,000 |
| Lubricating oil and grease | 12,002 | 9,000 | 7,000 | 12,000 | 11,000 | 8,000 |
| Coke | 396 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Asphalt | 14,484 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Uruguay— | | | | | | |
| Motor spirit | 237,242 | 226,254 | 238,439 | 234,647 | 284,842 | 251,538 |
| Kerosine | 156,620 | 167,797 | 183,422 | 172,269 | 167,212 | 165,549 |
| Aviation turbine fuel | 2,437 | 4,887 | 6,617 | 9,581 | 17,181 | 14,322 |
| Gas oil | 86,043 | 69,990 | 158,667 | 175,670 | 188,567 | 190,840 |
| Diesel oil | 45,353 | 48,508 | 41,261 | 37,891 | 47,988 | 66,041 |
| Fuel oil | 537,627 | 567,980 | 607,495 | 635,635 | 660,166 | 601,394 |
| Lubricating oil | 622 | 808 | 1,643 | 875 | 313 | 473 |
| Asphalt | 10,600 | 10,200 | 10,700 | 12,800 | 18,900 | 14,900 |
| Venezuela— | | | | | | |
| Motor spirit | 4,435,377 | 4,885,035 | 4,453,686 | 4,882,540 | 5,570,306 | 5,824,489 |
| Kerosine | 1,435,177 | 1,630,746 | 1,193,124 | 1,379,521 | 1,294,876 | 1,125,419 |
| Gas and diesel oils | 6,628,167 | 7,463,514 | 7,739,831 | 8,632,145 | 10,187,728 | 10,792,154 |
| Fuel oil | 20,751,026 | 24,058,382 | 27,318,514 | 27,433,708 | 30,934,189 | 31,267,995 |
| Lubricating oil | 179,345 | 164,384 | 206,100 | 515,916 | 567,210 | 618,310 |
| Asphalt | 1,082,000 | 890,000 | 1,007,000 | 1,041,000 | 1,070,000 | 839,000 |
| Burma— | | | | | | |
| Motor spirit | 123,100 | 132,310 | 143,188 | 143,000 | 148,194 | 142,000 |
| Kerosine | 81,649 | 61,375 | 64,462 | 70,491 | 87,402 | 84,000 |
| Jet fuel | 3,327 | 6,770 | 14,224 | n.a. | 21,842 | 25,000 |
| Diesel oil | 85,777 | 96,410 | 106,860 | 110,990 | 166,909 | n.a. |
| Fuel oil | 59,631 | 77,279 | 65,326 | 71,437 | 48,521 | n.a. |
| Paraffin wax | 10,660 | 11,988 | 13,021 | 13,353 | 17,146 | n.a. |
| Coke | 10,085 | n.a. | n.a. | n.a. | 12,000 | n.a. |

(a) Including naphtha.

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------------|---------------|------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Formosa— | | | | | | |
| Aviation spirit | — | 5,207 | } 215,000 | 226,000 | 229,000 | 237,000 |
| Motor spirit | 145,063 | 166,239 | | 29,000 | 28,400 | 31,000 | 31,500 |
| Kerosine | 28,530 | 32,482 | 134,700 | 144,500 | (b) 168,000 | (b) 145,000 |
| Jet fuel | 110,834 | 128,274 | 177,700 | 175,200 | 219,900 | 185,800 |
| Diesel oil | 130,411 | 151,470 | 377,700 | 424,900 | 521,300 | 561,300 |
| Fuel oil | 269,001 | 332,018 | 46,831 | 60,722 | 67,232 | 51,202 |
| Asphalt | 35,615 | 42,257 | | | | |
| Indonesia— | | | | | | |
| Aviation spirit | 211,845 | 167,569 | 145,062 | 117,460 | n.a. | n.a. |
| Motor spirit | 2,082,513 | 2,194,597 | 2,106,696 | 1,982,879 | n.a. | n.a. |
| Kerosine | 1,551,079 | 1,614,317 | 1,656,183 | 1,704,781 | n.a. | n.a. |
| Fuel, gas, diesel and lubricating oils | 6,048,902 | 6,726,997 | 6,828,896 | 7,002,858 | n.a. | n.a. |
| Paraffin wax | 88,663 | 100,197 | 102,462 | 89,985 | n.a. | n.a. |
| Asphalt | 29,368 | 28,894 | 31,002 | 43,895 | n.a. | n.a. |
| Other products | 626,318 | 787,955 | 659,843 | 758,775 | n.a. | n.a. |
| Iran (a)— | | | | | | |
| Aviation spirit | 498,000 | 503,000 | 545,000 | 473,000 | 566,000 | 554,000 |
| Motor spirit | 2,090,000 | 2,048,000 | 2,357,000 | 1,717,000 | 2,100,000 | 2,038,000 |
| Kerosine | 2,277,000 | 2,085,000 | 2,142,000 | 1,913,000 | 2,127,000 | 1,925,000 |
| Aviation turbine fuel | — | 441,000 | 514,000 | 522,000 | 712,000 | 896,000 |
| Gas and diesel oils | 2,641,000 | 2,964,000 | 2,736,000 | 2,538,000 | 3,005,000 | 2,898,000 |
| Fuel oil | 6,015,000 | 6,136,000 | 7,290,000 | 6,640,000 | 7,541,000 | 7,895,000 |
| Lubricating oil | 13,000 | 15,000 | 18,000 | 19,000 | 19,000 | 25,000 |
| Bitumen | 185,000 | 254,000 | 253,000 | 284,000 | 223,000 | 169,000 |
| Iraq— | | | | | | |
| Motor spirit | 243,000 | (b) 250,000 | 244,990 | (b) 309,000 | 264,756 | 257,996 |
| Kerosine | 268,000 | (b) 241,000 | 313,529 | (b) 363,000 | 371,524 | 382,116 |
| Gas oil | } 1,106,000 | (b) 1,052,000 | 196,926 | } b 361,000 | } 214,303 | 228,960 |
| Diesel oil | | | 191,492 | | | 187,117 | 181,120 |
| Fuel oil | | | 847,363 | (b) 949,000 | 1,032,469 | 1,004,215 |
| Israel— | | | | | | |
| Motor spirit | 187,484 | 180,945 | 203,946 | 192,805 | 272,105 | 310,000 |
| Kerosine | 173,114 | 173,744 | 175,084 | 203,069 | 232,769 | 239,000 |
| Gas and diesel oils | 262,910 | 299,692 | 374,011 | 426,747 | 548,444 | 717,000 |
| Fuel oil | 469,512 | 514,328 | 531,535 | 660,887 | 890,849 | 1,091,000 |
| Bitumen | 30,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Japan— | | | | | | |
| Aviation spirit | 46,478 | 51,957 | 51,701 | } 5,233,789 | 5,775,000 | } 62,022 |
| Motor spirit | 2,956,148 | 3,626,740 | 4,360,091 | | 1,858,000 |  | 2,372,000 | 6,542,373 |
| Kerosine | 953,979 | 1,246,126 | 1,693,398 | 383,000 | 432,000 | 3,160,616 |
| Jet fuel | 88,508 | 217,990 | 288,302 | 2,451,956 | 2,996,000 | 546,788 |
| Gas oil | 1,037,739 | 1,419,862 | 1,980,296 | 1,394,390 | 1,527,000 | 3,817,631 |
| Diesel oil | 874,629 | 1,069,930 | 1,064,677 | 17,208,923 | 20,391,000 | 1,703,126 |
| Fuel oil | 6,343,181 | 8,959,412 | 14,191,849 | 647,932 | 714,000 | 27,389,763 |
| Lubricating oil | 404,262 | 465,999 | 564,978 | 45,155 | 49,461 | 828,321 |
| Paraffin wax | 36,290 | 39,703 | 45,074 | 596,016 | 838,000 | 53,344 |
| Asphalt | 293,722 | 414,088 | 461,803 | | | 929,404 |
| Jordan— | | | | | | |
| Motor spirit | — | — | 40,923 | 34,000 | 41,075 | 45,450 |
| Kerosine | — | — | 43,197 | 38,000 | 51,386 | 53,833 |
| Gas oil | — | — | 41,898 | 40,000 | 111,207 | 114,836 |
| Fuel oil | — | — | 65,607 | 51,000 | 40,542 | 47,712 |
| Asphalt | — | — | 8,607 | 12,000 | 18,677 | 27,049 |
| Kuwait— | | | | | | |
| Motor spirit | 43,000 | 85,000 | 139,000 | 95,000 | 162,000 | 180,000 |
| Kerosine | 29,000 | 40,000 | 39,000 | 51,000 | 56,000 | 64,000 |
| Gas and diesel oils | 1,355,000 | 1,642,000 | 1,968,000 | 1,725,000 | 2,084,000 | 2,402,000 |
| Fuel oil | 3,432,000 | 4,025,000 | 5,127,000 | 5,102,000 | 5,548,000 | 5,754,000 |
| Bitumen | 21,000 | 22,000 | 33,000 | 35,000 | 22,000 | 28,000 |

(a) Abadan Refinery only.

(b) Estimated.

PRODUCTION OF PETROLEUM REFINERY PRODUCTS IN CERTAIN COUNTRIES (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|-------------|-------------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Lebanon— | | | | | | |
| Motor spirit | 115,795 | 112,993 | 108,280 | 99,514 | 121,433 | 159,000 |
| Kerosine | 76,050 | 64,396 | 71,798 | 63,451 | 100,813 | 121,900 |
| Gas oil | 166,969 | 161,836 | 155,903 | 175,438 | 161,053 | 173,500 |
| Fuel oil | 370,989 | 379,085 | 337,426 | 331,674 | 408,543 | 518,150 |
| Philippine Republic— | | | | | | |
| Motor spirit | 386,000 | 384,000 | 411,000 | 718,800 | 841,700 | 965,500 |
| Kerosine | 73,000 | 70,000 | 85,000 | 237,000 | 294,800 | 273,000 |
| Jet fuel | | 10,000 | | 10,000 | | 73,600 |
| Gas and diesel oil .. | 232,000 | 236,000 | 257,000 | 554,000 | 671,600 | 854,500 |
| Fuel oil | 420,000 | 411,000 | 422,000 | 710,600 | 940,500 | 1,118,000 |
| Saudi Arabia— | | | | | | |
| Aviation spirit | — | 935,000 | 31,815 | 47,277 | 34,862 | 37,657 |
| Motor spirit | 859,673 | | 1,122,306 | 1,038,129 | 955,557 | 1,219,834 |
| Kerosine | 1,078,694 | 621,613 | 757,097 | 742,985 | 480,420 | 487,585 |
| Jet fuel | | 396,996 | 324,720 | 427,802 | 563,282 | 595,458 |
| Diesel oil | 2,004,878 | 1,441,801 | 1,454,250 | 1,786,261 | 1,683,032 | 2,071,339 |
| Fuel oil | 3,728,127 | 4,614,498 | 6,655,609 | 7,277,150 | 7,611,459 | 7,809,318 |
| Asphalt, etc. | 50,930 | 51,841 | 35,935 | 57,839 | 57,112 | 46,330 |
| Syria— | | | | | | |
| Motor spirit | — | 38,000 | 105,000 | (a) 118,000 | (a) 130,000 | 123,000 |
| Kerosine | — | 28,000 | 95,000 | (a) 108,000 | (a) 93,000 | 104,000 |
| Gas and diesel oil .. | — | 60,000 | 177,000 | (a) 199,000 | (a) 199,000 | 255,000 |
| Fuel oil | — | 117,000 | 306,000 | (a) 314,000 | (a) 284,000 | 324,000 |
| Turkey— | | | | | | |
| Motor spirit | 65,370 | 74,110 | 70,830 | 76,060 | 514,611 | 532,578 |
| Kerosine | — | — | 8,200 | 10,700 | 277,484 | 389,357 |
| Diesel oil | 23,181 | 34,370 | 24,190 | 37,660 | 605,993 | 865,845 |
| Fuel oil | 165,531 | 176,770 | 179,600 | 184,300 | 1,097,364 | 1,406,693 |
| Asphalt | 42,746 | 45,840 | 37,128 | 56,265 | 88,683 | 117,509 |

(a) United States Bureau of Mines' estimate.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS*

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Crude petroleum (f) .. | 4,189 | 121,266 | 48,629 | 110,166 | 994,829 | 1,420,842 |
| Aviation spirit (bunkers) (a) .. | 160,700 | 129,102 | 99,415 | 79,915 | 40,029 | n.a. |
| Aviation spirit .. | 398,143 | 346,339 | 280,361 | 213,568 | 259,208 | 180,071 |
| Aviation turbine fuel (d) | 460,779 | 577,167 | 487,239 | 296,281 | 338,910 | 347,064 |
| Motor spirit .. | 1,072,000 | 855,078 | 977,179 | 968,353 | 1,096,401 | 877,657 |
| Other spirit .. | 38,398 | 35,874 | 37,165 | 44,150 | 50,799 | 167,783 |
| Kerosine (e) .. | 275,671 | 346,918 | 635,411 | 797,842 | 815,140 | 697,914 |
| Gas oil .. | 1,646,462 | 1,637,752 | 2,276,444 | 2,050,963 | 2,684,097 | 2,956,580 |
| Diesel oil .. | 488,675 | 445,398 | 409,384 | 295,129 | 393,370 | 396,167 |
| Fuel oil .. | 3,159,670 | 2,956,371 | 3,184,389 | 2,361,820 | 3,251,910 | 3,169,343 |
| do. (bunkers) (a) .. | 3,887,573 | 4,146,422 | 4,242,121 | 4,281,575 | 3,227,644 | n.a. |
| Lubricating oil .. | 392,779 | 448,286 | 483,081 | 484,233 | 574,952 | 513,133 |
| Greases (c) .. | 29,970 | 26,638 | 31,418 | 32,398 | 32,834 | 33,846 |
| Other heavy oils .. | 8,457 | 8,996 | 8,598 | 10,674 | 11,383 | 81,688 |
| Petroleum jelly .. | n.a. | n.a. | n.a. | n.a. | n.a. | 435 |
| Petroleum waxes .. | 7,040 | 8,245 | 6,411 | 6,094 | 6,643 | 8,348 |
| Malta (bunkers) (b)— | | | | | | |
| Aviation spirit .. | 21,943 | 14,669 | 13,213 | 11,872 | 11,936 | 12,030 |
| Aviation turbine fuel .. | 40,639 | 31,339 | 35,109 | 33,202 | 31,282 | 36,265 |
| Gas oil .. | r 239 | r 8,443 | r 2,150 | r 2,449 | 6,000 | 6,580 |
| Fuel oil .. | — | 475 | 407 | 224 | 3,669 | 2,081 |
| Ghana— | | | | | | |
| Aviation spirit (bunkers) (b) .. | 3,617 | — | — | — | — | — |
| Gas oil (bunkers) .. | — | — | — | — | — | 151 |
| do. do. (b) .. | 3,577 | 4,119 | 6,119 | 6,731 | 9,323 | 1,311 |
| Diesel oil (bunkers) (b) .. | 172 | 2 | 2 | 2,056 | 2,805 | 282 |
| Fuel oil .. | — | — | — | — | — | 17,299 |
| do. (bunkers) (b) .. | 10,801 | 8,705 | 8,839 | 5,793 | 6,654 | 793 |
| Lubricating oil (bunkers) (b) .. | 64 | 19 | 59 | 47 | 113 | 16 |
| Kenya (bunkers) (b)— | | | | | | |
| Aviation spirit .. | 9,475 | 9,527 | 13,955 | 19,264 | 3,658 | 4,605 |
| Motor spirit .. | 1 | 1 | 1 | 35 | 816 | 6 |
| Aviation turbine fuel .. | — | — | — | — | 41,710 | 41,008 |
| Gas, diesel and fuel oils | 105,639 | 113,835 | 103,557 | 143,820 | 135,371 | 124,472 |
| Lubricating oil .. | 514 | 433 | 458 | 577 | 522 | 490 |
| Mauritius (bunkers) (b)— | | | | | | |
| Aviation spirit .. | 1,896 | 1,866 | 1,793 | 2,165 | 1,977 | 1,615 |
| Aviation turbine fuel .. | — | — | — | 492 | 718 | 1,427 |
| Fuel oils .. | 6,823 | 6,312 | 9,425 | 12,556 | 14,141 | 8,224 |
| Nigeria— | | | | | | |
| Crude petroleum .. | 223,866 | 491,883 | 827,702 | 2,224,140 | 3,367,504 | 3,694,981 |
| Diesel oil (bunkers) (b) | 2,078 | 1,991 | 2,478 | 1,026 | 3,220 | 294 |
| Gas oil do. (b) | 136 | 1,304 | 1,930 | 2,589 | 3,689 | } 9,503 |
| Fuel oil do. (b) | 6,225 | 4,361 | 4,666 | 2,504 | 2,784 | |
| Sierra Leone (bunkers) (b)— | | | | | | |
| Aviation spirit .. | 201 | 131 | 201 | 166 | 472 | 411 |
| Aviation turbine fuel .. | — | — | — | 176 | 534 | 2,036 |
| Fuel and diesel oils .. | 214,722 | 219,985 | 275,709 | 304,681 | 274,974 | 228,619 |

*Excluding the United Kingdom, the following rates have been used for converting Imperial gallons to long tons: Aviation spirit 315, Motor spirit 305, White spirit 280, Aviation turbine fuel 275, Kerosine 275, Gas oil 260, Diesel oil 256, Fuel oil 240, Lubricating oil 250, Asphalt 220, Road oil 220, Crude petroleum 245 (except for countries mentioned in footnote (b) on page 246).

(a) Including foreign produce.

(d) Wide cut gasoline.

(b) Foreign produce. See imports.

(e) Including kerosine jet type fuel.

(c) Including cable impregnating compounds.

(f) Including partly refined.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|-----------|-----------|-------------|-------------|-------------|------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Tanganyika (bunkers) .. | | | | | | |
| (a)— | | | | | | |
| Aviation spirit | 414 | 831 | 818 | 272 | 3,310 | 2,007 |
| Aviation turbine fuel .. | — | — | — | — | 2,954 | 6,615 |
| Gas, diesel and fuel oils | 6 | 832 | 224 | 1,245 | 835 | 3,873 |
| Uganda (bunkers) (a)— | | | | | | |
| Aviation spirit | 3,213 | 2,002 | 2,891 | 3,585 | 3,534 | 2,676 |
| Aviation turbine fuel .. | — | — | — | — | 8,431 | 8,211 |
| Canada— | | | | | | |
| Crude petroleum | 4,223,924 | 4,448,298 | 5,631,325 | 8,696,335 | 12,210,695 | 12,116,775 |
| Motor spirit | 19,260 | 62,043 | 156,109 | 65,426 | 110,676 | 55,178 |
| Kerosine, etc. | 23,952 | 21 | 2,209 | n.a. | n.a. | n.a. |
| Fuel oil | 64,351 | 132,221 | 105,704 | 152,390 | 285,768 | 310,417 |
| do. (bunkers) | 1,076,598 | 1,339,979 | 1,316,435 | 1,403,484 | 1,489,833 | n.a. |
| Diesel oil (bunkers) .. | 369,656 | 456,365 | 433,036 | 426,577 | 454,043 | n.a. |
| Lubricating oil | 2,021 | 948 | 852 | (c) 280 | (c) 4,635 | (c) 9,138 |
| Other oils | 27 | 197 | 391 | n.a. | n.a. | n.a. |
| Mineral wax | 136 | 159 | 248 | n.a. | n.a. | n.a. |
| Petroleum coke | 27,481 | 44,152 | 32,528 | (e) 46,793 | (e) 28,445 | (e) 16,086 |
| Natural gas (million cu. ft.) | 86,972 | 84,764 | 91,045 | 168,180 | 319,566 | 340,953 |
| Barbados (bunkers)— | | | | | | |
| Aviation spirit (a) | 1,365 | 1,431 | 2,341 | 1,843 | 1,119 | 1,376 |
| Aviation turbine fuel (a) | 1,266 | 1,818 | 2,309 | 4,062 | 5,333 | 8,077 |
| Gas, diesel and fuel oils | — | — | 367 | 563 | 366 | 427 |
| Do. do. (a) | 37 | 393 | 594 | 521 | 64,057 | 258,000 |
| Bermuda (bunkers) (a)(b)— | | | | | | |
| Aviation spirit | 79,184 | 78,630 | 78,009 | 79,655 | 66,028 | n.a. |
| Motor spirit | 720 | 2,479 | 3,478 | 3,629 | 3,872 | n.a. |
| Aviation turbine fuel .. | 32,314 | 37,448 | 40,225 | 63,567 | 67,350 | n.a. |
| Kerosine | 352 | 361 | 809 | 462 | 474 | n.a. |
| Fuel oil | 7,774 | 7,429 | 26,784 | 19,818 | 34,237 | n.a. |
| Diesel oil | 1,872 | 3,413 | | | | |
| Lubricating oil | 1,036 | 518 | 269 | 92 | 36 | n.a. |
| Jamaica (bunkers) (a)— | | | | | | |
| Aviation spirit | 1,586 | 25,889 | 25,446 | 9,444 | 12,987 | 7,703 |
| Gas oil | 29 | 2,106 | 10,640 | 7,871 | 4,736 | 8,269 |
| Diesel oil | 1,598 | 48,941 | 64,054 | 53,006 | 32,352 | 22,437 |
| Fuel oil | 8,910 | 106,347 | 145,991 | 155,072 | 88,780 | 2,309 |
| Trinidad and Tobago— | | | | | | |
| Crude petroleum | 406,919 | 458,246 | 686,192 | 728,029 | 870,541 | 946,086 |
| Aviation spirit | 371,445 | 443,841 | (d) 912,822 | d 1,360,395 | d 1,426,354 | 1,297,844 |
| do. (bunkers) | 42,505 | 17,434 | 12,404 | 8,229 | 4,838 | |
| Motor spirit | 1,311,969 | 1,257,237 | 1,130,783 | 1,233,518 | 1,063,230 | 1,199,762 |
| do. (bunkers) | 16,946 | 8,279 | 25 | 8,505 | 39 | |
| Kerosine | 455,437 | 326,927 | 263,185 | 320,118 | 217,706 | 121,677 |
| do. (bunkers) | 171 | 4,875 | 13,414 | 20,569 | 32,180 | |
| Gas oil | 926,188 | 1,233,693 | 1,258,868 | 1,379,996 | 1,058,377 | 2,682,901 |
| do. (bunkers) | 62,888 | 48,850 | 37,717 | 49,260 | 117,260 | |
| Diesel oil | 389,121 | 179,945 | 176,124 | 356,034 | 874,695 | 9,091,909 |
| do. (bunkers) | 424,341 | 370,833 | 310,011 | 364,342 | 356,270 | |
| Fuel oil | 2,876,254 | 3,895,728 | 4,750,917 | 6,613,960 | 7,346,859 | 1,762,723 |
| do. (bunkers) | 1,235,053 | 1,471,232 | 1,537,568 | 1,803,873 | 1,762,723 | |
| Lubricating oil | 317 | 306 | 151 | — | 24 | n.a. |
| Road oil | 23,024 | 29,220 | 13,167 | 12,809 | 9,640 | n.a. |
| Asphalt— | | | | | | |
| Crude | 1 | — | — | — | — | — |
| Dried | 44,435 | 48,414 | 52,748 | 57,980 | 65,344 | 67,728 |
| Asphalt cement | 11,129 | 12,317 | 5,873 | 7,749 | 4,261 | n.a. |
| Bituminous asphalt .. | 45,639 | 28,765 | 32,547 | 30,182 | 49,575 | n.a. |

(a) Foreign produce. See imports.

(b) Including bunkers for military forces.

(c) Including grease.

(d) Including J.P.4 type aviation turbine fuel.

(e) Including pitch coke.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | | | | |
|--|-----------|-----------|-------------|-------------|-------------|-------------|-------|--------|-------|-------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | | | | | |
| British Guiana (a)— | | | | | | | | | | |
| Aviation spirit (bunkers) | 365 | 489 | 700 | 1,680 | 13,515 | n.a. | | | | |
| Falkland Islands— | | | | | | | | | | |
| (bunkers) (a)— | | | | | | | | | | |
| Fuel oil | 6,921 | 27,135 | 38,453 | 17,758 | 16,996 | — | | | | |
| Abu Dhabi (c) | | | | | | | | | | |
| Crude petroleum .. | — | — | — | — | — | 70,415 | | | | |
| Aden (f)— | | | | | | | | | | |
| Aviation and motor spirits | 620,810 | 587,845 | 568,702 | 789,634 | 812,251 | 793,513 | | | | |
| Kerosine | 310,411 | 412,961 | 320,716 | 497,969 | 559,129 | 601,913 | | | | |
| Gas, diesel, fuel oils .. | 739,128 | 1,081,749 | 1,278,113 | 1,779,578 | 1,931,273 | 2,451,748 | | | | |
| Fuel oil (bunkers) .. | 3,408,253 | 3,280,542 | 3,557,991 | 3,509,121 | 3,405,878 | 3,786,449 | | | | |
| Bahrain Islands (c)— | | | | | | | | | | |
| Aviation spirit | 8,000 | 10,000 | 1,608,000 | 1,549,000 | 1,836,000 | 1,900,000 | | | | |
| Motor spirit | 1,350,000 | 1,537,000 | | | | | | | | |
| Aviation turbine fuel .. | 485,000 | 304,000 | 289,000 | 451,000 | 526,000 | 474,000 | | | | |
| Kerosine | 619,000 | 728,000 | 811,000 | 687,000 | 716,000 | 640,000 | | | | |
| Diesel oil | 1,480,000 | 1,919,000 | 2,058,000 | 2,383,000 | 2,562,000 | 2,469,000 | | | | |
| do. (bunkers) | 125,000 | 111,000 | 95,000 | 85,000 | 76,000 | (e) | | | | |
| Fuel oil | 3,122,000 | 3,247,000 | 3,739,000 | 3,877,000 | 4,390,000 | 4,152,000 | | | | |
| do. (bunkers) | 641,000 | 615,000 | 656,000 | 733,000 | 751,000 | 876,000 | | | | |
| Asphalt | 46,000 | 75,000 | 106,000 | 101,000 | 84,000 | 29,000 | | | | |
| Brunei— | | | | | | | | | | |
| Crude petroleum (b) .. | 5,053,900 | 5,295,552 | 4,505,041 | 4,379,000 | 3,757,077 | 3,424,099 | | | | |
| Natural gas (million cubic feet) | 2,480 | 2,540 | 2,693 | 2,656 | 2,653 | 2,204 | | | | |
| Ceylon (bunkers) (a)— | | | | | | | | | | |
| Aviation spirit | 6,014 | 8,267 | 9,503 | 7,638 | 7,536 | 5,944 | | | | |
| Gas oil | 6,476 | 6,637 | 4,127 | 3,878 | 3,484 | 6,614 | | | | |
| Diesel oil | 48,644 | 39,974 | 49,341 | 52,854 | 49,305 | 24,035 | | | | |
| Fuel oil | 379,319 | 374,075 | 397,339 | 330,513 | 247,529 | 161,690 | | | | |
| Cyprus (bunkers) (a)— | | | | | | | | | | |
| Aviation spirit | 2,273 | 2,583 | 2,296 | 1,196 | 1,143 | 1,506 | | | | |
| Hong Kong— | | | | | | | | | | |
| Aviation and motor spirit | 959 | 3,827 | 1,215 | 6,263 | 2,225 | 1,902 | | | | |
| Kerosine | 1,446 | 1,855 | 2,111 | 2,660 | 3,552 | 4,310 | | | | |
| Diesel oil and gas oil .. | 6,558 | 8,669 | 8,683 | 10,445 | 15,914 | 18,431 | | | | |
| Fuel oil | 620 | 1,201 | 635 | 867 | 1,221 | 1,397 | | | | |
| Lubricating oil | 508 | 563 | 553 | 833 | 2,343 | 4,359 | | | | |
| Greases | 18 | 39 | 21 | 17 | 4 | 60 | | | | |
| Petroleum jelly | 164 | 86 | 66 | 51 | 53 | 38 | | | | |
| Paraffin wax | 344 | 107 | 170 | 220 | 139 | 80 | | | | |
| Asphalt and bitumen .. | 2,791 | 278 | 563 | 85 | 172 | 158 | | | | |
| India— | | | | | | | | | | |
| Motor spirit | 108,402 | 61,581 | (d) 193,472 | (d) 162,452 | (d) 239,647 | (d) 366,115 | | | | |
| Other spirit | | 11,210 | | | | | | | | |
| Diesel oil | | 14,858 | | | | | (d) 6 | (d) 24 | (d) — | (d) — |
| Fuel oil | | 83,710 | | | | | (d) — | (d) — | (d) — | (d) — |
| Paraffin wax | 22,061 | 22,540 | (d) 18,343 | (d) 12,043 | (d) 11,939 | (d) 9,370 | | | | |

(a) Foreign produce. See imports.

(b) Exported to Sarawak for refining. Some, however, is re-exported from Sarawak and shown as exports from that country.

(c) British Protected State.

(d) Years ended March 31 following that stated.

(e) Included, if any, with fuel oil (bunkers).

(f) Domestic and foreign produce.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Malaya— | | | | | | |
| Crude petroleum .. | 856,817 | 253,713 | 227,060 | 769,470 | 1,295,231 | 1,216,270 |
| Aviation spirit .. | 164,455 | 179,413 | 126,759 | 117,030 | 171,657 | 155,820 |
| do. do. (bunkers) | 18,067 | 24,269 | 32,202 | 41,793 | 50,398 | 51,786 |
| Motor spirit .. | 697,450 | 775,350 | 817,502 | 674,192 | 657,425 | 755,917 |
| White spirit .. | 53,311 | 71,796 | 77,852 | 90,204 | 70,330 | 61,486 |
| Aviation turbine fuel .. | 22,769 | 69,117 | 122,424 | 225,372 | 278,400 | 259,250 |
| Kerosine .. | 321,158 | 325,440 | 350,418 | 303,269 | 286,667 | 329,902 |
| Gas oil .. | 354,574 | 358,444 | 369,745 | 436,156 | 558,511 | 656,397 |
| Diesel oil .. | 219,683 | 169,871 | 249,268 | 285,397 | 286,132 | 318,456 |
| Fuel oil .. | 188,322 | 201,920 | 189,280 | 590,576 | 878,862 | 888,719 |
| Fuel and diesel oil (bunkers) .. | 1,999,575 | 1,841,517 | 1,917,555 | 2,373,984 | 2,636,187 | 2,636,758 |
| Lubricating oil .. | 6,266 | 5,420 | 4,392 | 4,552 | 5,210 | 22,161 |
| Petroleum jelly .. | 68 | 53 | 46 | 138 | 28 | 25 |
| Grease .. | 265 | 236 | 159 | 278 | 276 | 214 |
| Paraffin wax .. | 88 | 27 | 101 | 124 | 2,316 | 85 |
| Asphalt and bitumen .. | 37,001 | 3,718 | 5,298 | 3,445 | 9,343 | 48,470 |
| Qatar (e)— | | | | | | |
| Crude petroleum .. | 8,055,000 | 7,857,631 | 7,977,915 | 8,143,706 | 8,614,642 | 8,971,403 |
| Sabah— | | | | | | |
| (bunkers) (b)— | | | | | | |
| Aviation spirit .. | 1,702 | 1,430 | 663 | 591 | 921 | n.a. |
| Fuel oil .. | 9,087 | 6,622 | 6,631 | 9,479 | 6,097 | n.a. |
| Sarawak— | | | | | | |
| Crude petroleum (c) .. | 3,157,045 | 3,238,040 | 2,475,388 | 1,879,638 | 1,871,940 | 1,516,472 |
| Motor spirit (d) .. | 225,000 | 334,002 | 337,023 | 262,459 | 287,222 | 258,618 |
| Kerosine .. | 15 | 15 | — | — | — | 13,852 |
| Gas oil .. | 60,541 | 43,981 | 39,328 | 33,754 | 50,922 | 36,731 |
| Diesel oil .. | 950,027 | 1,112,390 | 1,121,445 | 951,764 | 1,090,062 | 1,095,426 |
| Fuel oil .. | 510,326 | 469,381 | 449,787 | 459,825 | 531,799 | 393,537 |
| do. (bunkers) (f) .. | 174,156 | 157,075 | 147,183 | 106,589 | 81,634 | 46,377 |
| Australia (a)— | | | | | | |
| Aviation spirit .. | 381 | 1,440 | 8,748 | 10,319 | 8,031 | 1,983 |
| do. do. (bunkers) | 4,495 | 2,392 | 494 | 8,079 | 7,799 | 1,439 |
| do. do. do. (b) | 11,490 | 5,943 | 19,080 | 8,892 | 2,997 | 1,319 |
| Motor spirit .. | 155,963 | 159,070 | 50,803 | 81,971 | 138,370 | 126,490 |
| Kerosine .. | 20,321 | 14,234 | 50,997 | 73,667 | 13,965 | 20,810 |
| Aviation turbine fuel .. | 1,872 | 1,597 | 23,751 | 35,533 | 68,233 | 63,986 |
| do. (bunkers) | 409 | 403 | 13 | 4,371 | 6,680 | 5,125 |
| do. do. (b) | 1,823 | 1,608 | 3,248 | 10,834 | 1,965 | 792 |
| Lubricating oil .. | 564 | 688 | 1,101 | 5,872 | 4,467 | 14,813 |
| Diesel and fuel oils .. | 989,736 | 922,482 | 1,016,468 | 1,465,540 | 1,758,225 | 2,189,523 |
| Fuel oil (bunkers)— | | | | | | |
| Domestic produce .. | 518,513 | 465,221 | 564,219 | 698,751 | 583,321 | 670,440 |
| Foreign produce .. | 8,869 | 9,602 | 10,537 | 6,652 | 8,410 | 5,448 |
| Fiji (bunkers)(b)— | | | | | | |
| Aviation spirit .. | 11,082 | 15,288 | 6,324 | 5,398 | 5,381 | 2,353 |
| Aviation turbine fuel .. | n.a. | 1,807 | 21,135 | 28,738 | 35,708 | 30,357 |
| Diesel oil .. | 6,059 | 3,772 | 8,313 | 11,660 | 12,429 | 13,415 |
| Gas oil .. | 399 | 584 | 331 | 382 | 2,129 | 1,521 |
| Fuel oil .. | 160 | 895 | 427 | — | 326 | 2,070 |
| New Zealand | | | | | | |
| (bunkers) (b)— | | | | | | |
| Aviation spirit .. | 6,219 | 7,192 | 3,649 | 5,063 | n.a. | n.a. |
| Diesel oil .. | 18,444 | 21,457 | 10,408 | 46,992 | 34,263 | 29,970 |
| Fuel oil .. | 9,478 | 7,511 | 4,100 | 55,065 | 43,362 | 24,110 |
| Lubricating oil .. | 1,247 | 1,247 | 1,287 | 1,547 | 1,632 | 1,660 |

(a) Years ended June 30 of that stated.

(e) British Protected State.

(b) Foreign produce. See imports.

(f) Including diesel oil bunkers.

(c) Including crude petroleum imported from Brunei as well as enriched waxy crude.

(d) Excluding motor spirit blended with crude petroleum and exported as enriched waxy crude.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Irish Republic— | | | | | | |
| Aviation spirit (d) (b) .. | 3,064 | 1,808 | 3,721 | 2,845 | 2,900 | 3,248 |
| do. (d) (e) .. | r 94,741 | r 75,644 | 57,392 | 44,239 | 34,574 | 20,045 |
| Motor spirit .. | — | — | 5,933 | 4,048 | 7,100 | 6,709 |
| Aviation turbine fuel (e) | — | — | — | — | — | 3,545 |
| do. (d) (b) .. | 8,753 | 12,543 | 11,838 | r 10,699 | 12,137 | 14,073 |
| do. (d) (e) .. | 1,247 | r 2,982 | r 34,628 | 72,207 | 72,866 | 73,274 |
| Gas and diesel oils .. | — | 71,819 | 156,433 | 135,726 | 133,990 | 142,944 |
| do. (bunkers) (d)(b) | 7,400 | 5,147 | — | — | — | — |
| do. do. (b) | — | 3,298 | r 9,885 | 9,509 | 7,405 | 9,359 |
| Fuel oil .. | — | 69,389 | 317,694 | 241,682 | 111,485 | 38,264 |
| do. (bunkers) (d) (b) | 37,395 | 23,914 | 15,013 | 11,282 | 5,255 | — |
| do. do. (b) | — | 29,692 | r 78,012 | 86,045 | 70,130 | 81,632 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Crude petroleum .. | — | 1 | 1 | 1 | 1 | — |
| Motor spirit .. | — | 23 | 20 | 4 | 37 | 52 |
| Kerosine .. | 1,025 | — | — | — | — | — |
| Gas oil .. | 203,242 | 167,883 | 132,531 | 82,753 | 191,625 | 202,674 |
| Fuel oil .. | 1,139 | 5,713 | 4,884 | 201 | 10 | — |
| Lubricating oil, etc. .. | 224 | 2,474 | 7,776 | 4,487 | 10,780 | 14,936 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude petroleum .. | 76,312 | 14,199 | 24 | 79 | 1,670 | — |
| Motor spirit .. | 484,004 | 455,321 | 478,521 | 369,321 | 426,213 | 832,347 |
| Kerosine .. | 159,963 | 237,453 | 218,489 | 161,043 | 177,712 | 206,528 |
| Gas oil .. | 628,916 | 679,892 | 842,658 | 782,454 | 794,451 | 1,207,982 |
| do. (bunkers) (b) | (c) | (c) | 64,829 | 80,180 | 83,470 | 85,465 |
| Fuel oil, etc. .. | 1,157,655 | 1,022,410 | 831,592 | 677,278 | 600,031 | 1,002,879 |
| do. (bunkers) (b) | 566,316 | 576,635 | 553,504 | 707,488 | 980,462 | 1,219,691 |
| Lubricating oil .. | 91,499 | 85,950 | 96,445 | 103,818 | 111,023 | 123,106 |
| do. (bunkers) (b) | 4,889 | 5,875 | 5,452 | 4,386 | 8,665 | 5,234 |
| Other heavy oils .. | 140 | 377 | 56 | 39 | 2,994 | 4 |
| Petroleum jelly .. | 541 | 917 | 1,392 | 1,581 | 1,665 | 1,311 |
| Paraffin wax .. | 77 | 89 | 37 | 76 | 65 | 80 |
| Ozokerite and ceresin (a) | 59 | 55 | 44 | 35 | 45 | 68 |
| Petroleum coke .. | 28 | 437 | 2,365 | 816 | 5,943 | 27,549 |
| Natural asphalt .. | 214 | 201 | 224 | 335 | 47 | 193 |
| Pitch .. | 81,189 | 122,289 | 163,704 | 196,472 | 223,005 | 287,945 |
| Denmark— | | | | | | |
| Aviation spirit .. | 2 | — | 530 | 1,497 | 2,845 | 5,561 |
| Motor spirit .. | — | 100 | 18 | 1,411 | 138,147 | 80,335 |
| White spirit .. | 2 | 33 | 26 | 40 | 1,090 | 925 |
| Kerosine .. | — | 1,366 | 3 | 494 | 6,820 | 17,576 |
| Gas oil .. | — | 6 | 28 | 7,925 | 74,123 | 33,726 |
| Diesel oil .. | — | — | — | 328 | 11,463 | 8,313 |
| Fuel oil .. | — | — | 326 | 31,292 | 294,856 | 215,527 |
| Gas oil (bunkers) .. | 45,182 | 39,658 | 40,696 | 30,190 | — | — |
| Diesel oil (bunkers) .. | 97,206 | 99,115 | 90,096 | 78,919 | 273,571 | 314,810 |
| Fuel oil (bunkers) .. | 115,111 | 122,454 | 104,965 | 89,062 | — | — |
| Lubricating oil .. | 884 | 3,906 | 4,724 | 3,832 | 2,362 | 4,331 |
| Grease .. | 1,072 | 1,109 | 1,128 | 1,202 | 1,531 | 1,401 |
| France— | | | | | | |
| Crude petroleum .. | 44,998 | 986 | 812 | — | — | — |
| Aviation spirit .. | 46,842 | 58,924 | 76,034 | 61,183 | 13,998 | 16,894 |
| Motor spirit .. | 1,287,914 | 1,305,656 | 1,566,194 | 1,688,088 | 1,398,105 | 1,356,938 |
| White spirit .. | 2,553 | 3,915 | 6,540 | 8,840 | 8,090 | 13,922 |
| Kerosine .. | 456,452 | 479,247 | 603,366 | 648,016 | 589,058 | 444,225 |

(a) Including montan wax.

(b) Bunkers for foreign ships or aircraft only.

(c) Included with fuel oil bunkers.

(d) Foreign produce. See imports.

(e) Exports to Shannon Free Airport.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------------|-----------|-----------|-------------|---------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| France <i>(cont.)</i> — | | | | | | |
| Gas oil | 1,916,623 | 1,533,743 | 1,701,704 | } 2,118,805 | 2,366,527 | 2,268,847 |
| do. (bunkers)— | | | | | | |
| Domestic produce .. | 401,905 | 315,291 | (a) 27,845 | } <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Foreign produce .. | 6,149 | 11,834 | <i>n.a.</i> | | | |
| Fuel oil | 1,891,575 | 2,117,398 | 1,954,598 | } 2,694,757 | 2,203,474 | 2,585,524 |
| do. (bunkers)— | | | | | | |
| Domestic produce .. | 1,837,243 | 1,762,514 | (a) 298,892 | } <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Foreign produce .. | 151,516 | 117,885 | <i>n.a.</i> | | | |
| Lubricating oil .. | 133,649 | 157,096 | 186,193 | } 179,386 | 183,578 | 216,536 |
| do. (bunkers)— | | | | | | |
| Domestic produce .. | 24,786 | 27,324 | (a) 3,434 | } <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Foreign produce .. | 2,241 | 1,160 | <i>n.a.</i> | | | |
| Petroleum jelly .. | 36 | 32 | 90 | 124 | 230 | 1,735 |
| Paraffin wax | 8,440 | 10,522 | 9,952 | 8,860 | 9,647 | 8,168 |
| Ozokerite, ceresin, etc. | 440 | 1,078 | 1,162 | 798 | 763 | 592 |
| Petroleum coke .. | — | 19 | 6 | 2,301 | 1 | 2,963 |
| Natural asphalt and bitumen | 19,881 | 18,150 | 22,435 | 27,054 | 21,063 | 20,183 |
| Mastic asphalt .. | 4,971 | 5,603 | 6,805 | 5,344 | 3,421 | 2,956 |
| Bitumen | 147,432 | 164,206 | 174,562 | 183,885 | 126,846 | 130,436 |
| Germany (Federal)— | | | | | | |
| Aviation spirit | | | | | | |
| (bunkers) (a) (b) .. | 75,317 | 67,734 | 64,940 | 63,502 | 52,870 | 53,324 |
| Motor spirit | } 366,184 | } 323,613 | } 530,520 | } 1,150,893 | } 1,151,549 | } 1,216,740 |
| White spirit | | | | | | |
| Kerosine | } 77,068 | } 23,141 | } 2,844 | } 8,093 | } 4,921 | } 30,352 |
| Aviation turbine fuel | | | | | | |
| do. (bunkers) (a) (b) | 12,001 | 31,401 | 18,326 | 9,606 | 205,686 | 19,414 |
| Gas and diesel oil .. | 321,706 | 528,283 | 78,949 | 139,711 | 187,890 | 227,130 |
| do. (bunkers) (a) (b) | 365,884 | 357,013 | 682,850 | 736,148 | 770,568 | 1,128,708 |
| Fuel oil | 172,602 | 358,369 | 111,963 | 100,308 | 147,656 | 203,152 |
| do. (bunkers) (a) (b) | 690,112 | 729,892 | 988,812 | 2,184,887 | 1,261,259 | 1,892,879 |
| Lubricating oil .. | 44,091 | 51,804 | 419,366 | 501,512 | 737,826 | 835,672 |
| do. (bunkers) (a) (b) | 9,964 | 10,900 | 68,316 | 80,027 | 73,770 | 87,891 |
| Petroleum jelly .. | 6,265 | 4,623 | 10,226 | 9,463 | 9,726 | 9,970 |
| Paraffin wax | 25,160 | 28,720 | 5,173 | 5,266 | 7,189 | 9,031 |
| Ozokerite, etc. .. | 205 | 175 | 22,760 | 22,037 | 29,846 | 31,840 |
| Natural asphalt and bitumen | 975 | 164 | 140 | 74 | 26 | 38 |
| Bitumen | 57,561 | 38,541 | 190 | 568 | 567 | 504 |
| Petroleum coke .. | 44,881 | 55,588 | 42,477 | 67,414 | 105,925 | 131,010 |
| Germany (East)— | | | | | | |
| Motor spirit | 74,833 | 59,078 | 256,051 | 364,455 | 381,854 | 412,176 |
| Diesel oil | 271,446 | 399,721 | 370,770 | 370,316 | 364,062 | 426,783 |
| Hungary— | | | | | | |
| Motor spirit | 75,412 | 91,689 | 99,785 | 94,506 | 115,664 | 81,177 |
| Kerosine | 9,413 | 183 | 163 | 10,070 | 140 | 236 |
| Gas oil | 145,618 | 140,465 | 159,828 | 171,707 | 193,045 | 159,466 |
| Fuel oil | 47,547 | 119,616 | 219,695 | 212,287 | 259,240 | 227,028 |
| Lubricating Oil .. | 12,916 | 12,996 | 13,091 | 13,222 | 13,401 | 13,319 |
| Paraffin wax and ceresin | 2,121 | 2,464 | 2,362 | 1,526 | 1,991 | 1,198 |
| Bitumen | 85,924 | 118,795 | 132,178 | 148,956 | 169,773 | 194,237 |
| Italy— | | | | | | |
| Crude petroleum .. | 203,973 | 468,747 | 510,305 | 469,949 | 797,748 | 176,478 |
| Aviation and motor spirits | 1,841,049 | 1,533,843 | 1,822,409 | 1,768,272 | 1,845,429 | 1,785,448 |
| do. (bunkers) (a) .. | 40,038 | 190,999 | 140,074 | 190,195 | 209,453 | 321,208 |
| White spirit | 16,682 | 10,276 | 16,311 | 12,826 | 14,530 | 15,656 |

(a) Bunkers for foreign ships or aircraft only.

(b) Figures for 1958-1959 include foreign produce.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Italy (cont.)— | | | | | | |
| Kerosine | 307,178 | 333,551 | 438,971 | 558,119 | 634,485 | 779,177 |
| Lubricating oil | 49,107 | 106,570 | 40,730 | 29,850 | 48,880 | 54,090 |
| Gas oil | 1,779,134 | 1,958,298 | 2,412,466 | 2,507,906 | 3,342,514 | 4,073,429 |
| do. (bunkers) (a) | 206,194 | 88,686 | 234,389 | 255,647 | 298,857 | 232,473 |
| Fuel oil | 2,742,770 | 2,557,317 | 1,869,799 | 2,528,374 | 2,488,599 | 2,576,418 |
| do. (bunkers) (a) | 913,502 | 1,352,742 | 1,949,803 | 2,246,633 | 2,405,779 | 2,553,257 |
| Paraffin wax | 783 | 557 | 678 | 868 | 1,017 | 1,346 |
| Natural asphalt and bitumen | 7,500 | 8,955 | 9,322 | 9,038 | 8,346 | 9,007 |
| Pitch | 107,980 | 102,748 | 114,094 | 116,882 | 121,123 | 140,220 |
| Netherlands— | | | | | | |
| Aviation spirit (bunkers) (a) | 453 | 797 | 1,499 | 1,537 | 1,807 | 3,542 |
| Motor spirit | 2,326,815 | 1,956,761 | 2,407,071 | 2,548,248 | 2,818,378 | 2,780,236 |
| Kerosine | 514,854 | 566,235 | 573,198 | 607,625 | 631,326 | 558,292 |
| Gas oil | 2,041,032 | 2,155,325 | 2,779,299 | 2,577,081 | 2,659,159 | 2,264,160 |
| do. (bunkers) (a) | 324,676 | 259,254 | 335,332 | 455,390 | 415,683 | 330,132 |
| Fuel oil | 4,941,011 | 3,876,710 | 4,947,274 | 4,896,176 | 4,800,485 | 3,451,824 |
| do. (bunkers) (a) | 824,253 | 786,887 | 1,038,676 | 1,424,970 | 1,688,191 | 2,042,368 |
| Lubricating oil | 183,067 | 213,637 | 246,767 | 223,686 | 263,329 | 239,328 |
| Petroleum jelly | 3,121 | 5,245 | 4,083 | 4,944 | 6,104 | 6,315 |
| Paraffin wax | 7,262 | 4,564 | 16,018 | 17,272 | 9,128 | 10,854 |
| Ozokerite and ceresin (d) | 1,571 | 1,726 | 810 | 218 | 195 | 304 |
| Pitch | 78,471 | 90,925 | 132,274 | 225,607 | 230,106 | 364,785 |
| Natural asphalt | 8 | 17 | 176 | 31 | — | 43 |
| Petroleum coke | 20,183 | 36,042 | 43,297 | 36,495 | 54,335 | 54,713 |
| Norway— | | | | | | |
| Motor spirit | 875 | 881 | 910 | 72,225 | 146,112 | 102,204 |
| Kerosine | 15 | 267 | 8 | 4,962 | 12,559 | 7,977 |
| Fuel oil and solar oil | 238 | 316 | 386 | 546,812 | 1,017,629 | 1,060,212 |
| Lubricating oil | 10,592 | 12,159 | 15,776 | 15,865 | 17,944 | 18,613 |
| Poland— | | | | | | |
| Kerosine | — | 7,500 | 11,500 | 7,400 | n.a. | 14,271 |
| Fuel oils | 136,100 | 174,900 | 192,400 | 269,800 | n.a. | 545,841 |
| Lubricating oil | 3,029 | 6,276 | 3,490 | 3,235 | n.a. | 3,530 |
| Paraffin wax | 108 | 3,046 | 5,167 | 5,597 | n.a. | 2,974 |
| Asphalt | — | 5,277 | 2,370 | 1,306 | n.a. | 9,928 |
| Portugal (b)— | | | | | | |
| Motor spirit | 102,892 | 83,690 | 89,984 | 75,994 | 46,733 | 47,141 |
| Kerosine | 37,904 | 35,568 | 13,919 | 40,979 | 28,242 | 44,589 |
| Fuel oil | 159,857 | 164,004 | 167,924 | 98,214 | 73,056 | 113,912 |
| do. (bunkers) (a) | 1,216 | 18,233 | 5,718 | 4,394 | 1,818 | 3,428 |
| Lubricating oil, etc. | 1,622 | 2,135 | 2,020 | 1,660 | 1,591 | 2,363 |
| Roumania— | | | | | | |
| Motor spirit (c) | 2,222,200 | 2,526,000 | 2,426,900 | 2,044,100 | 1,841,600 | 1,764,500 |
| Kerosine | 656,300 | 686,600 | 665,000 | 607,100 | 592,000 | 412,600 |
| Gas oil | 1,456,100 | 1,368,900 | 1,266,000 | 1,740,000 | 1,621,800 | 1,583,400 |
| Fuel oil | 543,000 | 970,100 | 1,210,000 | 1,283,600 | 1,444,600 | 1,618,500 |
| Lubricating oil | 93,000 | 152,700 | 208,100 | 242,400 | 201,700 | 270,500 |
| Paraffin wax | 9,200 | 12,200 | 19,300 | 30,200 | 23,100 | 24,700 |
| Petroleum coke | 13,700 | 16,000 | 13,500 | 26,100 | 27,900 | 54,300 |
| Bitumen | 58,000 | 61,300 | 79,900 | 84,900 | 97,700 | 99,300 |
| Spain— | | | | | | |
| Motor spirit | 86,288 | 15,431 | 14,410 | 63,717 | 53,887 | 61,555 |
| Diesel oil | 38,264 | 4,322 | — | — | — | 216,834 |
| Fuel oil | — | 31,410 | 165,651 | 41,423 | 20,679 | 34,290 |

(a) Bunkers for foreign ships or aircraft only.

(b) See imports for amounts imported for bunkering national ships.

(c) Including white spirit and special kerosine.

(d) Including montan wax.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|-------------|-------------|----------------------|----------------------|----------------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sweden— | | | | | | |
| Motor spirit, etc. .. | 487 | 8,995 | 8,252 | 2,663 | 12,740 | 87,017 |
| White spirit | — | 591 | 818 | 510 | 1,194 | 9,372 |
| Kerosine | 505 | 3,406 | 16,407 | 2,361 | 66,727 | 117,593 |
| Fuel oil and gas oil .. | 2,309 | 75,833 | 48,713 | 49,492 | | |
| Lubricating oil and grease | 14,253 | 23,430 | 31,191 | 36,135 | 40,013 | 41,330 |
| Paraffin wax | 4 | 18 | 29 | 27 | 14 | 11 |
| Asphalt | 138 | 1 | 3 | 3 | 23 | 42 |
| Pitch | 27,764 | 25,830 | 30,571 | 30,430 | 36,742 | 30,599 |
| Switzerland— | | | | | | |
| Motor spirit | <i>n.a.</i> | <i>n.a.</i> | 1 | 16 | 3 | 567 |
| Fuel oil | <i>n.a.</i> | <i>n.a.</i> | 17 | 1 | 35 | 953 |
| Lubricating oil and grease | <i>n.a.</i> | <i>n.a.</i> | 327 | 1,077 | 1,222 | 419 |
| Petroleum coke | <i>n.a.</i> | <i>n.a.</i> | 4,802 | 3,713 | 8,733 | 15,570 |
| Asphalt and bitumen .. | 4,321 | 2,217 | 2,498 | 2,124 | 2,002 | 1,810 |
| U.S.S.R.— | | | | | | |
| Crude petroleum | 8,949,000 | 12,288,100 | 17,543,400 | 23,018,900 | 25,864,400 | 29,765,255 |
| Motor spirit | 1,862,800 | 2,582,600 | 2,773,500 | 3,532,700 | 3,104,800 | 3,289,415 |
| Kerosine | 836,700 | 905,000 | 1,076,100 | 1,058,800 | 1,274,400 | 1,248,663 |
| Diesel oil | 3,429,000 | 4,570,100 | 5,083,900 | 5,607,700 | 6,286,500 | 7,370,131 |
| Fuel oil | 2,413,100 | 4,207,500 | 5,201,300 | 6,748,500 | 7,614,400 | 8,440,948 |
| Lubricating oil and grease | 305,500 | 342,100 | 374,000 | 416,000 | 431,700 | 381,183 |
| Paraffin wax | 11,900 | 21,800 | 23,900 | 23,300 | 30,000 | 28,739 |
| Bitumen | 21,800 | 31,200 | 36,500 | 73,600 | 21,700 | 18,306 |
| Yugoslavia— | | | | | | |
| Crude petroleum | — | — | — | 175,692 | 551,867 | 447,903 |
| Aviation spirit | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 654 |
| Motor spirit | 37,197 | 36,716 | 30,509 | 16,084 | 25,239 | 9,771 |
| White spirit | 673 | 50 | 34 | 167 | 189 | 247 |
| Power kerosine | 589 | — | — | — | — | — |
| Aviation turbine fuel .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,536 |
| Gas oil | 9,157 | 7,794 | 3,555 | 3,974 | 151,928 | 3,904 |
| Fuel oil | 26,619 | 9,547 | 32,903 | 60,926 | 75,724 | 65,276 |
| Lubricating oil | 59 | 5,508 | 6,614 | 10,160 | 24,931 | 46,016 |
| Mastic asphalt | — | — | 197 | 394 | 12 | — |
| Algeria— | | | | | | |
| Crude petroleum | 376,243 | 821,801 | — | — | — | <i>n.a.</i> |
| Motor spirit (<i>d</i>) | 28,165 | 32,474 | 30,972 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oil | 1 | 36 | 2 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oil and gas oil (<i>d</i>) .. | 525,199 | 476,892 | 454,788 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | 11 | 12 | 3 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Angola— | | | | | | |
| Crude petroleum | — | — | 1 | — | 113,135 | 312,697 |
| Fuel oil | 15,449 | 10,049 | 45,188 | 71,690 | 85,451 | 168,262 |
| Canary Islands— | | | | | | |
| Motor spirit | 309,770 | 308,873 | (<i>a</i>) 199,054 | (<i>a</i>) 176,533 | (<i>a</i>) 318,511 | <i>n.a.</i> |
| Kerosine | 79,486 | 92,561 | (<i>a</i>) 59,018 | (<i>a</i>) 53,976 | (<i>a</i>) 61,422 | <i>n.a.</i> |
| Diesel (<i>c</i>) | 172,054 | 240,559 | (<i>a</i>) 99,796 | (<i>a</i>) 114,486 | (<i>a</i>) 147,944 | <i>n.a.</i> |
| do. (bunkers) (<i>c</i>) | 123,267 | 149,314 | 128,070 | 174,217 | 121,209 | <i>n.a.</i> |
| Fuel oil (<i>c</i>) | 603,430 | 583,105 | (<i>a</i>) 201,927 | (<i>a</i>) 201,776 | (<i>a</i>) 255,730 | <i>n.a.</i> |
| do. (bunkers) (<i>c</i>) | 216,421 | 246,518 | 256,055 | 288,411 | 345,175 | <i>n.a.</i> |
| Lubricating oil | 7,404 | 19,472 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Paraffin wax | 561 | 578 | (<i>a</i>) 225 | (<i>a</i>) 327 | (<i>a</i>) — | <i>n.a.</i> |
| Asphalt | 61,433 | 93,781 | (<i>a</i>) 25,413 | (<i>a</i>) 33,122 | (<i>a</i>) 52,144 | <i>n.a.</i> |
| Cape Verde Islands— | | | | | | |
| Fuel oil (bunkers) (<i>b</i>) .. | 455,992 | 465,019 | 488,376 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(*a*) Excluding exports to Spain and other Spanish Dependencies.

(*b*) Foreign produce. *See* imports.

(*c*) Including foreign produce.

(*d*) Bunkers of foreign produce.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|------------|------------|------------|------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Ceuta (b)— | | | | | | |
| Diesel oil | 50,487 | 13,139 | 12,425 | 6,096 | 441 | n.a. |
| do. (bunkers) | 403,350 | 466,720 | 282,988 | 105,679 | 489,887 | n.a. |
| Fuel oil (bunkers) .. | — | — | 130,543 | 412,199 | 414,437 | n.a. |
| Congo (Republic of)— | | | | | | |
| Crude petroleum | — | — | n.a. | 91,949 | 132,875 | n.a. |
| Egypt— | | | | | | |
| Crude petroleum | 1,104,963 | 1,063,877 | 854,045 | 1,780,886 | 2,802,844 | n.a. |
| Motor spirit | 2,331 | 27,059 | 82,466 | 46,764 | 266,709 | n.a. |
| Kerosine | 5,329 | 5,862 | 5,908 | 4,591 | 4,288 | n.a. |
| Gas and diesel oils .. | 8,711 | 7,335 | 7,393 | 7,323 | 12,184 | n.a. |
| Fuel oil | 3,437 | 3,250 | 65,313 | 29,347 | 171,508 | n.a. |
| do. (bunkers) (c) .. | 18,005 | 8,828 | 22,844 | 137,281 | 84,146 | n.a. |
| Gabon— | | | | | | |
| Crude petroleum | 443,327 | 768,447 | 795,990 | 726,155 | 804,758 | 928,871 |
| Libya— | | | | | | |
| Crude petroleum | — | — | — | 681,000 | 7,727,929 | 23,859,392 |
| South Africa— | | | | | | |
| Motor spirit | 41,976 | 27,943 | 9,897 | 47 | 4 | 137 |
| do. (bunkers) (a) .. | 8,856 | 5,826 | 7,030 | 5,318 | 13,121 | n.a. |
| Kerosine | 236 | 29,937 | 13,834 | 1,765 | 98 | 910 |
| Gas oil (bunkers) (a) .. | 8,871 | 10,227 | 17,085 | 8,896 | 16,723 | n.a. |
| Diesel oil | 35,068 | 70,504 | 32,764 | 45 | 153 | } 42,821 |
| do. (bunkers) | 55,576 | 37,299 | 2,642 | 4,705 | 4,324 | |
| do. (bunkers) (a) .. | 53,541 | 25,006 | 22,711 | 28,777 | 26,313 | n.a. |
| Fuel oil | 25,102 | 55,011 | 37,967 | 12,146 | 241 | } 396,460 |
| do. (bunkers) | 231,728 | 199,923 | 188,030 | 245,664 | 267,448 | |
| do. (bunkers) (a) .. | 181,209 | 160,384 | 166,517 | 210,537 | 152,062 | n.a. |
| Asphalt and bitumen .. | 30,812 | 58,106 | 50,127 | 43,414 | 43,263 | 26,855 |
| Sudan— | | | | | | |
| Aviation spirit (bunkers) (a) .. | 18,617 | 15,909 | n.a. | n.a. | n.a. | n.a. |
| Tunisia (bunkers)— | | | | | | |
| Aviation spirit | 212 | — | — | — | — | n.a. |
| Fuel oil | — | 55 | — | — | — | n.a. |
| Mexico— | | | | | | |
| Crude petroleum | 112,615 | 15,827 | 147,349 | 913,531 | 1,038,797 | 989,559 |
| Motor spirit | 3,859 | 3,816 | 4,789 | 40,920 | 3,115 | 20,141 |
| Kerosine | 458 | 21,666 | 1 | — | — | — |
| Fuel oil | 1,558,602 | 1,817,941 | 995,775 | 1,132,626 | 1,607,093 | 1,578,429 |
| do. (bunkers) | 76,030 | 81,335 | 78,938 | 22,168 | 46,189 | 55,118 |
| Gas oil | 8,715 | 10,295 | 10,654 | 7,132 | 5,778 | 37,166 |
| Paraffin wax | 865 | 3,839 | 1,270 | 704 | 1,581 | 1,664 |
| Natural gas (million cu. ft.) (b) | 46,211 | 51,488 | 46,989 | 51,756 | 49,888 | 47,621 |
| Netherlands Antilles— | | | | | | |
| Crude petroleum | 507,975 | 708,830 | 180,121 | 322,000 | 374,000 | 289,000 |
| Aviation spirit | 1,448,616 | 1,195,762 | 1,413,993 | 1,455,000 | 1,601,000 | 1,563,000 |
| Motor spirit | 3,471,890 | 2,492,642 | 2,568,964 | 2,524,000 | 2,424,000 | 2,508,000 |
| White spirit | 54,092 | 100,112 | 67,398 | 57,000 | 61,000 | 56,000 |
| Kerosine | 1,229,209 | 1,535,172 | 1,326,787 | 1,060,000 | 830,000 | 859,000 |
| Aviation turbine fuel .. | 2,340,282 | 2,006,922 | 1,660,951 | 2,155,000 | 2,264,000 | n.a. |
| Gas oil | 3,991,875 | 3,216,223 | 3,186,203 | 3,665,000 | 4,378,000 | 4,705,000 |
| Diesel oil | 1,926,428 | 1,848,607 | 1,470,405 | 1,296,000 | 1,302,000 | 1,465,000 |
| Fuel oil | 18,805,434 | 19,766,415 | 20,162,668 | 20,792,000 | 21,802,000 | 21,357,000 |
| Lubricating oil | 617,446 | 648,592 | 723,507 | 655,000 | 814,000 | 599,000 |
| Asphalt | 746,627 | 861,786 | 840,671 | 894,000 | 835,000 | 808,000 |
| United States— | | | | | | |
| Crude petroleum | 579,300 | 336,600 | 411,639 | 430,373 | 239,015 | 242,465 |
| Natural gasoline | 404 | 249 | 144 | 942 | 995 | 2,224 |
| Aviation spirit | 1,326,260 | 1,151,129 | 697,894 | 323,678 | 161,654 | 139,047 |
| Motor spirit | 644,359 | 397,333 | 261,408 | 77,085 | 62,343 | 91,183 |

(a) Foreign produce. See imports.
 (b) Imports into the United States.

(c) Bunkers for foreign ships only.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States <i>(cont.)</i> — | | | | | | |
| Other finished light products | 121,601 | 127,471 | 125,301 | 128,492 | 146,658 | <i>n.a.</i> |
| Kerosine | 145,140 | 118,816 | 75,106 | 26,767 | 39,680 | 65,321 |
| Aviation turbine fuel | 22,274 | 22,221 | 14,382 | 15,452 | 10,585 | 21,173 |
| Gas oil and distillate fuel oil | 2,400,356 | 1,775,327 | 1,366,620 | 957,356 | 1,248,478 | 2,353,099 |
| Residual fuel oil | 3,298,243 | 3,109,005 | 2,742,096 | 2,080,066 | 1,874,269 | 2,228,511 |
| Fuel oil (bunkers) | 12,193,000 | 12,225,000 | 11,835,000 | 10,801,000 | 9,837,000 | 9,168,000 |
| Lubricating oil | 1,687,949 | 1,826,293 | 2,079,634 | 2,248,462 | 2,326,245 | 2,444,273 |
| Transformer oil | 24,743 | 31,021 | 34,229 | 43,181 | 43,188 | 51,194 |
| Greases | 45,995 | 51,998 | 51,885 | 47,551 | 52,678 | 50,244 |
| Paraffin wax | 91,368 | 102,163 | 137,697 | 123,440 | 144,801 | 148,049 |
| Petroleum jelly | 34,252 | 34,812 | 34,613 | 32,911 | 31,884 | 32,100 |
| Natural asphalt and bitumen | 24,591 | 26,499 | 28,571 | 29,455 | 40,790 | 36,478 |
| Other asphalt, etc. | 175,854 | 132,007 | 127,753 | 82,793 | 116,384 | 106,467 |
| Petroleum coke | 786,751 | 835,778 | 1,224,644 | 1,298,341 | 1,331,473 | 1,921,902 |
| Liquefied petroleum gases | 240,809 | 189,902 | 252,196 | 299,434 | 326,923 | 387,870 |
| Natural gas (<i>million cu. ft.</i>) | 38,719 | 18,413 | 11,332 | 10,747 | 14,835 | 15,964 |
| Argentina— | | | | | | |
| Crude petroleum | <i>n.a.</i> | 266 | 413 | 31,502 | 250,388 | 100,260 |
| Kerosine | <i>n.a.</i> | 2 | <i>n.a.</i> | 1,997 | 24,758 | 7,482 |
| Gas oil | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 33,458 |
| Fuel oil | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 32,037 | 488,024 | 610,169 |
| Paraffin wax | <i>n.a.</i> | 49 | 606 | 20 | 430 | 790 |
| Asphalt | 48 | 80 | 1,808 | 348 | 1,092 | 3,271 |
| Grahamite ("Rafaelite") | 1,832 | 1,553 | 2,125 | 1,152 | 713 | 828 |
| Bolivia— | | | | | | |
| Crude petroleum | 149,900 | 119,854 | 130,912 | 83,514 | 106,000 | <i>n.a.</i> |
| Motor spirit | 16,739 | 355 | 3,491 | 7,035 | 7,000 | <i>n.a.</i> |
| Kerosine | 1,141 | — | 16 | — | 600 | <i>n.a.</i> |
| Brazil— | | | | | | |
| Crude petroleum | 1,125,859 | 1,444,260 | 579,081 | 1,035,867 | 292,855 | 354,445 |
| Fuel oil | 183,018 | 44,204 | 59,057 | 73,643 | 75,926 | 31,732 |
| Chile— | | | | | | |
| Crude petroleum | — | 66 | — | — | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Crude petroleum | 3,359,987 | 3,917,684 | 4,284,315 | 3,800,199 | 3,348,082 | 4,295,293 |
| Gas and diesel oil | — | — | 1,220 | — | 2,181 | 17,071 |
| Fuel oil | 639,271 | 627,469 | 576,704 | 395,166 | 597,856 | 344,781 |
| Ecuador— | | | | | | |
| Crude petroleum | 91,326 | 37,316 | — | — | 145,892 | 160,972 |
| Peru— | | | | | | |
| Crude petroleum | 315,593 | 291,416 | 331,032 | 330,958 | 362,406 | 370,882 |
| Natural gasoline | 6,450 | 1,613 | 1,501 | 919 | 3,168 | — |
| Aviation spirit | 37,677 | 52,081 | 54,838 | 6,580 | 1,654 | — |
| Motor spirit | 31,026 | 33,089 | 22,492 | 4,894 | 357 | 39 |
| White spirit | 58 | 515 | — | — | — | — |
| Kerosine | 93,312 | 101,518 | 83,214 | 36,513 | 671 | 322 |
| Gas oil (a) | 71,746 | 41,232 | 168,805 | 188,978 | 112,643 | 24,096 |
| Fuel oil and diesel oil | 108,253 | 94,026 | 80,485 | 68,568 | 105,617 | 75,851 |
| do. (bunkers) | 25,524 | 22,287 | 30,862 | 36,437 | 25,074 | 27,228 |
| Lubricating oil and grease | 843 | 732 | 109 | 331 | 1,211 | 2,585 |
| Asphalt | — | — | — | 20 | — | — |

(a) Including bunkers.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long ton

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Uruguay (a)— | | | | | | |
| Motor spirit, etc. .. | 4,000 | 5,000 | 10,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine .. | 100 | 100 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Gas oil and diesel oil .. | 40,000 | 32,000 | 48,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oil .. | 159,000 | 98,000 | 201,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela— | | | | | | |
| Crude petroleum .. | 96,039,208 | 101,561,805 | 102,975,795 | 104,045,485 | 113,757,962 | 113,892,005 |
| Motor spirit .. | 1,853,480 | 2,326,159 | 2,099,542 | 2,265,766 | 2,349,614 | 2,677,331 |
| Kerosine .. | 818,929 | 790,185 | 601,461 | 877,551 | 1,160,292 | 1,208,577 |
| Aviation turbine fuel .. | <i>n.a.</i> | 16,117 | 185,740 | 263,987 | 552,917 | 218,864 |
| Gas oil .. | 3,513,975 | 3,368,399 | 2,801,104 | 3,348,942 | 3,739,665 | 4,794,759 |
| Diesel oil .. | 1,702,140 | 1,957,551 | 2,872,191 | 2,558,107 | 2,759,686 | 2,898,506 |
| Fuel oil .. | 19,726,698 | 22,549,506 | 26,848,862 | 27,826,224 | 29,619,033 | 30,836,490 |
| Lubricating oil .. | 164,783 | 150,600 | 208,144 | 194,323 | 242,623 | 259,662 |
| Paraffin wax .. | <i>n.a.</i> | 12,535 | 15,503 | — | — | — |
| Asphalt .. | 693,981 | 435,256 | 453,222 | 490,927 | 539,476 | 500,893 |
| Burma— | | | | | | |
| Paraffin wax .. | 5,457 | 6,554 | 5,133 | 7,617 | 9,649 | 10,661 |
| Formosa— | | | | | | |
| Motor spirit, etc. .. | 1,855 | 1,114 | 836 | 10,666 | 35,818 | — |
| Fuel oil .. | — | — | 11,614 | 39,018 | 32,788 | 50,304 |
| Asphalt .. | 4,931 | 9,395 | 6,933 | 31,573 | 36,745 | 27,639 |
| Indonesia— | | | | | | |
| Crude petroleum .. | 7,226,632 | 4,373,664 | 7,298,643 | 9,577,801 | 5,445,685 | <i>n.a.</i> |
| Motor spirit .. | 1,401,743 | 1,388,264 | 1,477,656 | 1,149,511 | 1,147,770 | <i>n.a.</i> |
| White spirit .. | 70,250 | 6,975 | — | — | — | <i>n.a.</i> |
| Kerosine .. | 380,543 | 487,694 | 484,569 | 427,653 | 484,418 | <i>n.a.</i> |
| Gas and diesel oils .. | 1,156,930 | 1,077,915 | 1,159,883 | 913,687 | 977,295 | <i>n.a.</i> |
| do. do. (bunker oil) | 78,088 | 85,878 | 104,131 | 123,817 | 82,538 | <i>n.a.</i> |
| Fuel oil .. | 2,483,162 | 2,484,688 | 2,753,259 | 2,423,030 | 3,323,435 | <i>n.a.</i> |
| do. (bunker oil) | 284,492 | 395,832 | 337,582 | 517,113 | 337,908 | <i>n.a.</i> |
| Lubricating oil .. | 31,693 | 52,585 | 41,568 | 20,146 | 26,194 | <i>n.a.</i> |
| Paraffin wax .. | 42,386 | 47,874 | 52,160 | 61,278 | 61,766 | <i>n.a.</i> |
| Iran (b)— | | | | | | |
| Crude petroleum .. | 23,974,019 | 29,725,588 | 31,932,790 | 34,368,680 | 44,302,500 | 44,521,989 |
| Motor spirit .. | 2,005,087 | 1,856,594 | 2,936,004 | 4,054,836 | 3,317,500 | 1,941,226 |
| Kerosine .. | 1,653,896 | 1,673,307 | 1,268,221 | 1,268,350 | 855,100 | 1,295,902 |
| Gas oil .. | 1,122,774 | 1,160,312 | 1,027,264 | 1,056,240 | 1,112,400 | 1,421,767 |
| Diesel oil .. | 1,703,659 | 921,809 | 863,817 | 888,160 | 593,000 | 557,483 |
| Fuel oil .. | 5,381,847 | 5,288,315 | 6,888,959 | 6,659,565 | 6,344,800 | <i>n.a.</i> |
| Iraq— | | | | | | |
| Crude petroleum .. | 33,255,000 | 39,169,282 | 44,490,282 | 45,851,135 | 45,937,931 | 53,237,116 |
| Motor spirit .. | — | 722 | 560 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine .. | 563 | 172 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Aviation spirit (foreign produce) (bunkers) .. | 49,701 | 58,153 | 94,662 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Motor spirit .. | 207,892 | 237,502 | 262,060 | 460,436 | 319,111 | 238,943 |
| Kerosine .. | 4 | 14,887 | 72,276 | 40,409 | 68,400 | 84,275 |
| Gas oil .. | — | 14,816 | 82,761 | 77,450 | 75,022 | 75,125 |
| Fuel oil, etc. (bunkers)— | | | | | | |
| Domestic produce .. | 118,383 | 108,645 | 192,612 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Foreign produce .. | 1,706,886 | 2,413,814 | 3,775,913 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oils .. | 570 | 2,667 | 5,229 | 6,680 | 10,675 | 401,245 |
| Paraffin wax .. | 12,592 | 11,656 | 11,310 | 9,080 | 8,355 | 8,270 |
| Asphalt and pitch .. | 2,056 | 30,433 | 28,885 | 67,570 | 81,758 | 173,592 |
| Jordan— | | | | | | |
| Motor spirit .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 440 | 691 | 484 |
| Kerosine .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 56 |
| Asphalt and bitumen .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 9,094 |

(a) Bunkers on foreign ships only.

(b) Years ended March 20 following that stated.

EXPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------------|--------------|--------------|------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Kuwait— | | | | | | |
| Crude petroleum .. | 63,090,053 | 61,279,115 | 71,488,439 | 72,997,668 | 81,298,330 | 85,323,283 |
| Light distillate .. | 750,347 | 785,310 | 667,884 | 600,096 | 565,000 | 610,000 |
| Gas oil .. | 809,620 | 960,061 | 1,478,982 | 1,460,859 | 1,795,000 | 2,144,000 |
| Diesel oil .. | 113,743 | 382,536 | 271,357 | 48,348 | 91,000 | 26,000 |
| do. (bunkers) .. | 337,835 | 224,484 | 172,655 | 141,201 | (d) | (d) |
| do. do. (c) .. | 18,442 | — | — | — | — | — |
| Fuel oil .. | 1,137,584 | 1,697,631 | 2,176,610 | 2,094,033 | 2,035,000 | 2,064,000 |
| do. (bunkers) .. | 2,199,515 | 2,357,238 | 2,911,169 | 2,947,494 | 3,612,000 | 3,833,000 |
| do. do. (c) .. | 64,057 | — | — | — | — | — |
| Netherlands New Guinea— | | | | | | |
| Crude petroleum .. | 262,782 | 241,106 | 244,579 | 164,791 | n.a. | n.a. |
| Neutral Zone (a)— | | | | | | |
| Crude petroleum .. | (b)4,000,000 | (b)4,640,000 | (b)5,605,000 | 7,463,000 | 9,394,000 | 13,273,000 |
| Fuel oil .. | n.a. | (b) 875,000 | (b) 715,000 | 975,000 | 2,478,000 | 2,288,000 |
| Saudi Arabia— | | | | | | |
| Crude petroleum .. | 41,085,199 | r44,758,739 | 49,948,993 | 55,955,606 | 62,089,088 | 66,472,079 |
| Aviation spirit .. | | — | 2,300 | 18,700 | 25,200 | 12,706 |
| Motor spirit .. | | 724,700 | 956,200 | 811,300 | 749,800 | 968,200 |
| Kerosine .. | | 545,600 | 710,900 | 611,000 | 414,000 | 384,500 |
| Aviation turbine fuel .. | n.a. | 402,400 | 317,900 | 411,600 | 562,200 | 566,400 |
| Diesel oil .. | | 1,316,900 | 1,264,900 | 1,504,700 | 1,450,400 | 1,871,000 |
| Fuel oil .. | | r2,959,200 | r 4,633,000 | r5,332,400 | 5,339,500 | 5,759,700 |
| Syria— | | | | | | |
| Natural asphalt .. | 625 | 217 | n.a. | n.a. | n.a. | n.a. |

(a) Neutral Zone of Kuwait and Saudi Arabia.

(c) Foreign produce. See imports.

(b) Estimated.

(d) Included with fuel oil.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS*

(Less Re-exports)

Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|------------|------------|------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Crude petroleum (g) .. | 33,744,783 | 39,238,039 | 44,611,161 | 48,900,509 | 52,240,771 | 54,173,381 |
| Aviation spirit (a) .. | 293,946 | 452,990 | 259,636 | 289,035 | 185,832 | 170,971 |
| Aviation turbine fuel .. | 19,703 | 100,205 | 96,447 | 144,719 | 103,576 | 51,227 |
| Motor spirit .. | 1,933,155 | 2,242,266 | 2,103,253 | 2,192,403 | 2,385,290 | 2,888,706 |
| Other spirit .. | 123,755 | 118,514 | 305,056 | 342,670 | 707,927 | n.a. |
| Kerosine .. | 783,090 | 1,045,003 | 649,562 | 482,884 | 708,049 | f 1,846,566 |
| Aviation jet fuel .. | 328,223 | 235,908 | 75,081 | 81,527 | 183,534 | 216,089 |
| Fuel oil (a) .. | 4,819,310 | 5,217,358 | 7,415,901 | 5,310,629 | 7,317,177 | 8,474,633 |
| Diesel oil .. | 85,332 | 233,923 | 76,042 | 121,856 | 170,544 | 154,312 |
| Gas oil .. | 1,874,365 | 1,980,289 | 2,116,763 | 2,042,461 | 2,164,449 | 2,766,285 |
| Lubricating oil .. | 403,480 | 410,355 | 489,117 | 515,185 | 503,072 | 528,036 |
| Greases .. | 3,710 | 3,710 | 3,489 | 2,503 | 2,805 | 2,589 |
| Other oils .. | 9,227 | 203,759 | (c) 12,677 | 68,433 | 205,625 | 26,837 |
| Mineral jelly .. | 5,381 | 5,538 | 6,294 | 4,824 | 4,583 | 3,691 |
| Paraffin wax .. | 30,216 | 32,383 | 35,545 | 31,682 | 23,967 | 22,730 |
| Other petroleum wax .. | 6,949 | 54,605 | 58,677 | 53,579 | 836,787 | 764,142 |
| Petroleum coke .. | 49,333 | 66,114 | 61,459 | 44,272 | 58,869 | 68,012 |
| Asphalt and bitumen (d) | 68,614 | (d) 61,694 | (d) 75,102 | (d) 83,866 | (d) 86,040 | 84,209 |
| Channel Islands— | | | | | | |
| Aviation spirit .. | 4,876 | 3,977 | 4,503 | 3,558 | 3,975 | 3,427 |
| Motor spirit .. | 19,823 | 21,317 | 23,649 | 25,777 | 26,369 | 27,631 |
| Other spirit (b) .. | 69 | 65 | 657 | 42 | 309 | 299 |
| Kerosine .. | 4,378 | 4,906 | 7,223 | 9,854 | 12,796 | 14,037 |
| Gas and fuel oil .. | 55,796 | 68,485 | 93,220 | 100,449 | 126,333 | 167,218 |
| Lubricating oil .. | 1,446 | 1,493 | 1,406 | 1,504 | 1,679 | 1,645 |
| Greases (b) .. | 17 | 21 | 47 | 26 | 27 | 48 |
| Gibraltar (e)— | | | | | | |
| Aviation spirit .. | } 5,000 | } 5,000 | } 5,000 | 7,540 | 4,808 | n.a. |
| Motor spirit .. | | | | n.a. | n.a. | n.a. |
| Diesel oil .. | | | | 10,441 | 11,470 | } 192,000 |
| Fuel oil .. | | | | 3,288 | 3,288 | |
| Lubricating oil .. | | | | 1,075 | 1,161 | |
| Kerosine .. | 300 | 250 | 220 | 41 | 50 | 65 |
| Malta— | | | | | | |
| Aviation spirit (a) .. | 22,831 | 16,407 | 12,360 | 6,972 | 9,998 | 14,428 |
| Motor spirit .. | 16,646 | 18,258 | 18,674 | 20,330 | 16,167 | 21,445 |
| Aviation turbine fuel (a) .. | 809 | 43,435 | 37,005 | 26,097 | 30,595 | 47,607 |
| Kerosine .. | 75,073 | 23,069 | 27,624 | 27,339 | 25,137 | 24,112 |
| Fuel oil (a) .. | r 33,045 | r 62,667 | r 39,272 | r 38,701 | 55,251 | 58,597 |
| Gas oil (a) .. | 17,054 | 19,517 | 17,638 | 17,453 | 17,863 | 18,301 |
| Lubricating oil .. | 1,068 | 1,438 | 1,301 | 1,367 | 1,532 | 1,146 |
| Paraffin wax .. | 330 | 373 | 318 | n.a. | 441 | 421 |
| Bitumen .. | 1,025 | 1,451 | 1,302 | n.a. | 1,439 | 2,038 |
| Gambia— | | | | | | |
| Aviation spirit .. | (c) 87 | 39 | — | 284 | — | — |
| Motor spirit .. | 2,598 | 2,310 | 1,920 | 2,938 | 3,129 | 3,438 |
| Kerosine .. | 822 | 538 | 475 | 667 | 698 | 776 |
| Aviation turbine fuel .. | 16 | (c) 76 | (c) 32 | 415 | 175 | — |
| Other fuel oils .. | 512 | (c) 3,484 | — | — | 115 | 14 |
| Gas oil .. | 1,031 | 2,060 | 1,446 | 2,808 | 2,908 | 3,001 |
| Diesel oil .. | 2,806 | 751 | 1,591 | 521 | 553 | 587 |
| Lubricating oil .. | 293 | 206 | 272 | 229 | 354 | 378 |
| Asphalt and bitumen .. | 243 | 295 | 70 | 296 | 867 | n.a. |

*Excluding the United Kingdom, the following rates have been used for converting Imperial gallons to long tons: Aviation spirit 315, Motor spirit 305, Aviation turbine fuel 275, Kerosine 275, Gas oil 260, Diesel oil 256, Fuel oil 240, Lubricating oil 250, Crude petroleum 245, Asphalt 220, Road oil 220.

(a) Including imports for bunkering purposes.

See exports.

(b) Jersey only.

(c) Excess of re-exports.

(d) Natural.

(e) Excluding imports for bunkers.

(f) Including white spirit.

(g) Including partly refined.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|----------|----------|----------|-----------|--------------|--------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Ghana— | | | | | | |
| Crude petroleum .. | — | — | — | 2 | — | 205,594 |
| Aviation spirit (b) .. | 5,617 | 4,146 | 5,838 | 2,518 | 3,192 | 2,859 |
| Motor spirit .. | 136,740 | 125,156 | 138,466 | 103,127 | 130,776 | 92,810 |
| White spirit .. | 40 | 243 | 1,300 | 1,312 | 2 | 18 |
| Kerosine .. | 40,848 | 45,690 | 49,742 | r 34,498 | 45,126 | 26,421 |
| Aviation turbine fuel .. | 198 | 219 | 839 | 4,591 | 14,161 | 12,866 |
| Fuel oil (b) .. | r 68,923 | 46,976 | 62,731 | 25,260 | 29,047 | 52,516 |
| Gas oil (b) .. | 103,906 | 112,938 | 165,427 | r 145,518 | 181,824 | 156,137 |
| Diesel oil .. | r 4,457 | 29,376 | 7,274 | r 131,675 | 29,001 | 14,811 |
| Lubricating oil (b) .. | 9,686 | 12,004 | 12,678 | 12,423 | 15,424 | 14,359 |
| Greases .. | 480 | 475 | 561 | 540 | 752 | 1,398 |
| Petroleum jelly .. | 8 | 6 | 53 | 80 | 823 | 1,095 |
| Asphalt and bitumen .. | 8,859 | 13,910 | 16,027 | 15,415 | 39,136 | 7,480 |
| Kenya— | | | | | | |
| Crude petroleum .. | — | — | — | — | — | 217,566 |
| Aviation spirit (b) .. | 16,107 | 10,774 | 20,450 | 14,959 | 13,358 | 15,033 |
| Motor spirit (b) .. | 113,100 | 109,227 | 110,711 | 106,527 | 117,334 | 105,171 |
| Kerosine .. | 63,892 | 43,391 | 63,878 | 74,264 | (b)(d)96,570 | (b)(d)89,171 |
| Gas, diesel, fuel oils (b) .. | 531,181 | 594,422 | 603,302 | 573,589 | 601,182 | 576,269 |
| Lubricating oil (b) .. | 13,034 | 1,952 | 9,127 | 14,296 | 13,256 | 5,455 |
| Greases .. | 647 | 355 | 649 | 922 | 832 | 679 |
| Petroleum jelly and paraffin wax .. | 209 | 215 | 312 | 354 | 459 | 617 |
| Asphalt .. | 9,832 | 17,726 | 12,783 | 16,178 | 16,910 | 9,493 |
| Mauritius— | | | | | | |
| Aviation spirit (b) .. | 2,279 | 1,676 | 2,245 | 1,293 | 2,664 | 1,225 |
| Motor spirit .. | 24,680 | 28,426 | 27,559 | 12,109 | 23,509 | 24,161 |
| Aviation turbine fuel (b) .. | 3,590 | 3,037 | 254 | 1,361 | 836 | 1,620 |
| Kerosine .. | 1,586 | 1,436 | 4,264 | 2,797 | 5,491 | 5,165 |
| Lubricating oils .. | 1,586 | 1,436 | 1,779 | 2,065 | 1,881 | 1,792 |
| Gas, diesel, fuel oils (b) .. | 22,274 | 28,058 | 22,576 | 39,861 | 47,990 | 34,617 |
| Grease .. | 97 | 156 | 109 | 147 | 200 | 185 |
| Asphalt and pitch .. | r 2,921 | r 2,333 | r 4,524 | r 2,752 | 2,345 | 2,739 |
| Asphalt, natural .. | 714 | 515 | 479 | 1,333 | 417 | 498 |
| Nigeria— | | | | | | |
| Aviation spirit .. | 30,976 | 17,091 | 28,939 | 21,624 | (a) 3,919 | (a) 19,374 |
| Motor spirit .. | 160,041 | 193,437 | 194,669 | 211,180 | 701,905 | 228,929 |
| White spirit .. | 160 | (a) 5 | 222 | 101 | 21,932 | 23,736 |
| Aviation turbine fuel .. | 4,145 | 7,835 | 6,900 | 28,394 | 43,712 | 20,730 |
| Kerosine .. | 69,531 | 96,825 | 94,502 | 102,358 | 475,060 | 132,889 |
| Gas oil (b) .. | 31,414 | 78,821 | 100,453 | 169,050 | 185,837 | 259,010 |
| Diesel oil (b) .. | 103,556 | 76,141 | 91,293 | 45,150 | 26,256 | 6,866 |
| Fuel oil (b) .. | 36,309 | 58,856 | 58,630 | 166,526 | 140,383 | 199,517 |
| Lubricating oil .. | r 11,269 | r 13,806 | r 18,540 | r 18,100 | 20,744 | 22,916 |
| Petroleum jelly .. | 413 | 230 | 162 | 41 | 1,159 | 1,734 |
| Asphalt and bitumen .. | 25,789 | 32,661 | 41,849 | 11,634 | 19,329 | 9,739 |
| Rhodesia and Nyasaland— | | | | | | |
| Aviation spirit .. | 10,944 | 10,062 | 11,486 | 10,267 | 9,417 | 7,542 |
| Motor spirit .. | 240,589 | 239,523 | 237,895 | 244,723 | 248,642 | 237,509 |
| Kerosine .. | 40,881 | 37,033 | 40,607 | 40,867 | 42,782 | 44,564 |
| Aviation jet fuel .. | 15,061 | 13,373 | 17,640 | 25,878 | 32,664 | 35,661 |
| White spirit .. | 15,061 | n.a. | 1,672 | 2,251 | 2,253 | 2,260 |
| Other oils .. | 15,061 | 2,482 | 2,203 | 1,396 | 1,372 | 1,052 |
| Gas oil .. | 167,493 | 154,371 | 164,331 | 174,185 | 191,788 | 202,243 |
| Fuel oil .. | 167,493 | 154,371 | 164,331 | 174,185 | 191,788 | 202,243 |
| Lubricating oil .. | 19,034 | 18,335 | 20,234 | 17,528 | 21,153 | 18,263 |
| Greases (c) .. | 1,705 | 2,063 | 2,050 | 1,803 | 2,040 | 1,601 |
| Paraffin wax .. | 1,060 | 1,210 | 1,637 | 1,462 | 2,022 | 1,437 |
| Asphalt and bitumen .. | 23,480 | 25,776 | 29,384 | 17,288 | 21,254 | 17,406 |

(a) Excess of re-exports.

(b) Including imports for bunkering purposes.

See exports.

(c) Including mineral jelly.

(d) Including aviation turbine fuel.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|------------|------------|------------|------------|--------------|--------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| St. Helena— | | | | | | |
| Motor spirit | 252 | 173 | 260 | 191 | 220 | 270 |
| Kerosine | 125 | 46 | 104 | 97 | 130 | 148 |
| Fuel oils | 135 | 78 | 168 | 141 | 208 | 115 |
| Lubricating oil | 18 | 7 | 6 | 10 | 15 | 17 |
| Seychelles— | | | | | | |
| Motor spirit | 263 | 244 | 378 | 388 | 370 | 521 |
| Kerosine | 269 | 271 | 349 | 372 | 402 | 544 |
| Fuel oil | 302 | 227 | 584 | 650 | 860 | 1,660 |
| Sierra Leone— | | | | | | |
| Aviation spirit (a) | 718 | 200 | 455 | 1,686 | 1,454 | 1,391 |
| Motor spirit | 16,499 | 21,109 | 15,377 | 19,372 | 21,571 | 21,680 |
| Aviation turbine fuel (a) | — | 39 | — | — | 802 | 1,924 |
| Kerosine | 9,627 | 13,713 | 10,800 | 11,102 | 13,574 | 12,886 |
| Gas oil (a) | 5,025 | 15,194 | 7,069 | 138,696 | 158,084 | 131,787 |
| Diesel oil (a) | 76,077 | 81,450 | 122,733 | | | |
| Fuel oil (a) | 151,617 | 164,863 | 159,929 | 219,515 | 179,422 | 177,673 |
| Lubricating oil | 1,587 | 1,331 | 1,964 | 2,134 | 2,317 | 2,475 |
| Asphalt and bitumen | 4,034 | 1,788 | 1,587 | 2,900 | 2,972 | 5,676 |
| Tanganyika— | | | | | | |
| Aviation spirit (a) | 2,724 | 3,174 | 3,481 | 3,047 | 4,603 | 1,512 |
| Motor spirit | 72,204 | 66,926 | 64,085 | 58,566 | 63,316 | 61,057 |
| Kerosine | 25,429 | 30,351 | 29,741 | 30,636 | 37,525 | 39,115 |
| Gas, diesel, fuel oils (a) | 172,645 | 138,339 | 184,033 | 165,573 | 175,379 | 205,094 |
| Lubricating oil | 6,320 | 4,886 | 6,441 | 6,048 | 8,086 | 6,400 |
| Greases | 503 | 506 | 381 | 650 | 605 | 513 |
| Petroleum jelly and paraffin wax | 75 | 62 | 25 | 47 | 91 | 83 |
| Asphalt | 4,237 | 5,367 | 3,960 | 7,699 | 3,390 | 4,600 |
| Uganda— | | | | | | |
| Aviation spirit (a) | 4,548 | 3,487 | 3,341 | 3,703 | 3,334 | 3,265 |
| Motor spirit | 55,535 | 55,805 | 57,820 | 54,719 | 55,768 | 62,152 |
| Kerosine | 22,027 | 22,457 | 23,315 | 27,536 | (a)(c)30,108 | (a)(c)32,828 |
| Gas, diesel, fuel oils | 46,142 | 38,612 | 38,586 | 37,289 | 42,658 | 44,465 |
| Lubricating oil | 3,745 | 3,648 | 3,671 | 3,544 | 3,797 | 3,874 |
| Greases | 339 | 422 | 419 | 302 | 362 | 305 |
| Petroleum jelly and paraffin wax | 64 | 70 | 85 | 93 | 126 | 156 |
| Asphalt | 4,046 | 2,891 | 977 | 4,568 | 1,755 | 709 |
| Zanzibar— | | | | | | |
| Aviation and motor spirit | 4,043 | 3,780 | 4,155 | 4,034 | 4,216 | 4,342 |
| Kerosine, etc. | 3,031 | 3,241 | 3,266 | 2,372 | 2,804 | 2,771 |
| Fuel oils | 3,230 | 3,599 | 3,337 | 3,711 | 5,031 | 3,154 |
| Canada— | | | | | | |
| Crude petroleum | 14,862,686 | 16,469,806 | 17,937,090 | 19,035,569 | 19,216,815 | 21,102,981 |
| Tops for refiners | 231,621 | — | — | — | — | 6,689 |
| Aviation spirit | 262,621 | 314,011 | 193,585 | 115,909 | 75,947 | 38,818 |
| Motor spirit | 332,222 | 311,588 | 101,729 | 84,493 | 90,496 | 242,898 |
| Kerosine, etc. | 37,807 | 74,946 | 108,926 | 33,485 | 34,782 | 25,058 |
| Lubricating oils | 139,433 | 163,686 | 163,903 | 153,765 | 150,563 | 157,164 |
| Diesel oil | 229,228 | 222,234 | 368,456 | 324,282 | 373,528 | 382,818 |
| Fuel oil | 2,763,151 | 3,909,523 | 3,511,635 | 2,962,946 | 3,094,324 | 3,416,641 |
| do. (b) | 2,388 | 5,891 | 1,966 | 2,518 | 1,269 | — |
| Other petroleum oils | 4,374 | 3,740 | 3,992 | 7,208 | 5,178 | 5,226 |
| Liquefied petroleum gas | 36,275 | 7,245 | 12,052 | 7,813 | 6,719 | 8,945 |
| Grease | 6,960 | 7,415 | 7,371 | 6,911 | 6,944 | 6,534 |
| Paraffin wax, etc. | 19,921 | 21,723 | 18,614 | 18,610 | (d) 17,006 | (d) 16,751 |
| Asphaltum oil, etc. | 2,495 | 4,194 | 5,980 | 5,565 | 6,292 | 13,224 |

(a) Including imports for bunkering purposes. See exports.

(b) Ex warehoused, for ships' stores.

(c) Including aviation turbine fuel.

(d) Paraffin wax only.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|------------|----------|-------------|----------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Canada <i>(cont.)</i> — | | | | | | |
| Asphalt | 23,231 | 31,639 | 24,743 | 28,289 | 15,397 | 38,082 |
| Petroleum coke | 268,073 | 281,011 | 360,130 | 326,557 | 301,846 | 328,943 |
| Other products | 89,646 | 95,305 | 129,396 | 142,852 | 138,928 | 137,647 |
| Natural gas (<i>million cubic feet</i>) | 34,716 | 11,963 | 5,571 | 5,574 | 5,575 | 6,877 |
| Antigua— | | | | | | |
| Aviation spirit | 1,919 | 2,265 | 1,437 | 2,906 | 2,888 | <i>n.a.</i> |
| Motor spirit | 2,493 | 2,343 | 2,871 | 3,339 | 3,243 | <i>n.a.</i> |
| Kerosine | 1,582 | 1,710 | 4,061 | 5,170 | 9,929 | <i>n.a.</i> |
| Fuel oils | 3,928 | 3,660 | 3,657 | 5,988 | 6,745 | <i>n.a.</i> |
| Lubricating oil | 249 | 574 | 163 | 378 | 100 | <i>n.a.</i> |
| Bahamas— | | | | | | |
| Motor spirit | 23,623 | 31,266 | 35,738 | 43,980 | 40,174 | 42,357 |
| Kerosine | 7,058 | 10,916 | 11,171 | 13,018 | 10,233 | 8,182 |
| Fuel oils | 26,029 | 42,521 | 41,246 | 59,900 | 88,204 | 80,258 |
| Lubricating oil | 540 | 928 | 964 | 1,492 | 1,112 | 1,220 |
| Barbados— | | | | | | |
| Crude petroleum | 5,581 | 8,816 | 10,542 | 23,218 | <i>n.a.</i> | 29,266 |
| Aviation spirit (<i>b</i>) | 1,223 | 1,906 | 2,316 | 2,232 | 2,252 | 2,512 |
| Motor spirit | 15,217 | 14,033 | 14,879 | 10,965 | 14,977 | 21,725 |
| Kerosine (<i>b</i>) (<i>c</i>) | 11,375 | 11,811 | 13,760 | 14,198 | 15,753 | 17,850 |
| Gas oil and diesel oil (<i>b</i>) | } r 13,864 | r 22,932 | r 19,764 | r 16,384 | 221,696 | 262,301 |
| Fuel oil (<i>b</i>) | | | | | | |
| Lubricating oil .. .. |  |  |  |  |  |  | 812 | 1,165 | 559 | 962 | 668 | 862 |
| Bermuda (<i>b</i>)— | | | | | | |
| Aviation and motor spirits | 80,806 | 119,539 | 93,905 | 96,264 | 70,859 | 59,517 |
| Aviation turbine fuel .. | 24,515 | 26,528 | 27,985 | 38,113 | 43,838 | 37,794 |
| Kerosine | 3,242 | 21,253 | 14,872 | 22,069 | 22,768 | 16,583 |
| Diesel oil | 22,305 | 31,229 | <i>n.a.</i> | 41,375 | 48,411 | 40,413 |
| Fuel oil | 10,808 | 9,304 | 18,453 | 19,974 | 12,349 | 22,759 |
| Lubricating oil | 1,770 | 1,300 | 901 | 957 | 1,025 | <i>n.a.</i> |
| Asphalt | 865 | 1,990 | 1,884 | 577 | 1,614 | <i>n.a.</i> |
| British Honduras— | | | | | | |
| Aviation spirit | (a) 241 | 277 | 326 | 41 | 207 | 489 |
| Motor spirit | 4,729 | 5,390 | 4,974 | 4,258 | 8,089 | 6,688 |
| Kerosine | 2,919 | 2,959 | 2,884 | 2,236 | 4,744 | 3,497 |
| Diesel and fuel oils .. | 4,755 | 4,645 | 4,906 | 9,989 | 8,847 | 7,881 |
| Lubricating oil | 326 | 465 | 396 | 490 | 828 | 6,648 |
| Asphalt, etc. | 966 | 379 | 809 | 102 | 516 | 1,447 |
| Cayman Islands— | | | | | | |
| Aviation and motor spirits | 1,598 | 1,657 | 1,688 | 1,716 | 1,537 | 1,584 |
| Kerosine | 474 | 481 | 933 | 1,380 | 857 | 754 |
| Diesel oil | 297 | 396 | 1,059 | 972 | 358 | 1,036 |
| Dominica— | | | | | | |
| Motor spirit | 1,028 | 1,485 | 1,255 | 1,980 | 1,753 | 3,176 |
| Kerosine | 466 | 723 | 648 | 960 | 920 | 1,176 |
| Fuel oil and diesel oil .. | 631 | 1,041 | 913 | 1,184 | 1,011 | 985 |
| Lubricating oil | 79 | 127 | 155 | 238 | 69 | 71 |
| Road oil | 115 | 968 | 149 | 246 | 291 | 239 |
| Grenada— | | | | | | |
| Motor spirit | 2,235 | 2,680 | 3,418 | 2,933 | 3,587 | 3,498 |
| Kerosine | 1,371 | 1,236 | 1,636 | 1,679 | 2,019 | 1,458 |
| Fuel oils | 1,284 | 1,016 | 2,039 | 1,235 | 2,115 | 1,257 |
| Lubricating oil | 97 | 149 | 146 | 209 | 71 | 90 |
| Road oil | 647 | 1,143 | 1,571 | 1,496 | 56 | 27 |

(a) Excess of re-exports.

(b) Including imports for bunkering purposes. See exports.

(c) Including aviation turbine fuel.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Jamaica— | | | | | | |
| Aviation spirit (b) .. | 15,312 | 19,568 | 17,674 | 12,341 | 12,007 | 16,174 |
| Motor spirit | 60,884 | 69,657 | 71,021 | 78,190 | 84,927 | 83,602 |
| Kerosine | 25,937 | 29,366 | 35,224 | 20,602 | 37,938 | 22,357 |
| Gas oil (b) | 41,731 | 43,102 | 83,753 | 52,235 | 53,058 | 49,644 |
| Diesel oil (b) | 67,671 | 77,409 | 70,213 | 91,862 | 89,606 | 83,216 |
| Fuel oil (b) | 366,038 | 490,641 | 393,705 | 596,994 | 497,743 | 519,478 |
| Lubricating oil | 3,640 | 4,853 | 4,717 | 5,179 | 5,545 | 5,135 |
| Grease | 385 | 492 | 442 | 354 | 385 | 300 |
| Petroleum jelly | 207 | 195 | 224 | 248 | 246 | 279 |
| Paraffin wax | 16 | 20 | 23 | 12 | 12 | 23 |
| Natural asphalt | 3,027 | 4,886 | 3,571 | 1,812 | 2,348 | 3,716 |
| Montserrat— | | | | | | |
| Motor spirit | 234 | 241 | 143 | 340 | 350 | 251 |
| Kerosine | 98 | 156 | 129 | 213 | 232 | 105 |
| Fuel oils | 193 | 237 | 348 | 359 | 606 | 322 |
| Lubricating oil | 3 | 7 | 5 | 18 | 29 | 46 |
| St. Kitts— | | | | | | |
| Motor spirit | 1,167 | 2,301 | 1,298 | 1,280 | (c) 2,443 | 1,559 |
| Kerosine | 1,262 | 1,390 | 1,313 | 1,873 | (c) 2,118 | 1,793 |
| Fuel oils | 909 | 1,629 | 1,740 | 1,975 | (c) 2,908 | 2,201 |
| Lubricating oil | 101 | 132 | 145 | 135 | (c) 172 | 146 |
| St. Lucia— | | | | | | |
| Motor spirit | 1,081 | 1,371 | 1,706 | r 1,965 | 2,044 | 2,758 |
| Kerosine | 580 | 729 | 735 | r 924 | 975 | 1,174 |
| Fuel oil | 2,057 | 1,806 | 1,704 | r 2,591 | 2,702 | 2,761 |
| Lubricating oil | 109 | 82 | 142 | r 112 | 142 | 143 |
| Road oil | 604 | 894 | r 50 | r 43 | 112 | 16 |
| St. Vincent— | | | | | | |
| Aviation and motor spirits | 1,568 | 1,977 | 1,997 | 2,237 | 2,199 | 3,427 |
| Kerosine | 883 | 978 | 1,355 | 1,247 | 1,401 | 1,232 |
| Gas, diesel and fuel oils | 600 | 634 | 693 | 762 | 657 | 819 |
| Lubricating oil | 90 | 95 | 89 | 95 | 76 | 101 |
| Road oil | 717 | 1,443 | 1,226 | 860 | 439 | 389 |
| Asphalt | 2 | 10 | 1 | 5 | 4 | — |
| Trinidad and Tobago— | | | | | | |
| Crude petroleum | 3,602,473 | 4,394,648 | 5,642,917 | 8,795,309 | 9,036,205 | 9,773,624 |
| Aviation and motor spirits | 1,440 | 2,029 | 1 | — | — | 14,306 |
| Kerosine | 1,720 | (a) 6 | — | 4 | — | — |
| Gas oil | 113,051 | 140,309 | 144,021 | — | — | — |
| Fuel oil | — | 22,278 | 6,681 | — | 18,337 | 15 |
| Lubricating oil | 4,732 | 6,161 | 7,000 | 6,558 | 6,572 | 7,935 |
| Greases | (a) 336 | 330 | 110 | 378 | 246 | — |
| Petroleum jelly | 105 | n.a. | 365 | 100 | 88 | n.a. |
| Paraffin wax | 104 | 29 | 21 | 18 | 27 | n.a. |
| Turks and Caicos Islands— | | | | | | |
| Aviation and motor spirit | 109 | 174 | 157 | 156 | 131 | 354 |
| Kerosine | 118 | 155 | 187 | 189 | 203 | 254 |
| Gas, diesel and fuel oils | 180 | 752 | 804 | 98 | 204 | 347 |
| Lubricating oil | 3 | 4 | 9 | 7 | n.a. | n.a. |
| Virgin Islands— | | | | | | |
| Motor spirit | 132 | 193 | 272 | 314 | 768 | n.a. |
| Kerosine | 135 | 133 | 150 | 140 | 316 | n.a. |
| Diesel oil | 62 | 82 | 162 | 122 | 430 | n.a. |
| Lubricating oil | 8 | 13 | 9 | 10 | 30 | n.a. |

 (a) Excess of re-exports.
 (c) Total imports.

 (b) Including imports for bunkering purposes.
 See exports.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| British Guiana— | | | | | | |
| Aviation spirit (c) .. | 1,859 | 1,809 | 4,156 | 7,929 | 4,308 | <i>n.a.</i> |
| Motor spirit | 17,554 | 19,241 | 19,705 | 21,967 | 18,618 | <i>n.a.</i> |
| Kerosine | 12,983 | 14,452 | 16,203 | 16,385 | 17,927 | <i>n.a.</i> |
| Gas, diesel and fuel oils | 112,798 | 147,231 | 172,243 | 414,193 | 287,145 | <i>n.a.</i> |
| Lubricating oil | 2,181 | 2,378 | 3,809 | 2,780 | 2,620 | <i>n.a.</i> |
| Grease | 179 | 199 | 331 | 292 | 273 | <i>n.a.</i> |
| Paraffin wax | 23 | 24 | 30 | 27 | 26 | <i>n.a.</i> |
| Petroleum jelly | 53 | 71 | 73 | 66 | 68 | <i>n.a.</i> |
| Road oil | 1,212 | 697 | 1,340 | 1,345 | 527 | <i>n.a.</i> |
| Asphalt and bitumen .. | 1,060 | 327 | 436 | 2,850 | 1,433 | <i>n.a.</i> |
| Asphalt natural | 558 | 486 | 1,065 | 879 | 753 | <i>n.a.</i> |
| Falkland Islands— | | | | | | |
| Motor spirit | 266 | 205 | 244 | 259 | 253 | 77 |
| Kerosine | 128 | 29 | 50 | 30 | 31 | 7 |
| Gas and diesel oils .. | 8,472 | 2,573 | 11,834 | 3,883 | 54 | 11,498 |
| Fuel oil (c) | 115,314 | 57,365 | 589,463 | 63,178 | 31,168 | 14,944 |
| Lubricating oil | 349 | 227 | 184 | 128 | 25 | 12 |
| Aden— | | | | | | |
| Crude petroleum | 3,691,645 | 4,139,454 | 4,205,582 | 5,284,281 | 6,216,214 | 6,305,476 |
| Motor spirit | 20,661 | 18,108 | 35,822 | 26,921 | 33,792 | 35,393 |
| Kerosine | 28,763 | 91,504 | 31,293 | — | 761 | — |
| Gas and fuel oils (c) .. | 1,381,438 | 1,445,233 | 1,745,475 | 1,591,976 | 1,138,797 | 1,621,335 |
| Lubricating oil and greases | 4,173 | 4,287 | 4,319 | 4,097 | 6,479 | <i>n.a.</i> |
| Aden Protectorate (b)— | | | | | | |
| Motor spirit | 8,455 | 6,162 | 4,406 | 8,603 | 7,125 | (e) |
| Kerosine | 6,441 | 9,849 | 6,963 | 7,260 | 8,267 | (e) |
| Gas and fuel oils | 7,860 | 4,632 | 2,193 | 5,109 | 3,691 | (e) |
| Lubricating oil and grease | 207 | 173 | 170 | 98 | 198 | (e) |
| Bahrain Islands (a)— | | | | | | |
| Crude petroleum | 7,341,000 | 7,011,000 | 7,943,000 | 8,444,000 | 9,533,000 | (e) |
| Brunei— | | | | | | |
| Aviation and motor spirits | 4,176 | 2,197 | 526 | 525 | 103 | 400 |
| Kerosine | 837 | 1,270 | 1,653 | 1,233 | 1,547 | 1,869 |
| Diesel oil | 182 | 47 | — | 24 | 27 | — |
| Fuel oil | 6 | — | 7 | 11 | 4 | — |
| Lubricating oil | 1,345 | 1,294 | 928 | 1,188 | 1,670 | 1,088 |
| Grease | 38 | 23 | 24 | 29 | 117 | 56 |
| Ceylon— | | | | | | |
| Aviation spirit (c) .. | 8,531 | 8,215 | 3,041 | 2,877 | 1,985 | 1,683 |
| Motor spirit | 141,613 | 151,838 | 154,445 | 164,435 | 134,160 | 136,683 |
| Kerosine | 122,594 | 134,477 | 144,174 | 154,795 | 176,634 | 136,826 |
| Gas oil (c) | 63,469 | 90,679 | 100,411 | 125,452 | 153,647 | 129,409 |
| Diesel oil (c) | 126,587 | 130,999 | 99,560 | 147,795 | 138,973 | 131,569 |
| Fuel oil (c) | 429,870 | 415,232 | 355,677 | 421,599 | 391,499 | 332,784 |
| Lubricating oil | 7,279 | 13,055 | 9,226 | 10,022 | 12,788 | 16,363 |
| Other oils and greases | 388 | 680 | 555 | 494 | 637 | 174 |
| Paraffin wax | 656 | 259 | 768 | 384 | 506 | 108 |
| Asphalt (incl. natural) .. | 8,763 | 24,560 | 18,102 | 1,719 | 3,718 | 4,183 |
| Cyprus— | | | | | | |
| Aviation spirit (c) .. | 13,221 | 6,962 | 8,932 | 5,665 | 3,704 | 3,617 |
| Motor spirit | 54,334 | 53,864 | 59,430 | 55,396 | 59,408 | 56,798 |
| Aviation turbine fuel .. | 59,300 | 41,664 | 35,726 | 22,584 | 4,332 | 29,303 |
| Kerosine, etc. | 22,602 | 24,661 | 23,367 | 21,886 | 25,273 | 24,501 |
| Gas oil | 67,631 | 61,032 | 61,189 | 67,728 | 68,090 | 76,916 |
| Other fuel oils | 74,071 | 98,901 | 111,545 | 103,866 | 111,824 | 126,936 |

(a) British Protected State.

(b) Exports from Aden to the Protectorate.

(c) Including imports for bunkering purposes. See exports.

(d) Excess of re-exports.

(e) Included with Aden.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|-----------|-----------|--------------|--------------|--------------|--------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Cyprus (cont.)— | | | | | | |
| Lubricating oil .. | 2,642 | 3,044 | 2,575 | 3,778 | 2,812 | 4,370 |
| Paraffin wax .. | 184 | 193 | 234 | 96 | 194 | 93 |
| Asphalt and bitumen .. | 5,491 | 5,293 | 7,771 | 10,925 | 13,527 | 15,872 |
| Hong Kong— | | | | | | |
| Aviation spirit .. | 19,003 | 19,772 | 11,666 | 12,541 | 7,620 | 4,894 |
| Motor spirit .. | 56,260 | 69,344 | 65,097 | 66,274 | 56,341 | 68,240 |
| White spirit .. | 3,844 | 5,152 | 5,438 | 5,191 | 10,042 | 8,266 |
| Aviation turbine fuel .. | 79,082 | 17,676 | 38,547 | 54,288 | 83,149 | 106,830 |
| Kerosine .. | | 85,396 | 97,514 | 109,870 | 123,990 | 146,018 |
| Diesel oil and gas oil .. | 176,854 | 180,325 | 194,218 | 230,244 | 259,630 | 289,547 |
| Fuel oil .. | 760,466 | 727,319 | 777,057 | 859,121 | 970,877 | 1,126,247 |
| Lubricating oil .. | 7,577 | 8,710 | 11,620 | 12,306 | 17,897 | 17,789 |
| Greases .. | 385 | 418 | 963 | 828 | 921 | 964 |
| Petroleum jelly .. | 157 | 89 | 267 | 310 | 318 | 353 |
| Paraffin wax .. | 887 | 1,406 | 1,168 | 1,249 | 1,549 | 1,397 |
| Asphalt and bitumen .. | 6,649 | 12,532 | 9,903 | 10,366 | 11,443 | 11,067 |
| Asphalt (natural) .. | 156 | 320 | 468 | 658 | 483 | 453 |
| India— | | | | | | |
| Crude petroleum .. | 1,779,734 | 1,183,500 | (b)2,658,517 | (b)6,220,280 | (b)4,258,742 | (b)7,024,208 |
| Aviation and motor spirits .. | 70,831 | 82,247 | (b) 85,472 | (b) 105,168 | (b) 98,559 | (b) 80,038 |
| Other spirit .. | 139 | 113 | | | | |
| Kerosine .. | 940,579 | 1,073,208 | (b) 907,283 | (b) 711,235 | (b)1,590,508 | (b)1,289,740 |
| Diesel oil .. | n.a. | 261,000 | (b) 276,310 | (b) 343,502 | (b) 452,200 | (b) 560,081 |
| Fuel oil .. | 32,978 | 32,330 | (b) 71,785 | (b) 164,983 | (b) 200,920 | (b) 905,390 |
| Lubricating oil .. | 161,106 | 198,339 | (b) 310,333 | (b) 232,834 | (b) 272,903 | (b) 380,708 |
| Turpentine substitute .. | 6,197 | 12,407 | (b) 13,044 | (b) n.a. | (b) n.a. | (b) n.a. |
| Greases .. | 3,255 | 3,502 | (b) (a) | (b) (a) | (b) (a) | (b) (a) |
| Petroleum jelly .. | 2,208 | 1,962 | (b) 1,857 | (b) 1,735 | (b) 1,513 | (b) 1,570 |
| Paraffin wax .. | 3 | 6 | (b) 7 | (b) 11 | (b) 16 | (b) — |
| Asphalt and bitumen .. | 14,248 | 6,126 | (b) 11,533 | (b) 18,042 | (b) 10,525 | (b) 6,963 |
| Goa— | | | | | | |
| Motor spirit .. | 19,187 | 11,840 | 18,337 | n.a. | n.a. | (c) |
| Kerosine .. | 7,021 | 5,539 | 5,513 | n.a. | n.a. | (c) |
| Lubricating oils .. | 855 | 1,395 | 1,327 | n.a. | n.a. | (c) |
| Other oils .. | 9,354 | 12,183 | 17,854 | n.a. | n.a. | (c) |
| Malaya— | | | | | | |
| Crude petroleum .. | 788,976 | 285,213 | 279,090 | 1,276,487 | 3,266,002 | 3,917,179 |
| Aviation spirit .. | 173,304 | 225,709 | 126,571 | 172,075 | 163,456 | 158,219 |
| Motor spirit .. | 993,531 | 1,021,451 | 1,048,410 | 837,632 | 662,154 | 721,112 |
| White spirit .. | 61,451 | 82,441 | 91,808 | 125,911 | 192,769 | — |
| Aviation turbine fuel .. | 116,275 | 170,689 | 234,370 | 253,647 | 273,934 | 206,981 |
| Kerosine .. | 364,434 | 396,954 | 475,298 | 502,454 | 453,848 | 364,526 |
| Gas oil .. | 755,001 | 757,751 | 912,781 | 836,643 | 796,766 | 930,847 |
| Diesel oil .. | 715,539 | 599,986 | 669,809 | 986,382 | 914,698 | 566,978 |
| Fuel oil .. | 2,477,186 | 2,174,469 | 2,193,394 | 2,878,306 | 2,575,167 | 2,775,373 |
| Lubricating oil .. | 30,113 | 31,056 | 36,020 | 40,237 | 49,884 | 66,217 |
| Paraffin wax .. | 2,538 | 2,775 | 2,829 | 4,155 | 4,164 | 2,645 |
| Petroleum jelly .. | 742 | 733 | 1,271 | 705 | 667 | 875 |
| Grease .. | 1,099 | 1,169 | 1,839 | 1,712 | 2,236 | 2,198 |
| Asphalt and bitumen .. | 49,053 | 45,892 | 53,422 | 51,195 | 48,743 | 26,039 |
| Natural asphalt .. | 197 | — | 20 | 75 | 317 | 3,433 |
| Pakistan— | | | | | | |
| Motor spirit .. | 17,536 | 62,800 | n.a. | 152,549 | 115,798 | 88,402 |
| Other spirit .. | 546 | 1,659 | n.a. | n.a. | n.a. | n.a. |
| Kerosine .. | 76,894 | 152,872 | n.a. | 270,638 | 238,542 | 157,995 |
| Diesel oil .. | 195,242 | 270,669 | n.a. | 1,374,823 | 769,334 | 827,844 |
| Fuel oil .. | 121,913 | 470,426 | n.a. | | | |

(a) Included with lubricating oil.

(b) Years ended March 31 following that stated.

(c) With effect from April, 1963, figures included with those of India.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-----------|------------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Pakistan (cont.)— | | | | | | |
| Lubricating oil | 30,406 | 57,763 | n.a. | 48,628 | 47,147 | 84,816 |
| Other oils | 12,515 | 14,646 | n.a. | n.a. | n.a. | n.a. |
| Grease | 1,062 | 1,381 | n.a. | n.a. | n.a. | n.a. |
| Paraffin wax | 1,662 | 1,009 | n.a. | 1,384 | 1,107 | 1,155 |
| Asphalt | 6,615 | 9,299 | n.a. | 25,354 | 41,836 | 30,140 |
| Sabah— | | | | | | |
| Aviation and motor spirits (a) | 2,978 | 19,917 | 13,752 | 16,872 | 22,646 | 23,974 |
| Kerosine | 3,982 | 9,145 | 9,346 | 6,886 | 9,425 | 12,771 |
| Diesel oil (a) | 5,351 | 24,651 | 26,067 | 27,184 | 35,590 | 44,314 |
| Fuel oil (a) | 905 | 7,160 | 8,418 | 8,941 | 7,561 | 8,519 |
| Lubricating oil | 516 | 2,670 | 3,799 | 3,441 | 3,640 | 3,292 |
| Sarawak— | | | | | | |
| Crude petroleum | 5,125,219 | 5,313,995 | 4,505,041 | 3,708,753 | 3,840,782 | 3,382,548 |
| Aviation spirit | 577 | 928 | 878 | 693 | 594 | 226 |
| Motor spirit | 8,911 | 11,116 | 11,601 | 12,220 | 13,174 | 14,489 |
| Kerosine | 8,142 | 8,640 | 9,493 | 10,621 | 11,155 | 13,176 |
| Gas oil | 8,226 | 10,466 | 12,798 | 16,259 | 15,830 | 18,342 |
| Diesel oil | 6,154 | 3,982 | 2,814 | 3,527 | 4,635 | 4,319 |
| Fuel oil | 718 | 3,612 | 4,255 | 5,971 | 6,225 | (c) 8,895 |
| Lubricating oil | 1,746 | 2,187 | 2,264 | 2,303 | 2,650 | 2,776 |
| Paraffin wax | 8 | 3 | 14 | 14 | 16 | 12 |
| Mineral jelly | 46 | 37 | 31 | 25 | 31 | 39 |
| Natural gas (million cubic feet) | 2,480 | 2,540 | 2,693 | 2,421 | 2,473 | 1,952 |
| Australia (b)— | | | | | | |
| Crude petroleum | 9,881,060 | 10,329,346 | 11,405,405 | 12,684,109 | 13,373,103 | 14,887,129 |
| Aviation spirit (a) | 84,839 | 86,634 | 62,793 | 38,643 | 48,004 | 46,889 |
| Motor spirit | 477,464 | 622,571 | 561,470 | 601,646 | 522,474 | 723,805 |
| White spirit | 55,258 | 56,456 | 49,108 | 55,807 | 46,806 | 49,014 |
| Kerosine | 367,969 | 334,945 | 320,990 | 345,107 | 254,197 | 224,597 |
| Aviation turbine fuel | 9,771 | 15,164 | 44,063 | 69,413 | 74,657 | 119,923 |
| Lubricating oil | 158,980 | 188,885 | 198,343 | 207,231 | 183,764 | 235,195 |
| Gas, diesel and fuel oils (a) | 104,877 | 52,995 | 75,102 | 55,229 | 271,150 | 359,396 |
| Other oils | 63,972 | 6,116 | 7,001 | 40,978 | 9,209 | 11,795 |
| Petroleum jelly | 2,089 | 2,001 | 1,951 | 1,586 | 1,236 | 1,817 |
| Paraffin wax | 8,069 | 7,345 | 7,638 | 6,728 | 5,405 | 8,871 |
| Natural asphalt | 2,141 | 1,768 | 2,610 | 1,369 | 1,277 | 1,777 |
| Bitumen and pitch | 1,083 | 768 | 978 | 1,011 | 544 | 6,175 |
| Fiji— | | | | | | |
| Aviation spirit (a) | 19,138 | 13,647 | 12,681 | 8,431 | 9,517 | 3,733 |
| Motor spirit | 25,689 | 20,086 | 19,439 | 20,302 | 19,202 | 21,256 |
| Aviation turbine fuel (a) | 6,721 | 6,479 | 21,239 | 35,297 | 32,460 | 32,028 |
| Kerosine | | 6,047 | 11,719 | 7,089 | 6,768 | 7,502 |
| Gas oil (a) | 18,077 | 13,983 | 23,665 | 13,731 | 14,337 | 10,113 |
| Diesel oil (a) | 6,040 | 19,198 | 7,639 | 23,747 | 35,235 | 42,535 |
| Fuel oil (a) | — | 470 | — | — | 844 | 4,366 |
| Lubricating oil | 1,359 | 1,602 | 1,128 | 1,237 | 1,537 | 1,593 |
| Greases | 159 | 290 | 136 | 145 | 140 | 174 |
| Bitumen | 1,962 | 576 | 159 | 1,378 | 1,152 | 1,595 |
| New Guinea (b)— | | | | | | |
| Aviation and motor spirits | 15,530 | 12,002 | 16,835 | 17,610 | 19,322 | 26,979 |
| Kerosine | 4,069 | 2,430 | 2,621 | 4,844 | 2,935 | 4,926 |
| Fuel oils | 15,076 | 15,198 | 14,718 | 23,329 | 21,049 | 27,587 |
| Lubricating oil | 774 | 1,020 | 1,029 | 1,110 | 1,115 | 1,121 |

(a) Including imports for bunkering purposes. See exports.

(b) Years ended June 30 of that stated.

(c) Excess of re-exports.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|--------------|-------------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| New Hebrides— | | | | | | |
| Aviation spirit | — | 301 | 108 | 387 | 274 | 207 |
| Motor spirit | 2,411 | 2,731 | 2,490 | 2,239 | 1,825 | 1,882 |
| Kerosine | 964 | 996 | 915 | 966 | 1,218 | 1,049 |
| Other oils | 3,013 | 3,596 | 3,781 | 5,113 | 5,847 | 5,756 |
| New Zealand— | | | | | | |
| Aviation spirit (b) .. | 33,697 | 27,314 | 34,612 | 33,847 | } 960,435 | 1,056,297 |
| Motor spirit | 762,903 | 786,046 | 868,626 | 959,996 | | |
| White spirit | 11,897 | 10,687 | 12,284 | 12,205 | 11,394 | 17,200 |
| Aviation turbine fuel .. | 1,718 | 12,559 | 23,238 | 34,837 | 46,338 | 57,237 |
| Kerosine | 36,452 | 36,706 | 39,760 | 39,657 | 39,280 | 37,824 |
| Gas oil | 198,792 | 198,668 | 272,163 | 300,946 | 327,618 | 377,924 |
| Diesel oil (b) | 192,173 | 143,204 | 160,919 | 168,860 | 138,262 | 97,697 |
| Fuel oil (b) | 255,381 | 249,758 | 230,533 | 226,312 | 306,157 | 402,955 |
| Lubricating oil (b) .. | 33,078 | 34,006 | 44,286 | 43,044 | 46,712 | 41,796 |
| Transformer oil | 1,312 | 526 | 1,586 | 930 | 1,767 | n.a. |
| Petroleum jelly | 200 | 215 | 244 | 158 | 240 | n.a. |
| Paraffin wax | 1,468 | 1,520 | 1,283 | 1,390 | 2,141 | 1,536 |
| Ozokerite | 3 | 3 | 3 | 8 | n.a. | n.a. |
| Asphalt and bitumen .. | 33,333 | 50,768 | 53,180 | 65,901 | 63,722 | n.a. |
| do. natural | 188 | 462 | 709 | 610 | 240 | 464 |
| Papua (c)— | | | | | | |
| Aviation and motor spirits | 7,126 | 10,144 | 12,673 | 10,034 | 11,333 | 13,528 |
| Kerosine | 202 | 1,572 | 2,145 | 2,536 | 1,319 | 2,182 |
| Fuel oil | 7,659 | 7,293 | 7,426 | 5,972 | 6,588 | 6,781 |
| Lubricating oil and grease | 578 | 626 | 389 | 653 | 511 | 512 |
| Solomon Islands— | | | | | | |
| Aviation spirit | — | — | 60 | (d) 133 | (d) 172 | (d) 172 |
| Motor spirit | 638 | 566 | 713 | 1,244 | 1,100 | 899 |
| Kerosine | 508 | 556 | 518 | 602 | 543 | 591 |
| Fuel oils | 1,521 | 2,154 | 1,956 | 3,041 | 3,357 | 3,176 |
| Lubricating oil | 129 | 144 | 291 | n.a. | 119 | 145 |
| Western Samoa— | | | | | | |
| Motor spirit | 2,254 | 2,556 | 3,154 | 3,433 | 3,708 | 4,019 |
| Kerosine | 635 | 712 | 1,038 | 771 | 781 | 910 |
| Fuel oil | 1,251 | 999 | 956 | 1,251 | 1,035 | 1,854 |
| Lubricating oil | 50 | 90 | 104 | 83 | 148 | 104 |
| Irish Republic— | | | | | | |
| Crude petroleum | — | r 811,106 | r 15,240,053 | r 1,551,140 | 1,616,420 | 1,741,558 |
| Aviation spirit (b) .. r | 95,409 | r 72,923 | r 56,926 | r 51,042 | 39,472 | 21,025 |
| Motor spirit r | 263,838 | 165,114 | 13,194 | 4,960 | 9,313 | 7,876 |
| White spirit r | 2,916 | 3,368 | r 3,402 | 3,379 | 3,315 | 2,984 |
| Kerosine r | } 122,172 | r 110,418 | r 74,998 | 104,185 | 70,656 | 88,353 |
| Aviation turbine fuel (b) r | | | 55,928 | 74,027 | 106,767 | 88,894 |
| Gas and diesel oils (b) r | 218,055 | 129,102 | 4,752 | 9,506 | 9,544 | 9,428 |
| Fuel oil (b) r | 359,913 | r 21,948 | r 138,240 | 159,347 | 193,884 | 255,502 |
| Lubricating oil r | 18,354 | r 20,453 | r 18,989 | r 22,493 | 22,810 | 22,426 |
| Greases | 264 | 280 | 233 | 246 | 246 | 241 |
| Other oils | 1,510 | 1,866 | 2,233 | 3,069 | 3,423 | 3,028 |
| Paraffin wax (a) | 1,368 | 1,753 | 2,396 | 2,634 | 2,111 | 2,783 |
| Asphalt and bitumen .. | 60,018 | 61,919 | 69,505 | 68,756 | 87,755 | 3,244 |
| do. natural | 376 | 61 | — | 136 | 152 | 15,101 |

(a) Including other mineral jellies and waxes.

(b) Including imports for bunkering purposes. See exports.

(c) Years ended June 30 of that stated.

(d) Including aviation turbine fuel.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-----------|-----------|-----------|-----------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Austria— | | | | | | |
| Crude petroleum .. | — | 18 | 4,416 | 266,994 | 618,378 | 811,662 |
| Motor spirit .. | 207,803 | 247,919 | 291,571 | 408,912 | 519,430 | 514,900 |
| White spirit .. | <i>n.a.</i> | 6,555 | 6,182 | 6,864 | 6,933 | 6,409 |
| Gas oil .. | 6,649 | 26,667 | 71,464 | 60,303 | 61,431 | 69,110 |
| Fuel oil .. | 469,285 | 530,350 | 687,614 | 772,982 | 875,487 | 1,007,613 |
| Lubricating oil, etc. .. | 28,131 | 31,556 | 34,099 | 37,696 | 38,103 | 43,412 |
| Petroleum jelly .. | 244 | 239 | 212 | 269 | 280 | 272 |
| Paraffin wax .. | 4,005 | 4,662 | 4,503 | 5,065 | 5,630 | 6,344 |
| Ozokerite and ceresin .. | 649 | (a) 588 | (a) 602 | (a) 615 | (a) 339 | (a) 283 |
| Natural asphalt.. | 1,277 | 906 | 826 | 1,089 | 1,695 | 2,392 |
| Petroleum coke.. | 18,316 | 8,095 | 16,107 | 6,786 | 563 | 8,763 |
| Bitumen, etc. .. | 38,633 | 53,286 | 53,879 | 82,926 | 82,807 | 106,379 |
| Belgium-Luxemburg | | | | | | |
| E. U.— | | | | | | |
| Crude petroleum .. | 6,419,055 | 6,610,844 | 6,706,495 | 7,714,263 | 8,401,677 | 11,860,905 |
| Motor spirit, etc. .. | 407,178 | 315,204 | 374,096 | 362,963 | 423,065 | 343,866 |
| Kerosine .. | 32,780 | 27,940 | 23,731 | 25,563 | 40,460 | 22,002 |
| Gas oil .. | 866,041 | 695,353 | 792,107 | 826,347 | 1,100,286 | 1,123,187 |
| Fuel oil .. | 1,348,026 | 1,465,770 | 1,640,173 | 1,760,838 | 2,273,488 | 2,168,449 |
| Lubricating oil .. | 161,791 | 178,291 | 155,437 | 169,413 | 196,278 | 205,704 |
| Other heavy oils .. | 4,596 | 10,998 | 31,298 | 6,816 | 337 | 55,885 |
| Petroleum jelly .. | 1,040 | 1,435 | 1,772 | 1,481 | 1,441 | 1,348 |
| Paraffin wax .. | 4,748 | 4,730 | 5,851 | 5,908 | 6,507 | 6,711 |
| Ozokerite and ceresin (a) | 482 | 401 | 250 | 335 | 145 | 163 |
| Petroleum coke.. | 63,834 | 34,362 | 18,940 | 19,310 | 34,902 | 79,173 |
| Natural asphalt.. | 3,829 | 2,758 | 2,492 | 2,693 | 2,747 | 4,264 |
| Pitch .. | 34,106 | 59,947 | 23,445 | 13,527 | 18,521 | 25,515 |
| Denmark— | | | | | | |
| Crude petroleum .. | 30,005 | 36,885 | 5,350 | 232,875 | 1,263,488 | 1,719,782 |
| Aviation spirit .. | 888,316 | 125,550 | 87,424 | 80,840 | 120,597 | 33,274 |
| Motor spirit .. | | 823,722 | 894,343 | 1,000,610 | 945,344 | 896,982 |
| White spirit .. | 11,765 | 13,656 | 14,191 | 14,582 | 20,315 | 17,106 |
| Kerosine .. | 112,274 | 162,696 | 252,393 | 298,157 | 298,983 | 391,897 |
| Gas oil .. | 745,959 | 808,221 | 892,195 | 1,030,020 | 1,138,385 | 1,298,907 |
| Diesel oil .. | 473,358 | 551,304 | 679,815 | 771,491 | 868,078 | 1,056,309 |
| Fuel oil .. | 1,926,311 | 1,830,169 | 2,103,286 | 2,182,827 | 2,360,095 | 2,378,893 |
| Lubricating oil .. | 53,215 | 71,047 | 64,177 | 70,133 | 80,244 | 66,115 |
| Grease .. | 924 | 1,348 | 1,134 | 942 | 1,311 | 1,427 |
| Petroleum jelly .. | 353 | 485 | 463 | 463 | 500 | 504 |
| Ozokerite, etc. .. | 737 | 1,028 | 884 | 863 | 1,351 | 1,093 |
| Paraffin wax .. | 4,756 | 4,831 | 5,036 | 5,735 | 5,890 | 5,768 |
| Natural asphalt.. | 734 | 1,692 | 1,358 | 959 | 1,752 | 1,976 |
| Other asphalt .. | 62,169 | 67,685 | 69,249 | 100,884 | 111,639 | 108,790 |
| Faroe Islands— | | | | | | |
| Motor spirit .. | 1,887 | 2,002 | 1,347 | 2,402 | 2,058 | 2,578 |
| Kerosine .. | 2,362 | 2,440 | 733 | 2,751 | 2,687 | 2,080 |
| Fuel oils .. | 31,226 | 25,338 | 14,383 | 28,354 | 31,485 | 31,553 |
| Lubricating oil, etc. .. | 434 | 415 | 468 | 317 | 476 | 492 |
| Finland— | | | | | | |
| Crude petroleum .. | 870,556 | 1,072,737 | 1,118,972 | 1,361,407 | 1,488,311 | 1,524,865 |
| Motor spirit .. | 112,513 | 21,434 | 44,914 | 32,301 | 16,506 | 18,911 |
| White spirit .. | 3,660 | 3,650 | 3,585 | 4,733 | 6,145 | 5,255 |
| Kerosine .. | 20,842 | 17,415 | 29,954 | 26,923 | 24,392 | 26,507 |
| do. Power .. | 15,948 | 5,561 | 1,852 | 6 | 1 | 6 |
| Fuel oil .. | 876,412 | 720,281 | 1,418,626 | 1,459,568 | 1,863,309 | 1,913,954 |
| Lubricating oil .. | 20,740 | 26,493 | 36,069 | 45,170 | 48,796 | 46,839 |
| Petroleum jelly .. | 234 | 405 | 381 | 369 | 511 | 470 |
| Paraffin wax .. | 1,856 | 3,071 | 4,184 | 4,862 | 5,065 | 6,912 |
| Asphalt, etc. .. | 31,396 | 26,654 | 8,219 | 17,431 | 16,744 | 14,600 |

(a) Including montan wax.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| France— | | | | | | |
| Crude petroleum .. | 27,974,654 | 28,709,907 | 30,531,645 | 34,463,365 | 36,573,573 | 42,574,849 |
| Aviation spirit .. | 123,724 | 134,745 | 131,706 | 134,094 | 112,344 | 102,261 |
| Motor spirit .. | 520,106 | 475,812 | 679,668 | 572,603 | 636,937 | 586,656 |
| Kerosine .. | 13,708 | 3,659 | 5,836 | 8,154 | 3,040 | 10,028 |
| Lubricating oil .. | 13,439 | 14,833 | 14,717 | 10,309 | 18,453 | 19,269 |
| Fuel oil .. | 486,411 | 921,860 | 1,229,110 | 1,108,191 | 1,588,227 | 2,529,976 |
| Gas oil .. | 332,551 | 230,421 | 247,630 | 221,720 | 212,002 | 426,176 |
| Petroleum coke .. | 68,961 | 60,075 | 92,099 | 103,885 | 130,187 | 336,418 |
| Paraffin wax .. | 2,077 | 2,492 | 2,911 | 3,834 | 4,346 | 5,342 |
| Ozokerite and ceresin .. | 4,634 | 4,329 | 5,097 | 7,266 | 8,676 | 8,679 |
| Petroleum jelly .. | 691 | 534 | 755 | 686 | 671 | 696 |
| Natural asphalt and bitumen .. | 3,642 | 2,267 | 1,635 | 1,925 | 2,066 | 2,153 |
| Bitumen .. | 314 | 136 | 629 | 727 | 305 | 184 |
| Germany (Federal)— | | | | | | |
| Crude petroleum .. | 10,638,066 | 16,543,067 | 22,692,143 | 28,830,783 | 32,677,499 | 39,444,856 |
| Aviation spirit (a) .. | | | 158,455 | 154,515 | 164,174 | 159,415 |
| Motor spirit .. | 424,263 | 416,891 | 414,173 | 359,996 | 398,946 | 424,246 |
| White spirit .. | | | 4,380 | 5,589 | 7,367 | 12,354 |
| Kerosine .. | | | 101,974 | 74,128 | 13,015 | 20,092 |
| Aviation turbine fuel (a) .. | 114,937 | 227,896 | 131,499 | 97,530 | 166,473 | 122,150 |
| Gas and diesel oil (a) .. | 801,774 | 846,537 | 880,516 | 717,760 | 1,083,065 | 1,419,579 |
| Fuel oil (a) .. | 4,766,253 | 3,587,682 | 4,375,587 | 4,635,838 | 9,237,703 | 10,267,190 |
| Lubricating oil, etc. .. | 107,138 | 143,111 | 149,286 | 170,688 | 215,742 | 175,330 |
| Petroleum jelly .. | 1,446 | 1,508 | 1,839 | 1,691 | 1,936 | 1,388 |
| Paraffin wax .. | 10,272 | 13,047 | 12,827 | 14,237 | 24,244 | 20,959 |
| Ozokerite, etc. .. | 500 | 982 | 725 | 163 | 27 | 5 |
| Natural asphalt and bitumen .. | 9,179 | 10,613 | 10,946 | 11,625 | 14,079 | 16,717 |
| Bitumen .. | 89,511 | 148,460 | 234,816 | 347,114 | 459,162 | 845,838 |
| Petroleum coke .. | n.a. | n.a. | 63,728 | 98,658 | 120,920 | 165,580 |
| Germany (East)— | | | | | | |
| Crude petroleum .. | 1,109,000 | 1,534,000 | 1,910,000 | 2,234,000 | 2,550,000 | 3,113,045 |
| Greece— | | | | | | |
| Crude petroleum .. | 95,452 | 1,539,442 | 1,631,356 | 1,576,603 | 1,437,323 | 2,129,000 |
| Aviation spirit .. | 111,601 | 17,460 | 382 | 11,981 | 13,587 | 11,295 |
| Motor spirit .. | 161,725 | 19,936 | 13,381 | 1,678 | 13,029 | 16,175 |
| White spirit .. | 425 | 501 | 806 | 869 | 1,163 | 1,440 |
| Kerosine .. | 116,869 | 16,411 | 3,073 | 94 | 2,868 | 1,942 |
| Fuel oil and diesel oil .. | 1,293,250 | 389,937 | 605,065 | 747,423 | 1,094,241 | 1,385,879 |
| Lubricating oil, etc. .. | 18,297 | 20,626 | 19,952 | 22,054 | 23,358 | 26,809 |
| Petroleum jelly .. | 124 | 99 | 87 | 90 | 97 | 101 |
| Paraffin wax .. | 239 | 175 | 195 | 246 | 382 | 427 |
| Asphalt and bitumen .. | 21,884 | 4,688 | 2,132 | 680 | 1,628 | 7,223 |
| Hungary— | | | | | | |
| Crude petroleum .. | 1,125,493 | 1,236,387 | 1,432,558 | 1,389,327 | 1,515,703 | 1,799,056 |
| Motor spirit .. | 9,894 | 4,907 | 10,903 | 56,137 | 61,602 | 88,136 |
| Kerosine .. | — | — | — | — | — | — |
| Gas oil .. | — | 3,937 | 19,716 | 89,243 | 118,676 | 177,466 |
| Fuel oil .. | 56,158 | 58,295 | 68,720 | 81,897 | 65,772 | 133,221 |
| Iceland— | | | | | | |
| Aviation spirit .. | 12,299 | 13,175 | 12,557 | 10,848 | 12,118 | 12,857 |
| Motor spirit .. | 40,225 | 45,882 | 42,636 | 38,341 | 43,910 | 47,810 |
| White spirit .. | 549 | 337 | 464 | 466 | 470 | 491 |
| Kerosine .. | 3,602 | 18,083 | 8,462 | 7,705 | 1,488 | 1,272 |
| Gas oil and fuel oil .. | 276,927 | 308,936 | 308,359 | 278,895 | 306,887 | 343,875 |
| Lubricating oil .. | 4,539 | 4,044 | 4,406 | 4,074 | 4,794 | |
| Greases .. | 174 | 140 | 145 | 137 | 184 | 4,267 |
| Paraffin wax .. | 62 | 143 | 132 | 145 | 181 | 188 |
| Petroleum jelly .. | 5 | 2 | 9 | 14 | 4 | 18 |
| Asphalt .. | 352 | 560 | 1,215 | 832 | 1,527 | 904 |

(a) Figures for 1958-1959 include imports for bunkering foreign ships or aircraft.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------------|------------|------------|------------|------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Italy— | | | | | | |
| Crude petroleum .. | 22,207,338 | 24,402,201 | 28,336,147 | 32,803,729 | 39,328,656 | 45,366,105 |
| Aviation and motor spirits | 37,885 | 31,701 | 88,783 | 114,214 | 122,124 | 118,775 |
| Kerosine | 1,396 | 225 | 206 | 741 | 1,575 | 3,136 |
| Gas oil | 30,244 | 3,612 | 1,175 | 7,379 | 5,309 | 35,701 |
| Fuel oil | 235,303 | 598,060 | 1,470,520 | 1,964,600 | 2,821,695 | 3,102,497 |
| Lubricating oil .. | 40,498 | 44,277 | 78,552 | 108,141 | 120,030 | 155,336 |
| Petroleum jelly .. | 1,320 | 1,305 | 1,573 | 1,716 | 2,053 | 2,140 |
| Paraffin wax | 15,249 | 14,511 | 16,689 | 20,985 | 25,102 | 25,197 |
| Pitch | 181 | 282 | 5,999 | 180 | 690 | 200 |
| Petroleum coke .. | 41,712 | 54,430 | 100,440 | 132,035 | 151,873 | 191,438 |
| Ozokerite and ceresin .. | 128 | 601 | 485 | 666 | 328 | 280 |
| Natural asphalt and bitumen | 1,539 | 1,772 | 1,919 | 2,814 | 2,433 | 2,496 |
| Netherlands— | | | | | | |
| Crude petroleum .. | 13,839,859 | 12,477,736 | 16,227,967 | 18,980,919 | 19,613,218 | 20,560,260 |
| Motor spirit, etc. .. | 151,924 | 118,304 | 128,812 | 113,062 | 109,550 | 120,656 |
| Kerosine | 199,433 | 193,684 | 180,412 | 209,526 | 235,305 | 345,505 |
| Gas oil | 894,431 | 1,108,850 | 1,286,182 | 1,014,940 | 989,196 | 1,232,137 |
| Fuel oil | 2,892,833 | 3,453,114 | 3,329,216 | 3,578,248 | 3,565,012 | 2,936,625 |
| Lubricating oil .. | 158,649 | 160,690 | 154,204 | 151,793 | 144,166 | 157,096 |
| Petroleum jelly .. | 2,787 | 2,855 | 2,711 | 2,291 | 2,559 | 2,734 |
| Paraffin wax | 22,601 | 28,301 | 29,839 | 23,588 | 17,966 | 16,939 |
| Ozokerite and ceresin (a) | 83 | 167 | 178 | 155 | 156 | 128 |
| Pitch | 11,919 | 20,184 | 24,246 | 36,089 | 60,569 | 92,933 |
| Petroleum coke .. | 14,767 | 11,662 | 16,785 | 10,949 | 13,619 | 39,033 |
| Natural asphalt .. | 1,147 | 985 | 1,303 | 1,413 | 1,738 | 1,417 |
| Norway— | | | | | | |
| Crude petroleum .. | 83,120 | 105,201 | 216,795 | 1,711,949 | 2,317,740 | 2,495,638 |
| Aviation spirit | 23,016 | 29,283 | 22,593 | 24,964 | 24,600 | 32,381 |
| Motor spirit | 354,193 | 377,118 | 429,113 | 305,700 | 432,831 | 406,638 |
| White spirit | 12,972 | 13,943 | 14,622 | 17,436 | 18,923 | 16,372 |
| Kerosine | 83,029 | 75,726 | 86,508 | 80,929 | 89,198 | 116,888 |
| Aviation turbine fuel .. | 80,548 | 78,718 | 97,134 | 104,375 | 70,208 | 76,359 |
| Diesel oil | 395,623 | 428,071 | 332,888 | 321,783 | 269,015 | 239,655 |
| Gas oil | 675,052 | 710,308 | 877,440 | 563,515 | 715,108 | 813,741 |
| Fuel oil | 1,263,730 | 1,314,221 | 1,498,596 | 1,222,330 | 1,119,421 | 1,271,869 |
| Lubricating oil .. | 30,725 | 34,712 | 35,913 | 36,838 | 37,442 | 39,471 |
| Petroleum jelly .. | n.a. | 143 | 172 | 221 | 306 | 273 |
| Paraffin wax | 1,854 | 2,034 | 2,306 | 2,684 | 2,541 | 2,735 |
| Greases | (c) 1,828 | 1,358 | 1,669 | 1,788 | 1,633 | 1,690 |
| Pitch | 23,292 | 6,483 | 10,121 | 17,325 | 11,064 | 30,929 |
| Petroleum coke .. | 68,024 | 85,856 | 92,878 | 96,349 | 124,572 | 113,108 |
| Asphalt, etc. | 34,722 | 18,219 | 15,947 | 13,645 | 14,769 | 425 |
| Poland— | | | | | | |
| Crude petroleum .. | 590,300 | 681,600 | 702,600 | 727,900 | 1,025,000 | 1,393,243 |
| Motor spirit | 655,700 | 739,700 | 839,700 | 1,029,900 | n.a. | 1,090,796 |
| Kerosine | 54,200 | 52,300 | 52,300 | 45,500 | n.a. | 51,769 |
| Fuel oils | 501,800 | 628,700 | 750,300 | 972,600 | n.a. | 1,454,657 |
| Lubricating oil .. | 6,546 | 27,988 | 52,913 | 66,506 | n.a. | 81,178 |
| Paraffin wax | 9,373 | 13,538 | 10,488 | 14,981 | n.a. | 16,640 |
| Asphalt | 15,418 | 14,814 | 31,887 | 85,464 | n.a. | 68,991 |
| Petroleum coke .. | 7,984 | 4,267 | 15,446 | 22,674 | n.a. | 22,364 |
| Portugal— | | | | | | |
| Crude petroleum .. | 1,133,554 | 1,242,219 | 1,280,678 | 1,285,538 | 1,312,884 | 1,474,027 |
| Motor spirit | 12,839 | 12,599 | 18,882 | 22,212 | 23,285 | 21,628 |
| do. (b) | 5,051 | 4,806 | n.a. | n.a. | n.a. | n.a. |
| Kerosine | 50,261 | 38,737 | 32,520 | 24,137 | 39,699 | 19,426 |
| Aviation turbine fuel .. | 118 | 49 | — | — | 5 | 674 |
| Gas oil and diesel oil .. | 141,455 | 145,366 | 295,511 | 296,801 | 293,974 | 322,393 |

(a) Including montan wax.

(b) Imported for bunkering of national ships.

(c) Including petroleum jelly.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Portugal (cont.)— | | | | | | |
| Fuel oil | 137,653 | 115,522 | 210,332 | 247,877 | 275,512 | 284,625 |
| Gas, diesel, fuel oils (b) | 164,340 | 203,717 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | 24,188 | 27,284 | 30,467 | 34,184 | 32,363 | 34,796 |
| do. (b) | 2,119 | 2,547 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Petroleum jelly | 99 | 130 | 113 | 142 | 130 | 153 |
| Paraffin wax | 2,137 | 2,245 | 2,889 | 3,512 | 2,818 | 2,832 |
| Ozokerite and ceresin | 98 | 99 | 106 | 95 | 66 | 49 |
| Bitumen | 91 | 118 | (a) 29,712 | (a) 37,046 | 44,508 | 39,084 |
| Natural asphalt | 13,607 | 15,429 | 11,561 | 7,097 | 9,569 | 6,108 |
| Spain— | | | | | | |
| Crude petroleum | 3,831,548 | 4,020,534 | 3,941,274 | 4,653,518 | 5,425,060 | 5,798,073 |
| Motor spirit | 213,312 | 204,436 | (c) 56,087 | (c) 80,149 | (c) 83,164 | (c) 37,715 |
| Kerosine | 32,472 | 53,713 | (c) 34,092 | (c) 17,315 | (c) 28,741 | (c) 9,075 |
| Diesel oil | 97,958 | 120,720 | (c) 143,599 | (c) 115,769 | (c) 45,351 | (c) 115,603 |
| Lubricating oil | 80,912 | 84,920 | (c) 32,097 | (c) 11,082 | (c) 39,333 | (c) 6,779 |
| Fuel oil | 410,050 | 277,360 | (c) 807 | (c) 9,818 | (c) 9,210 | (c) 34,390 |
| Petroleum jelly | 893 | 295 | (c) 298 | (c) 732 | (c) 931 | (c) 850 |
| Paraffin wax | 2,247 | 568 | (c) 1,625 | (c) 1,535 | (c) 735 | (c) 1,438 |
| Asphalt | 68,961 | 90,327 | (c) 13,846 | (c) 713 | (c) 536 | (c) 1,062 |
| Sweden— | | | | | | |
| Crude petroleum | 2,129,415 | 2,335,773 | 2,604,355 | 2,551,145 | 2,421,148 | 2,633,817 |
| Motor spirit, etc. | 1,258,662 | 1,251,949 | 1,505,209 | 1,540,238 | 1,832,333 | 2,701,468 |
| White spirit | 46,001 | 43,832 | 56,021 | 47,305 | 50,000 | 69,802 |
| Kerosine | 306,791 | 307,627 | 317,021 | 289,111 | 318,000 | 445,298 |
| Fuel oil and gas oil | 6,590,677 | 6,651,825 | 8,406,037 | 8,590,473 | 9,622,528 | 11,941,596 |
| Lubricating oil and grease | 92,237 | 103,389 | 117,070 | 114,944 | 130,866 | 123,743 |
| Petroleum jelly | 671 | 650 | 764 | 647 | 810 | 858 |
| Paraffin wax | 5,827 | 6,079 | 7,118 | 7,179 | 7,846 | 7,631 |
| Ozokerite, ceresin, etc. | 1,869 | 1,233 | 1,137 | 1,421 | 1,521 | 1,925 |
| Asphalt | 3,957 | 1,337 | 882 | 507 | 1,067 | 683 |
| Pitch | 7,227 | 6,435 | 7,282 | 7,018 | 8,424 | 9,441 |
| Petroleum coke | 6,893 | 6,188 | 4,698 | 12,849 | 9,947 | 12,700 |
| Switzerland— | | | | | | |
| Crude Petroleum | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 4,202 | 353,368 |
| Motor spirit | 745,885 | 834,327 | 974,070 | 1,132,780 | 1,032,682 | 1,253,188 |
| White spirit | 10,531 | 10,090 | 10,841 | 10,776 | 8,861 | 7,796 |
| Kerosine | 56,448 | 63,167 | 15,425 | 15,424 | 16,425 | 19,844 |
| Gas and diesel oils | 195,468 | 221,536 | 369,415 | 448,601 | 298,718 | 494,894 |
| Fuel oil | 1,897,803 | 1,885,866 | 2,318,463 | 2,398,116 | 3,302,971 | 4,192,766 |
| Lubricating oil and grease | 46,091 | 51,739 | 57,858 | 66,755 | 68,933 | 77,762 |
| Petroleum jelly | 759 | 1,086 | 702 | 805 | 830 | 702 |
| Paraffin wax and ceresin | 3,310 | 4,379 | 4,998 | 5,149 | 5,660 | 6,090 |
| Asphalt and bitumen | 962 | 1,172 | 96,174 | 128,279 | 147,039 | 191,804 |
| Petroleum coke | <i>n.a.</i> | <i>n.a.</i> | 14,124 | 27,052 | 35,954 | 65,173 |
| U.S.S.R.— | | | | | | |
| Crude petroleum | 1,061,500 | 1,066,000 | 1,147,400 | 873,600 | 488,000 | 534,621 |
| Motor spirit | 2,065,300 | 2,196,700 | 2,139,900 | 1,752,000 | 1,556,300 | 1,510,757 |
| Kerosine | 347,200 | 352,100 | 300,400 | 268,500 | 240,200 | 200,384 |
| Diesel oil | 442,100 | 352,900 | 336,700 | 261,800 | 223,100 | 237,686 |
| Fuel oil | 44,300 | 50,300 | 47,900 | 47,000 | 42,900 | 50,195 |
| Lubricating oil and grease | 97,300 | 126,500 | 120,800 | 143,700 | 115,300 | 144,481 |
| Paraffin wax | 26,600 | 28,900 | 32,200 | 38,900 | 33,300 | 26,475 |
| Bitumen | 138,500 | 175,500 | 199,400 | 177,600 | 61,600 | 67,024 |
| Yugoslavia— | | | | | | |
| Crude petroleum | 619,135 | 609,314 | 428,107 | 282,657 | 735,070 | 765,773 |
| Aviation spirit | 23,676 | 30,508 | 23,625 | 10,370 | 16,564 | 10,466 |
| Motor spirit | 609 | 829 | 707 | 103 | — | 1 |
| Kerosine | — | — | 6,831 | 9,402 | 4,632 | 4,509 |
| Aviation turbine fuel | — | 8 | 5 | — | — | — |
| Fuel oils | 205 | 58,576 | 126,214 | 123,460 | 229,432 | 137,381 |

(a) Including petroleum coke.

(b) Imported for bunkering of national ships.

(c) Excluding imports from Canary Islands.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Yugoslavia (cont.) | | | | | | |
| Lubricating oil | 13,976 | 16,073 | 17,996 | 23,381 | 19,761 | 21,671 |
| Greases | 202 | 245 | 321 | 317 | 194 | 334 |
| Paraffin wax | 523 | 939 | 1,646 | 1,786 | 2,682 | 2,755 |
| Petroleum jelly | 278 | 748 | 524 | 444 | 571 | 648 |
| Ozokerite and ceresin | 112 | 134 | 184 | 160 | 224 | 327 |
| Petroleum coke | 7,342 | 6,698 | 2,046 | 15,698 | 13,653 | 15,255 |
| Pitch | 4,910 | 5,320 | 768 | 5,022 | 1,820 | 21,240 |
| Algeria— | | | | | | |
| Crude petroleum | — | — | 11,116 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Aviation spirit | 16,528 | 16,272 | 5,734 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Motor spirit | 266,761 | 290,883 | 311,926 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| White spirit | 1,902 | 2,315 | 3,307 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine | 82,117 | 87,588 | 93,976 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Gas oil | 306,718 | 355,940 | 373,813 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oil and diesel oil | 296,897 | 432,862 | 553,828 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | 27,378 | 32,719 | 29,046 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Bitumen, etc. | 67,501 | 81,862 | 88,048 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Paraffin wax | 601 | 580 | 607 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Petroleum jelly | 12 | 52 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ozokerite and ceresin | 17 | 11 | 12 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Natural asphalt, etc. | 37 | 4,598 | 1,215 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mastic asphalt | 3,968 | 3,495 | 4,877 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Angola— | | | | | | |
| Crude petroleum | — | 11,628 | 116,192 | 119,691 | — | — |
| Motor spirit | 29,387 | 28,162 | 23,252 | 17,413 | 9,246 | 10,375 |
| Kerosine | 9,732 | 8,867 | 10,046 | 10,000 | 9,579 | 6,834 |
| Gas oil and fuel oil | 76,054 | 78,702 | 58,626 | 49,044 | 40,777 | 15,525 |
| Lubricating oil | 6,744 | 6,458 | 7,510 | 7,360 | 7,818 | 9,680 |
| Paraffin wax | 13 | 23 | 19 | 59 | 24 | 61 |
| Petroleum jelly | 25 | 20 | 35 | 29 | 27 | 34 |
| Asphalt and bitumen | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 744 | 48 | 4,078 |
| Cameroun— | | | | | | |
| Motor spirit, etc. | 53,300 | 55,405 | 53,446 | 50,601 | 50,684 | 48,792 |
| Kerosine | 16,097 | 15,191 | 16,925 | 26,062 | 24,327 | 26,760 |
| Gas and fuel oil | 25,766 | 25,036 | 23,115 | 27,654 | 31,584 | 34,907 |
| Lubricating oil | 3,694 | 4,303 | 2,695 | 3,596 | 3,939 | 4,107 |
| Canary Islands— | | | | | | |
| Crude petroleum | 2,763,827 | 3,080,585 | 2,447,564 | 2,658,809 | 4,100,273 | <i>n.a.</i> |
| Motor spirit | 9,903 | 10,018 | 10,470 | 14,860 | 37,897 | <i>n.a.</i> |
| Diesel (b) | 38,339 | 97,542 | 27,155 | 41,762 | 18,361 | <i>n.a.</i> |
| Fuel oil (b) | 3,996 | — | 9,021 | — | 22,637 | <i>n.a.</i> |
| Cape Verde Islands— | | | | | | |
| Motor spirit | 515 | 455 | 562 | 551 | 783 | 599 |
| Kerosine | 1,155 | 1,268 | 1,472 | 1,750 | 1,610 | 1,988 |
| Fuel oil (b) | 456,329 | 476,416 | 328,451 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ceuta— | | | | | | |
| Motor spirit | 8,849 | 7,859 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine | 457 | 3,112 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Diesel (b) | 136,313 | 136,662 | (a) 125,279 | (a) 111,055 | (a) 130,299 | <i>n.a.</i> |
| Fuel oil (b) | 372,735 | 384,079 | (a) 268,213 | (a) 267,007 | (a) 303,399 | <i>n.a.</i> |
| Lubricating oil | 2,188 | 2,797 | (a) 3,487 | (a) 3,811 | (a) 367 | <i>n.a.</i> |
| Congo Republic— | | | | | | |
| Motor spirit, etc. | 212,832 | 187,279 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| White spirit | 569 | 373 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine | 38,266 | 41,772 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oil, etc. | 189,917 | 183,800 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil and greases | 13,603 | 16,803 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Petroleum jelly | 64 | 69 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Paraffin wax | 104 | 118 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Asphalt | 995 | 1,664 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Excluding imports from Spain and Canary Islands.

(b) Imported chiefly for bunkering purposes. See exports.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|-----------|-----------|-----------|-----------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Dahomey— | | | | | | |
| Aviation spirit | 120 | 197 | 660 | 373 | 832 | <i>n.a.</i> |
| Motor spirit | 18,785 | 15,299 | 20,728 | 14,140 | 13,335 | <i>n.a.</i> |
| Kerosine | 12,426 | 10,835 | 15,250 | 12,855 | 12,726 | <i>n.a.</i> |
| Gas oil | 8,877 | 7,241 | 14,335 | 12,409 | 14,795 | <i>n.a.</i> |
| Fuel oils | 99 | 106 | 550 | 837 | 535 | <i>n.a.</i> |
| Lubricating oil | 1,294 | 1,307 | 1,060 | 807 | 1,146 | <i>n.a.</i> |
| Egypt— | | | | | | |
| Crude petroleum | 1,569,742 | 1,514,893 | 2,044,509 | 2,741,198 | 3,650,185 | <i>n.a.</i> |
| Motor spirit | 16,748 | 20,769 | 12,941 | 9,821 | 5,529 | <i>n.a.</i> |
| White spirit | 2,116 | 43 | — | 10 | 29 | <i>n.a.</i> |
| Kerosine | 459,822 | 369,084 | 415,291 | 330,537 | 312,931 | <i>n.a.</i> |
| Fuel oil | 259,765 | 426,646 | 378,437 | 100,229 | 81,696 | <i>n.a.</i> |
| Gas oil | 84,333 | 110,200 | 183,625 | 149,218 | 156,576 | <i>n.a.</i> |
| Diesel oil | 51,694 | 42,659 | 35,798 | 15,156 | 17,687 | <i>n.a.</i> |
| Lubricating oil | 53,628 | 47,125 | 39,935 | 52,201 | 34,880 | <i>n.a.</i> |
| Petroleum jelly | 889 | 568 | 200 | 324 | 169 | <i>n.a.</i> |
| Paraffin wax | 2,048 | 1,102 | 1,992 | 1,104 | 151 | <i>n.a.</i> |
| Ozokerite and ceresin | 75 | 212 | 112 | 100 | | |
| Asphalt and bitumen | 830 | 819 | 602 | 23 | 2,041 | <i>n.a.</i> |
| Equatorial African Community— | | | | | | |
| Aviation spirit | 24,357 | 24,346 | 29,008 | 26,411 | 23,616 | <i>n.a.</i> |
| Motor spirit | 43,522 | 47,234 | 49,538 | 50,181 | 56,702 | <i>n.a.</i> |
| Kerosine | 12,930 | 15,180 | 16,283 | 14,130 | 12,158 | <i>n.a.</i> |
| Gas oil | 49,757 | 53,499 | 72,698 | 71,450 | 73,760 | <i>n.a.</i> |
| Fuel oil | 7,812 | 8,671 | 4,540 | 5,789 | 6,321 | <i>n.a.</i> |
| Lubricating oil, etc. | 6,437 | 5,998 | 6,616 | 7,502 | 6,691 | <i>n.a.</i> |
| Ethiopia (a)— | | | | | | |
| Aviation spirit | 3,799 | 7,372 | 6,473 | 9,346 | <i>n.a.</i> | 1,684 |
| Motor spirit | 72,604 | 85,584 | 75,495 | 79,534 | <i>n.a.</i> | 171,223 |
| Kerosine | 4,064 | 3,572 | 3,903 | 4,017 | <i>n.a.</i> | 3,995 |
| Gas and fuel oils | 15,937 | 14,273 | 22,481 | 28,644 | <i>n.a.</i> | 13,528 |
| Lubricating oil and grease | 5,194 | 7,515 | 5,686 | 5,396 | <i>n.a.</i> | <i>n.a.</i> |
| French Somaliland— | | | | | | |
| Motor spirit | 2,232 | 2,290 | 2,176 | 2,645 | 3,015 | 4,557 |
| Kerosine | 676 | 658 | 689 | 777 | 868 | 1,050 |
| Fuel oil, etc. | 4,591 | 3,731 | 4,682 | 5,013 | 6,055 | 6,772 |
| Lubricating oil | 261 | 261 | 295 | 400 | 467 | 457 |
| Ivory Coast— | | | | | | |
| Aviation spirit | 518 | 8,194 | 3,745 | 859 | 654 | 1,440 |
| Motor spirit | 83,950 | 86,943 | 59,426 | 90,757 | 88,203 | 86,259 |
| Kerosine | 28,824 | 33,570 | 26,047 | 28,396 | 28,171 | 28,983 |
| Gas oil | 24,825 | 29,040 | 29,573 | 35,251 | 42,730 | 52,088 |
| Fuel oils | 19,753 | 23,040 | 11,998 | 20,808 | 27,311 | 29,957 |
| Lubricating oil | 5,080 | 6,195 | 5,907 | 5,731 | 6,766 | 8,111 |
| Liberia— | | | | | | |
| Motor spirit | 20,873 | 17,149 | 19,996 | 24,993 | 18,241 | <i>n.a.</i> |
| Kerosine | 2,600 | 12,734 | 6,394 | 4,139 | 8,228 | <i>n.a.</i> |
| Diesel oil, etc. | 22,810 | 17,767 | 27,130 | 26,884 | 57,398 | <i>n.a.</i> |
| Lubricating oil | 1,344 | 1,040 | 1,461 | 2,328 | 4,135 | <i>n.a.</i> |
| Libya— | | | | | | |
| Motor spirit | 35,275 | 42,059 | 61,523 | 52,120 | 65,623 | 73,902 |
| Kerosine, etc. | 9,105 | 11,895 | 15,240 | 18,151 | 22,807 | 29,145 |
| Gas oil and diesel oil | 25,344 | 40,000 | 66,543 | 88,822 | 88,716 | 103,779 |
| Fuel oil | 3,734 | 9,536 | 43,658 | 6,731 | 7,280 | 17,208 |
| Lubricating oil, etc. | 3,184 | 4,096 | 6,890 | 6,047 | 6,946 | 8,260 |

(a) Years ended September 10.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Malagasy Republic— | | | | | | |
| Aviation spirit | 8,044 | 5,245 | 5,219 | 5,611 | 4,492 | 4,815 |
| Motor spirit | 50,114 | 48,226 | 51,522 | 51,533 | 54,354 | 55,918 |
| Kerosine | 16,730 | 15,299 | 17,236 | 16,972 | 17,710 | 18,167 |
| Gas oil | 39,415 | 43,102 | 41,495 | 38,832 | 46,105 | 50,385 |
| Fuel oils | 79 | 806 | 656 | 1,093 | 1,207 | 1,482 |
| Lubricating oil | 4,764 | 5,009 | 5,575 | 3,985 | 5,754 | 6,348 |
| Road oil, etc. | 3,639 | 3,927 | 4,104 | 5,289 | 3,520 | 4,759 |
| Paraffin wax | 80 | 25 | 22 | 117 | 761 | 665 |
| Petroleum jelly | 14 | 12 | 17 | 17 | 21 | 29 |
| Asphalt and bitumen .. | 37 | 69 | 107 | 34 | 18 | 427 |
| Melilla— | | | | | | |
| Motor spirit | 3,904 | 3,790 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine | 1,153 | 1,216 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Diesel oil | 9,400 | 9,472 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oil | 5,119 | 5,127 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | 423 | 809 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Paraffin wax | 52 | 82 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Morocco— | | | | | | |
| Crude petroleum | 25,542 | 74,014 | 88,228 | 127,134 | 119,293 | 451,162 |
| Aviation spirit | 16,238 | 12,069 | 10,488 | 13,095 | 11,331 | 6,084 |
| Motor spirit | 197,922 | 181,905 | 171,535 | 152,506 | 95,003 | 2,603 |
| White spirit | 1,156 | 1,648 | 1,581 | 1,435 | 1,422 | 1,739 |
| Kerosine | 38,094 | 41,222 | 46,618 | 45,724 | 28,057 | 17,290 |
| Gas oil | 124,433 | 131,870 | 165,749 | 199,121 | 70,981 | 6,846 |
| Fuel oil | 171,789 | 178,981 | 209,203 | 207,343 | 81,777 | 9,704 |
| Lubricating oil, etc. .. | 16,024 | 14,761 | 18,403 | 19,052 | 17,072 | 17,673 |
| Paraffin wax | 4,455 | 5,637 | 5,267 | 5,325 | 8,390 | 5,193 |
| Asphalt, bitumen, etc. . | 17,994 | 19,614 | 23,428 | 24,444 | 25,566 | 27,345 |
| Mozambique— | | | | | | |
| Motor spirit | 32,335 | 34,929 | 39,349 | 36,760 | 18,425 | <i>n.a.</i> |
| Kerosine | 18,429 | 19,104 | 19,131 | 20,357 | 16,523 | 15,878 |
| Fuel oil | 66,138 | 66,720 | 81,933 | 75,461 | 31,059 | 18,374 |
| Lubricating oil | 6,028 | 6,656 | 7,175 | 7,093 | 6,130 | 6,487 |
| Paraffin wax | 40 | 38 | 69 | 80 | <i>n.a.</i> | <i>n.a.</i> |
| Petroleum jelly | 31 | 27 | 56 | 38 | <i>n.a.</i> | <i>n.a.</i> |
| Asphalt and bitumen (a) | 8,939 | 6,025 | 4,716 | 5,269 | <i>n.a.</i> | <i>n.a.</i> |
| Niger— | | | | | | |
| Aviation spirit | 2,129 | 673 | <i>n.a.</i> | 975 | 2,987 | 1,336 |
| Motor spirit | 3,553 | 3,291 | <i>n.a.</i> | 8,964 | 4,954 | 11,091 |
| Kerosine | 1,115 | 974 | <i>n.a.</i> | 2,361 | 3,001 | 3,634 |
| Gas oil | 1,125 | 1,460 | <i>n.a.</i> | 4,457 | 5,008 | 9,659 |
| Fuel oils | 30 | 40 | <i>n.a.</i> | 335 | 1,767 | 2,485 |
| Lubricating oil | 433 | 89 | <i>n.a.</i> | 334 | 983 | 530 |
| Reunion— | | | | | | |
| Motor spirit, etc. | 13,900 | 13,561 | 15,139 | 16,900 | 18,934 | 22,293 |
| Kerosine | 1,748 | 2,205 | 2,243 | 2,538 | 2,683 | 3,866 |
| Fuel oil, etc. | 3,751 | 7,098 | 6,577 | 7,895 | 6,469 | 8,732 |
| Lubricating oil | 735 | 743 | 1,092 | 1,033 | 1,209 | 2,360 |
| S. Tome and Principe— | | | | | | |
| Motor spirit | 1,195 | 1,101 | 1,007 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine | 365 | 432 | 530 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oil | 959 | 681 | 831 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Senegal— | | | | | | |
| Aviation spirit | 15,307 | 10,654 | 8,779 | 5,878 | 3,928 | 5,563 |
| Motor spirit | 75,143 | 77,554 | 72,966 | 66,797 | 71,821 | 65,401 |
| Kerosine | 15,128 | 16,172 | 13,668 | 11,683 | 12,324 | 18,276 |
| Gas oil | 28,447 | 35,578 | 15,845 | 17,304 | 20,209 | 16,767 |
| Fuel oils | 69,266 | 95,372 | 88,420 | 116,451 | 140,973 | 146,546 |
| Lubricating oil | 9,886 | 5,764 | 7,878 | 3,547 | 4,231 | 3,645 |

(a) Including coal tar and pitch.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Somali Republic (b)— | | | | | | |
| Aviation and motor spirit | 3,908 | 5,405 | 4,989 | 5,816 | 6,470 | n.a. |
| Kerosine | 738 | 772 | 849 | 1,106 | 942 | n.a. |
| Gas oil | 1,587 | 2,110 | 2,263 | 2,775 | 3,110 | n.a. |
| Lubricating oil | 140 | 59 | 204 | 241 | 260 | n.a. |
| South Africa— | | | | | | |
| Crude petroleum | 1,381,367 | 1,375,984 | 1,368,412 | 1,583,306 | 1,726,547 | 2,267,049 |
| Motor spirit (a) | 1,128,765 | 1,110,949 | 1,124,744 | 1,173,318 | 1,191,633 | 1,079,905 |
| Other spirit | 19,102 | 15,494 | 14,203 | 16,449 | 17,977 | n.a. |
| White spirit | 31,610 | 21,123 | 29,578 | 30,355 | 29,803 | 33,265 |
| Kerosine | 479,671 | 393,505 | 403,706 | 391,749 | 370,520 | 400,069 |
| Gas oil (a) | 486,268 | 519,406 | 532,016 | 593,715 | 621,562 | 580,042 |
| Diesel oil (a) | 64,877 | 33,570 | 33,156 | 4,840 | 23,535 | 24,703 |
| Fuel oil (a) | 151,497 | 197,287 | 164,933 | 208,296 | 228,396 | n.a. |
| Lubricating oil | 96,017 | 104,701 | 104,232 | 119,008 | 143,376 | 131,396 |
| Transformer oil | 5,374 | 5,805 | 3,769 | 5,192 | 4,069 | n.a. |
| Road oil | 382 | 2,836 | 2,144 | 2,261 | 346 | n.a. |
| Other oils | 3,027 | 3,509 | 17,832 | 4,004 | 21,990 | n.a. |
| Paraffin wax | 15,051 | 15,296 | 15,949 | 9,769 | 11,873 | 13,881 |
| Asphalt and bitumen | 37,116 | 32,997 | 39,169 | 33,633 | 31,014 | 32,234 |
| Petroleum jelly | 2,943 | 2,981 | 4,537 | 2,645 | 2,976 | n.a. |
| Sudan— | | | | | | |
| Aviation spirit (a) | 22,634 | 19,314 | 15,684 | 12,789 | 10,169 | 8,613 |
| Motor spirit | 72,874 | 70,625 | 71,176 | 74,105 | 70,266 | 81,302 |
| Kerosine | 33,332 | 40,001 | 52,069 | 51,684 | 60,014 | 68,468 |
| Gas oil | 64,115 | 63,292 | 75,324 | 99,074 | 111,677 | 141,880 |
| Diesel oil | 20,384 | 21,252 | 27,862 | 21,786 | 23,767 | 34,321 |
| Fuel oil | 164,270 | 194,956 | 189,417 | 176,403 | 195,998 | 195,514 |
| Lubricating oil, etc. | 9,950 | 6,585 | 7,722 | 11,339 | 12,085 | 13,471 |
| Petroleum jelly | n.a. | n.a. | 4 | 9 | 8 | 10 |
| Paraffin wax | 10 | 29 | 14 | 10 | 30 | 172 |
| Asphalt and bitumen | 6,036 | 2,755 | 3,162 | 6,799 | 8,631 | 8,040 |
| Togo— | | | | | | |
| Motor spirit | 5,784 | 6,851 | 8,231 | 8,008 | 8,070 | 7,282 |
| Kerosine | 4,695 | 5,559 | 6,187 | 6,622 | 7,732 | 7,627 |
| Fuel oil | 4,849 | 5,635 | 8,314 | 14,450 | 13,421 | 20,526 |
| Lubricating oil | 610 | 448 | 623 | 1,020 | 526 | 776 |
| Tunisia— | | | | | | |
| Aviation spirit | 297 | 77,001 | 74,463 | 68,841 | 73,639 | 75,979 |
| Motor spirit | 72,970 | | | | | |
| Kerosine | 37,074 | 41,266 | 43,337 | 45,517 | 48,130 | 50,365 |
| Fuel oil | 174,257 | 200,334 | 221,418 | 233,761 | 236,571 | 262,607 |
| Gas oil | 83,938 | 86,916 | 99,720 | 109,910 | 119,112 | 132,234 |
| Lubricating oil | 7,284 | 9,601 | 8,899 | 13,500 | 8,869 | 10,924 |
| Petroleum jelly | 10 | 25 | 51 | 12 | 19 | 1 |
| Paraffin wax | 111 | 60 | 68 | 83 | 58 | 171 |
| Upper Volta— | | | | | | |
| Aviation spirit | 765 | 970 | 1,113 | 1,539 | 1,009 | 564 |
| Motor spirit | 13 | 671 | 7,266 | 13,111 | 10,774 | 11,816 |
| Kerosine | — | 146 | 3,370 | 5,664 | 4,918 | 4,681 |
| Gas oil | — | 346 | 2,716 | 5,976 | 5,345 | 5,362 |
| Fuel oils | — | 62 | 578 | 3,093 | 5,452 | 5,932 |
| Lubricating oil | — | 9 | 51 | 861 | 1,365 | 1,061 |
| Costa Rica— | | | | | | |
| Motor spirit | 49,111 | 47,776 | 72,261 | 53,816 | 57,013 | 62,019 |
| Kerosine | 7,778 | 7,758 | 13,471 | 9,901 | 13,054 | 13,398 |
| Diesel oil, etc. | 65,192 | 56,189 | 74,094 | 65,124 | 91,641 | 99,964 |
| Fuel oil | 20,891 | 9,276 | 20,239 | 27,049 | 12,308 | 15,070 |
| Lubricating oil | 5,540 | 4,213 | 4,788 | 5,372 | 7,676 | 10,196 |
| Grease | 291 | 227 | 296 | 244 | 337 | 266 |
| Petroleum jelly | 80 | 125 | 99 | 129 | 117 | 125 |
| Paraffin wax | 1,302 | 1,337 | 1,417 | 1,328 | 1,179 | 1,591 |
| Asphalt | 4,091 | 3,513 | 4,735 | 4,221 | 4,828 | 2,841 |

(a) Including imports for bunkering purposes. See exports.

(b) Former British Protectorate only.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-----------|-----------|---------|---------|---------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Cuba— | | | | | | |
| Crude petroleum .. | 2,030,833 | 1,682,722 | n.a. | n.a. | n.a. | n.a. |
| Motor spirit | 122,129 | 54,947 | n.a. | n.a. | n.a. | n.a. |
| Kerosine | 9,073 | 620 | n.a. | n.a. | n.a. | n.a. |
| Fuel oil | 1,727,157 | 1,196,866 | n.a. | n.a. | n.a. | n.a. |
| Gas oil | 21,144 | | | | | |
| Lubricating oil .. | 48,162 | 91,502 | n.a. | n.a. | n.a. | n.a. |
| Other oils | 28,723 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Petroleum jelly .. | 764 | 296 | n.a. | n.a. | n.a. | n.a. |
| Paraffin wax | 3,959 | 12,838 | n.a. | n.a. | n.a. | n.a. |
| Asphalt rock | 153 | — | n.a. | n.a. | n.a. | n.a. |
| Other asphalt and bitumen | 488 | 231 | n.a. | n.a. | n.a. | n.a. |
| Petroleum coke .. | 188 | 6,522 | n.a. | n.a. | n.a. | n.a. |
| Dominican Republic— | | | | | | |
| Aviation spirit | 14,652 | 9,268 | 5,500 | 3,889 | 4,488 | n.a. |
| Motor spirit | 82,464 | 80,293 | 78,759 | 72,402 | 66,971 | n.a. |
| Kerosine | 12,373 | 11,776 | 14,562 | 15,366 | 16,035 | n.a. |
| Diesel oil | 71,179 | 51,891 | 60,851 | 74,204 | 63,291 | n.a. |
| Fuel oil | 127,580 | 177,633 | 147,975 | 126,152 | n.a. | n.a. |
| Lubricating oil, etc. | 7,841 | 7,204 | 7,736 | 7,038 | 7,135 | n.a. |
| Paraffin wax | 959 | 1,059 | 1,092 | 929 | n.a. | n.a. |
| Asphalt | 2,451 | 15,875 | 14,878 | 9,005 | 10,627 | n.a. |
| French West Indies— | | | | | | |
| Guadeloupe— | | | | | | |
| Motor spirit, etc. .. | 17,869 | 22,587 | 22,248 | 26,064 | 25,797 | 29,463 |
| Kerosine | 8,527 | 10,004 | 10,547 | 15,679 | 17,634 | 17,006 |
| Gas and fuel oil .. | 8,945 | 12,776 | 14,375 | 14,305 | 15,993 | 15,889 |
| Lubricating oil .. | 1,501 | 2,342 | 1,916 | 2,620 | 2,507 | 2,443 |
| Martinique— | | | | | | |
| Motor spirit, etc. .. | 16,407 | 19,721 | 22,623 | 22,400 | 21,321 | 57,629 |
| Kerosine | 9,455 | 10,463 | 9,051 | 11,316 | 9,013 | 12,974 |
| Gas and fuel oil .. | 17,874 | 20,348 | 20,570 | 22,221 | 23,815 | 27,227 |
| Lubricating oil .. | 1,495 | 2,177 | 2,265 | 2,329 | 2,508 | 2,975 |
| Greenland— | | | | | | |
| Motor spirit | 1,473 | 2,070 | 2,107 | 3,307 | 2,824 | 2,773 |
| Kerosine | 1,039 | 2,887 | 1,103 | 3,097 | 2,293 | 3,423 |
| Fuel oil | 34,813 | 40,249 | 29,722 | 50,592 | 45,226 | 53,904 |
| Lubricating oil .. | 353 | 508 | 569 | 343 | 470 | 644 |
| Guatemala— | | | | | | |
| Crude petroleum, etc. | 156,058 | 180,979 | 208,476 | 209,557 | 220,532 | n.a. |
| Aviation spirit | 5,331 | 117,182 | 121,529 | 122,374 | 103,000 | n.a. |
| Motor spirit | 114,713 | | | | | |
| Kerosine | 22,404 | 21,879 | 32,689 | 42,941 | 50,092 | n.a. |
| Diesel oil | 67,201 | 85,400 | 82,191 | 87,807 | 84,210 | n.a. |
| Fuel oil | 4,144 | | | | | |
| Lubricating oil .. | 6,858 | 5,642 | 6,000 | 5,417 | 6,369 | n.a. |
| Grease | 657 | 483 | 508 | 520 | 523 | n.a. |
| Asphalt | 17,377 | 19,000 | 15,000 | n.a. | n.a. | n.a. |
| Paraffin wax, etc. .. | 3,850 | 4,000 | 6,000 | 5,428 | 5,664 | n.a. |
| Honduras— | | | | | | |
| Crude petroleum .. | 65,596 | 69,712 | 71,413 | 102,582 | 85,146 | 67,196 |
| Motor spirit | 41,953 | 38,782 | 37,576 | 40,291 | 43,587 | 44,006 |
| Kerosine | 6,436 | 7,353 | 10,666 | 10,623 | 12,387 | 13,397 |
| Gas, diesel and fuel oils | 72,897 | 71,848 | 71,239 | 75,227 | 72,883 | 92,640 |
| Lubricating oil .. | 5,317 | 5,914 | 5,492 | 5,828 | 4,892 | 4,003 |
| Greases | 341 | 374 | 565 | 513 | 465 | 392 |
| Mexico— | | | | | | |
| Crude petroleum .. | 101,853 | 10,468 | — | 26 | 2 | 20,798 |
| Aviation spirit | 53,414 | 52,797 | 50,800 | 6,353 | 6,528 | 3,129 |
| Motor spirit | 241,303 | 103,349 | 110,753 | 42,651 | 10,343 | 7,092 |
| Kerosine | 76,056 | 4,239 | 743 | 653 | 420 | 150 |
| Gas oil | 137,623 | 21,843 | 3,543 | 33,008 | 282 | 334 |
| Fuel oil | 418,994 | 258,652 | 89,525 | 82,802 | 91,288 | 159,354 |

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|------------|------------|------------|------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Mexico (cont.)— | | | | | | |
| Lubricating oil | 11,818 | 11,149 | 12,789 | 21,823 | 14,768 | 5,204 |
| Grease | 4,964 | 5,940 | 3,588 | 2,945 | 2,443 | 3,718 |
| Paraffin wax | 12,689 | 17,408 | 21,249 | 20,353 | 1,822 | 22,655 |
| Petroleum jelly | 896 | 1,396 | 1,691 | 1,611 | 1,411 | 2,176 |
| Asphalt | 1,552 | 4,589 | 2,087 | 1,039 | 468 | 814 |
| Asphalt rock | 1,657 | 2,729 | 844 | 123 | 173 | 136 |
| Natural gas (<i>million cu. ft.</i>) | 9,324 | 10,327 | 9,877 | 8,900 | 9,620 | 9,384 |
| Netherlands Antilles— | | | | | | |
| Crude petroleum | 36,027,260 | 38,180,175 | 38,151,901 | 39,327,000 | 39,155,000 | 38,356,000 |
| Aviation spirit | 257,814 | 82,650 | 286,885 | 463,000 | 425,000 | 483,000 |
| Motor spirit | 1,484,502 | 754,098 | 511,137 | 810,000 | 444,000 | 455,000 |
| Kerosine | 65,183 | 42,173 | 28,372 | 131,000 | 82,000 | 46,000 |
| Fuel oil | 2,891,177 | 1,840,249 | 1,032,264 | 1,274,000 | 3,358,000 | 4,000,000 |
| Diesel oil | 150,144 | 239,613 | 17,647 | 74,000 | 21,000 | 20,000 |
| Gas oil | 696,733 | 446,942 | 234,476 | 248,000 | 266,000 | 172,000 |
| Lubricating oil, etc. | 2,651 | 3,368 | 28,305 | 92,000 | 17,000 | — |
| Asphalt | — | — | 1,182 | — | — | — |
| Nicaragua— | | | | | | |
| Aviation spirit | 56,479 | 56,974 | 60,379 | 63,110 | 64,355 | 40,796 |
| Motor spirit | | | | | | |
| Kerosine | 17,686 | 16,077 | 16,423 | 17,393 | 18,145 | 17,432 |
| Fuel oil | 116,277 | 81,284 | 93,595 | 90,799 | 103,709 | 62,414 |
| Lubricating oil | 4,052 | 3,708 | 3,702 | 4,492 | 4,109 | 3,954 |
| Paraffin wax | 915 | 692 | 888 | 809 | 853 | 915 |
| Petroleum jelly | | | | | | |
| Natural asphalt | — | — | 9 | — | — | — |
| Panama Republic— | | | | | | |
| Aviation spirit | 24,494 | 24,322 | 47,585 | 47,714 | <i>n.a.</i> | <i>n.a.</i> |
| Motor spirit | 78,228 | 78,132 | 81,018 | 88,013 | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine | 27,411 | 28,399 | 29,703 | 31,076 | <i>n.a.</i> | <i>n.a.</i> |
| Diesel oil | 50,489 | 64,476 | 47,925 | 64,211 | <i>n.a.</i> | <i>n.a.</i> |
| Fuel oil | 119,980 | 123,876 | 133,778 | 146,244 | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | 3,652 | 4,064 | 4,596 | 4,757 | <i>n.a.</i> | <i>n.a.</i> |
| Grease | 336 | 317 | 301 | 240 | <i>n.a.</i> | <i>n.a.</i> |
| Paraffin wax etc. | 235 | 227 | 329 | 364 | <i>n.a.</i> | <i>n.a.</i> |
| St. Pierre and Miquelon— | | | | | | |
| Motor spirit | 429 | 437 | 552 | 521 | 504 | 563 |
| Gas oil and fuel oil | 9,973 | 8,307 | 10,666 | 21,225 | 12,743 | 10,957 |
| Salvador— | | | | | | |
| Motor spirit | 75,256 | 73,530 | 72,754 | 63,624 | 64,146 | 7,422 |
| Kerosine | 25,761 | 29,040 | 26,774 | 28,564 | 32,523 | 25,118 |
| Gas oil and diesel oil | 21,482 | 24,220 | 31,580 | 38,536 | 53,254 | 31,750 |
| Fuel oil | 51,742 | 52,944 | 55,947 | 48,232 | 52,886 | 368,135 |
| Lubricating oil | 3,774 | 3,057 | 3,403 | 3,558 | 3,612 | 4,436 |
| Grease | 598 | 348 | 336 | 333 | 389 | 388 |
| Paraffin wax, etc. | 854 | 955 | 1,009 | 815 | 1,106 | 1,230 |
| Petroleum jelly | 97 | 208 | 236 | 228 | 241 | 239 |
| Asphalt | 5,531 | 7,934 | 5,526 | 4,858 | 5,124 | 5,056 |
| United States— | | | | | | |
| Crude petroleum | 54,817,219 | 54,584,541 | 57,238,878 | 58,897,926 | 64,398,618 | 64,946,020 |
| Aviation spirit | — | 50,023 | 3,360 | 1,619 | 299,897 | 304,265 |
| Motor spirit, etc. | 2,978,302 | 2,041,739 | 289,595 | 215,765 | | |
| Naphtha, etc. | 364,831 | 363,180 | 255,935 | 112,394 | 1,281,455 | <i>n.a.</i> |
| Kerosine | 4,287 | 15,879 | 8,837 | 54,084 | 379 | 28,326 |
| Aviation turbine fuel | (a) | (a) | 1,615,884 | 1,476,386 | 2,213,007 | 3,325,304 |
| Fuel oil | 28,606,304 | 32,549,078 | 33,649,080 | 33,640,432 | 38,335,669 | 39,616,420 |
| Gas oil and diesel oil | 1,985,880 | 2,007,818 | 1,328,327 | 1,853,292 | 1,314,012 | <i>n.a.</i> |
| Unfinished distillates and topped oils | 2,871,438 | 3,180,507 | 2,863,433 | 3,674,336 | 3,028,321 | <i>n.a.</i> |
| Lubricating oil, etc. | 1,052 | 128 | 3,222 | 2,381 | 3,961 | 3,473 |

(a) Included with motor spirit.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------------|-----------|-----------|-----------------|-----------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States <i>(cont.)</i> — | | | | | | |
| Road oil, etc. | 366,680 | 267,504 | 213,709 | 228,606 | 318,310 | <i>n.a.</i> |
| Paraffin wax, etc. | 810 | 2,634 | 759 | 356 | 205 | 668 |
| Ozokerite and ceresin | 1,937 | 2,660 | 1,918 | 2,835 | 3,058 | 3,067 |
| Petroleum jelly | 3 | 513 | 6,238 | 4 | 7,930 | <i>n.a.</i> |
| Asphalt (petroleum) | 821,504 | 1,028,791 | 774,746 | 837,810 | 719,124 | 819,876 |
| Natural asphalt and bitumen | 22,153 | 3,366 | 19,496 | 21,051 | 43,930 | 25,389 |
| Natural gas (<i>million cu. ft.</i>) | 135,797 | 133,990 | 155,646 | 218,860 | 372,389 | 406,204 |
| Argentina— | | | | | | |
| Crude petroleum | 5,550,211 | 5,374,095 | 3,262,806 | 1,771,838 | 1,097,826 | 854,790 |
| Motor spirit | 52,733 | 40,993 | 42,672 | 66,220 | 50,158 | 34,062 |
| Kerosine | 139,206 | 248,427 | 478,925 | 522,444 | 328,334 | 30,667 |
| Gas oil | 330,534 | 393,376 | 501,351 | 642,228 | 679,302 | 396,336 |
| Fuel oil | 1,399,230 | 1,555,257 | 366,176 | 2,336 | — | — |
| Diesel oil | 320,446 | 442,922 | 255,319 | 219,533 | 266,528 | 57,217 |
| Lubricating oil | 63,590 | 40,906 | 63,434 | 34,731 | 109,380 | 72,287 |
| Grease | 209 | 373 | 86 | 341 | 647 | 132 |
| Paraffin wax | <i>n.a.</i> | 1 | 4 | 17 | 28 | 15 |
| Petroleum jelly | <i>n.a.</i> | 2 | 6 | 14 | 40 | 53 |
| Bolivia— | | | | | | |
| Aviation spirit | 9,746 | 10,895 | 10,387 | <i>r</i> 9,280 | 10,893 | 11,931 |
| Motor spirit | 2 | 11 | — | 33 | 89 | 67 |
| Kerosine | 27 | 11 | 11 | 92 | 167 | 82 |
| Fuel oil | 712 | 11,980 | 25,882 | <i>n.a.</i> | 6,957 | 163 |
| Lubricating oil and grease | 5,343 | 3,301 | 3,448 | 2,356 | 2,785 | 1,363 |
| Paraffin wax, etc. | 1,088 | 1,013 | 1,280 | 1,644 | 1,699 | 1,845 |
| Tar, pitch, etc. | 607 | 589 | 588 | 957 | 5 | 10 |
| Brazil— | | | | | | |
| Crude petroleum | 5,563,200 | 5,651,472 | 5,594,150 | 7,429,857 | 9,803,889 | 10,210,620 |
| Aviation spirit | 292,271 | 293,209 | 275,785 | 248,219 | 238,206 | 200,977 |
| Motor spirit | 657,291 | 401,011 | 601,128 | 548,472 | 174,457 | 313,385 |
| White spirit | 705 | 1,071 | 1,392 | 2,793 | 3 | 1 |
| Kerosine | 304,611 | 222,370 | 96,645 | 135,576 | 85,025 | 16,427 |
| Diesel oil | 1,103,858 | 1,251,348 | 1,244,422 | 589,916 | 37,549 | 53,631 |
| Fuel oil | 1,654,250 | 1,227,811 | 1,689,975 | 1,269,636 | 122,001 | — |
| Lubricating oil | 152,825 | 180,102 | 208,530 | 179,182 | 231,679 | 214,240 |
| Transformer oil | 1,656 | 2,411 | 359 | 1,772 | 6,669 | 10,291 |
| Petroleum jelly | 898 | 1,582 | 1,652 | 1,210 | 1,146 | 1,461 |
| Greases | 127 | 108 | 163 | 174 | 58 | 79 |
| Paraffin wax | 10,113 | 10,359 | 16,678 | 13,446 | 20,574 | 16,441 |
| Ozokerite and ceresin | 81 | 136 | 271 | 203 | 1 | 230 |
| Asphalt and bitumen | 15,647 | 1,716 | 1,085 | 4,175 | 626 | 515 |
| Chile— | | | | | | |
| Aviation spirit | 27,977 | 35,313 | 15,552 | <i>r</i> 8,847 | 12,855 | <i>n.a.</i> |
| Motor spirit | 48,579 | 17,567 | 12,588 | <i>r</i> 18,335 | 19,404 | <i>n.a.</i> |
| Kerosine | 85,209 | 150,772 | 102,136 | 37,449 | 43,384 | <i>n.a.</i> |
| Diesel oil | 236,772 | 158,537 | 107,060 | 153,564 | 111,109 | <i>n.a.</i> |
| Residual fuel oil (<i>a</i>) | 790,038 | 1,823,199 | 1,690,397 | 1,164,540 | 991,234 | <i>n.a.</i> |
| Lubricating oil | 31,270 | 28,708 | 18,343 | <i>r</i> 15,823 | 10,642 | <i>n.a.</i> |
| Petroleum jelly | 191 | 107 | 178 | 205 | 139 | <i>n.a.</i> |
| Greases | 1,307 | 1,658 | 1,626 | 2,567 | 1,243 | <i>n.a.</i> |
| Paraffin wax | 7,122 | 7,959 | 6,496 | 8,730 | 5,558 | <i>n.a.</i> |
| Natural asphalt | 3,031 | 1,500 | 566 | 234 | 230 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Aviation spirit | 13,672 | 24,372 | 23,470 | 17,348 | 13,040 | 31,329 |
| Motor spirit | 24,263 | 9,308 | 36,202 | 104,631 | 169,079 | 3,814 |
| Kerosine | 3,703 | 5,090 | 2,915 | 5,948 | 407 | 402 |
| Gas oil and diesel oil | 4,223 | 3,154 | 9,599 | 12,692 | 468 | — |

(a) Including crude petroleum.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Colombia (cont.)— | | | | | | |
| Fuel oils | 798 | 795 | 399 | 780 | 840 | — |
| Lubricating oil | 29,575 | 28,058 | 29,463 | 34,267 | 34,667 | 27,846 |
| Petroleum jelly | 388 | 393 | 435 | 429 | 510 | 692 |
| Paraffin wax | 14,433 | 19,519 | 23,483 | 28,020 | 23,225 | 24,783 |
| Natural asphalt.. .. | 94 | 3 | 1 | 9 | 7 | 9 |
| Ecuador— | | | | | | |
| Motor spirit | 74,003 | 70,936 | 10,263 | <i>n.a.</i> | <i>n.a.</i> | 29,656 |
| Lubricating oil and greases | 4,558 | 5,024 | <i>n.a.</i> | 5,470 | 5,218 | 7,524 |
| Petroleum jelly | 109 | 53 | <i>n.a.</i> | 76 | 90 | <i>n.a.</i> |
| Paraffin wax | 2,839 | 2,811 | <i>n.a.</i> | 2,946 | 3,506 | <i>n.a.</i> |
| Natural asphalt.. .. | 2,625 | 8,257 | <i>n.a.</i> | 213 | 1,723 | <i>n.a.</i> |
| French Guiana— | | | | | | |
| Motor spirit, etc. | 2,347 | 2,528 | 2,500 | 2,856 | 2,891 | 4,036 |
| Kerosine | 989 | 549 | 715 | 1,086 | 577 | 1,107 |
| Fuel oil, etc. | 2,671 | 2,282 | 2,596 | 2,754 | 2,631 | 4,549 |
| Paraguay— | | | | | | |
| Motor spirit | 35,000 | 29,000 | 32,000 | 36,000 | 39,000 | 40,000 |
| Kerosine | 10,000 | 15,000 | 18,000 | 15,000 | 18,000 | 19,000 |
| Fuel oil, etc. | 32,000 | 43,000 | 45,000 | 63,000 | 67,000 | 70,000 |
| Lubricating oil | 2,400 | 1,500 | 2,700 | 2,400 | 2,500 | 3,200 |
| Peru— | | | | | | |
| Aviation spirit | 68,774 | 72,739 | 93,221 | 36,591 | 24,774 | 27,954 |
| Motor spirit | 2 | 3,981 | 6,965 | 3,212 | 17,984 | 44,382 |
| Diesel oil and fuel oil | 125,002 | 237,980 | 361,123 | 556,365 | 514,126 | 441,214 |
| Lubricating oil | 16,233 | 14,063 | 15,844 | 14,882 | 16,352 | 15,025 |
| Petroleum jelly | 84 | 141 | 139 | 185 | 122 | 228 |
| Paraffin wax | 6,118 | 6,152 | 8,010 | 6,910 | 8,719 | 9,749 |
| Asphalt and bitumen | 242 | 4,198 | 317 | 4,293 | 947 | 339 |
| Greases | 1,173 | 1,174 | 1,589 | 1,410 | 1,860 | 1,860 |
| Ozokerite | 5 | 8 | 15 | 18 | 23 | 28 |
| Surinam— | | | | | | |
| Motor spirit | 12,127 | 12,349 | 16,634 | <i>n.a.</i> | 1,158 | <i>n.a.</i> |
| Kerosine | 4,031 | 4,046 | 5,025 | <i>n.a.</i> | 5,431 | <i>n.a.</i> |
| Gas oil .. .. | .. .. | 5,343 | 3,739 | <i>n.a.</i> | 745 | <i>n.a.</i> |
| Diesel oil | 86,184 | 34,798 | 45,406 | <i>n.a.</i> | 59,999 | <i>n.a.</i> |
| Fuel oil .. .. | .. .. | 60,155 | 68,186 | <i>n.a.</i> | 73,526 | <i>n.a.</i> |
| Lubricating oil | 1,509 | 2,331 | 2,106 | <i>n.a.</i> | 3,731 | <i>n.a.</i> |
| Greases | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Paraffin wax | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Asphalt | 1,653 | 3,146 | 2,808 | <i>n.a.</i> | 2,997 | <i>n.a.</i> |
| Uruguay— | | | | | | |
| Crude petroleum | 1,156,000 | 1,186,000 | 1,324,000 | 1,334,000 | 1,500,000 | <i>n.a.</i> |
| Motor spirit, etc. | 46,000 | 19,000 | 8,000 | 38,000 | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine | — | 9,000 | — | — | <i>n.a.</i> | <i>n.a.</i> |
| Gas oil | 49,000 | 86,000 | 26,000 | 44,000 | 127,947 | <i>n.a.</i> |
| Diesel oil | 14,000 | 18,000 | 33,000 | .. .. | .. .. | .. .. |
| Fuel oil | 90,000 | 240,000 | 167,000 | 39,000 | .. .. | .. .. |
| Lubricating oil and greases | 5,000 | 9,000 | 19,000 | 11,000 | 13,680 | <i>n.a.</i> |
| Paraffin wax | 268 | 418 | 420 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela— | | | | | | |
| Motor spirit | 195 | 2,370 | 42,843 | 18,124 | 12,086 | 3,088 |
| White spirit | 39 | 2,893 | 1,423 | 535 | 430 | 856 |
| Gas and fuel oils | 11 | 25 | 452 | 2 | 6 | 34 |
| Lubricating oil and grease.. .. | 80,012 | 51,844 | 39,940 | 24,298 | 19,808 | 8,278 |
| Paraffin wax | 3,968 | 2,918 | 2,519 | 2,756 | 4,325 | 5,761 |
| Petroleum jelly | 379 | 175 | 411 | 506 | 607 | 424 |
| Asphalt .. .. | .. .. | 568 | 502 | 159 | 99 | 177 |
| Bitumen, pitch, etc. | 1,185 | 2,999 | 352 | 752 | 1,602 | 664 |

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Burma— | | | | | | |
| Motor spirit | 13,176 | 10,869 | 14,172 | 10,554 | 14,077 | 5,341 |
| Kerosine | 1,805 | 17 | 4,321 | 8,410 | 15,576 | 12,515 |
| Gas and diesel oils | 28,873 | 24,224 | 30,920 | 23,360 | 78,378 | 14,720 |
| Lubricating oil | 12,201 | 15,318 | 12,170 | 18,880 | 14,676 | 6,368 |
| Grease | 520 | 766 | 615 | 1,358 | 542 | 480 |
| Paraffin wax | — | 2 | 3 | 1 | — | — |
| Petroleum jelly | 582 | 866 | 658 | 851 | 984 | 461 |
| Asphalt | 12,227 | 14,263 | 16,605 | 11,971 | 19,722 | 15,530 |
| Formosa— | | | | | | |
| Crude petroleum | (b) 684,696 | (b) 684,756 | 1,043,567 | 1,340,871 | 1,238,626 | 1,470,384 |
| Motor spirit | 1,107 | 27 | 21 | 1 | — | — |
| Lubricating oil | 9,766 | 13,675 | 8,057 | 15,343 | 24,678 | 17,961 |
| Grease | 290 | 397 | 798 | 535 | 1,067 | 372 |
| Petroleum jelly | 199 | 5 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Paraffin wax | 1,147 | 1,052 | 1,318 | 1,519 | 1,847 | 1,836 |
| Asphalt | — | 16 | 1,897 | 2,007 | 3,653 | 2,731 |
| Indonesia— | | | | | | |
| Crude petroleum | 1,237,433 | 1,144,503 | 349,122 | 2,108,305 | <i>n.a.</i> | <i>n.a.</i> |
| Motor spirit | 322,331 | 138,970 | 460,543 | 365,170 | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine, etc. | 892 | 1,502 | 26,335 | 183,314 | <i>n.a.</i> | <i>n.a.</i> |
| Fuel and gas oils | 40,691 | 19,824 | 3,263 | — | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oil | 58,539 | 50,174 | 45,089 | 63,913 | <i>n.a.</i> | <i>n.a.</i> |
| Paraffin wax | 1,000 | 826 | 447 | 679 | <i>n.a.</i> | <i>n.a.</i> |
| Petroleum jelly | 1,792 | 1,505 | 271 | 1,067 | <i>n.a.</i> | <i>n.a.</i> |
| Asphalt | 11,177 | 32,182 | 14,136 | 50,874 | <i>n.a.</i> | <i>n.a.</i> |
| Iran (a)— | | | | | | |
| Lubricating oil | 17,586 | 17,301 | 25,603 | 25,480 | 25,340 | 25,041 |
| Paraffin wax | 950 | 2,576 | 1,198 | 1,908 | 2,067 | 1,189 |
| Petroleum jelly | 211 | 552 | 196 | | | |
| Iraq— | | | | | | |
| Lubricating oil | 3,272 | 844 | 2,003 | 2,909 | 2,237 | <i>n.a.</i> |
| Israel (c)— | | | | | | |
| Motor spirit | 183,321 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine | 142,600 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Gas, diesel and fuel oils | 1,059,909 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lubricating oils | 9,515 | 13,131 | 10,337 | 13,454 | 16,287 | 17,376 |
| Paraffin wax | 1,165 | 1,953 | 969 | 1,455 | 1,976 | 1,839 |
| Petroleum jelly | 96 | 82 | 77 | 109 | 112 | 295 |
| Asphalt | 62 | 235 | 219 | 340 | 179 | 156 |
| Japan— | | | | | | |
| Crude petroleum | 13,915,909 | 18,772,137 | 26,628,519 | 33,344,140 | 39,451,896 | 51,075,352 |
| Aviation spirit | 62,264 | 60,197 | 50,575 | 65,649 | 80,217 | 69,302 |
| Motor spirit | 13,789 | 2,338 | 59,511 | 27,336 | 16,569 | 14,726 |
| Kerosine | 731 | 2,447 | 50 | 310 | 2,037 | 44,444 |
| Aviation turbine fuel | 4,687 | 15,139 | 47,730 | 82,647 | 75,794 | 62,465 |
| Gas oil | 40,043 | 54,712 | 79,372 | 66,358 | 10,222 | 1,840 |
| Fuel oil | 2,761,551 | 3,008,072 | 4,867,735 | 8,213,673 | 8,942,941 | 9,910,848 |
| Lubricating oil | 37,438 | 58,028 | 146,993 | 220,527 | 282,365 | 330,636 |
| Grease | 933 | 1,667 | 3,721 | 3,050 | 3,334 | 69,760 |
| Petroleum jelly | 2,092 | 3,513 | 3,735 | 4,205 | 3,413 | 1,814 |
| Paraffin wax | 1,099 | 2,207 | 3,743 | 3,557 | 5,253 | 4,096 |
| Gilsonite | 1,723 | 2,862 | 3,757 | 3,861 | 3,925 | 3,589 |
| Asphalt and pitch | 982 | 742 | 173 | 134 | 74 | 66 |
| Petroleum coke | 149,259 | 231,470 | 368,585 | 489,945 | 410,281 | 582,629 |
| Jordan— | | | | | | |
| Crude petroleum | 19,556 | 16,898 | 75,550 | 203,794 | 248,432 | 324,039 |
| Motor spirit | 33,267 | 45,231 | 43,795 | 5,456 | 1,758 | 1,182 |
| Kerosine | 36,144 | 41,082 | 5,476 | 19,813 | 16,333 | 16,005 |
| Fuel oil, etc. | 62,280 | 89,006 | 97,300 | 58,734 | 50,848 | 30,985 |
| Lubricating oil | 2,852 | 3,537 | 4,511 | 3,749 | 5,833 | 4,691 |
| Natural asphalt | 4,799 | 8,612 | 8,851 | 2,004 | 307 | 9,094 |

(a) Years ended March 20 of year following that stated.

(b) Including fuel oil.

(c) Figures include amounts obtained from imported crude petroleum.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Korea (South)— | | | | | | |
| Crude petroleum .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 9,644 | 14,100 |
| Aviation spirit .. | | 1,318 | 1,291 | 1,495 | 1,457 | 9,003 |
| Motor spirit .. | | 150,030 | 120,073 | 108,261 | 78,976 | 62,956 |
| Kerosine, etc. .. | | 60,458 | 31,805 | 39,380 | 49,546 | 51,141 |
| Gas, diesel and fuel oils | | 556,665 | 449,120 | 533,257 | 812,814 | 1,089,530 |
| Lubricating oils .. | <i>n.a.</i> | 12,705 | 14,502 | 8,123 | 12,457 | 31,865 |
| Greases .. | | 3,903 | 493 | 863 | 569 | 941 |
| Petroleum jelly .. | | 68 | 156 | 129 | 220 | 268 |
| Paraffin wax .. | | 8,029 | 13,400 | 9,470 | 7,826 | 6,983 |
| Asphalt and pitch .. | | 52,933 | 9,968 | 19,274 | 35,010 | 63,960 |
| Kuwait (a)— | | | | | | |
| Diesel oil .. | 18,442 | — | — | — | — | <i>n.a.</i> |
| Fuel oil .. | 64,057 | — | — | — | — | <i>n.a.</i> |
| Laos— | | | | | | |
| Aviation spirit .. | <i>n.a.</i> | 3,363 | 4,710 | 10,085 | 15,500 | <i>n.a.</i> |
| Motor spirit .. | <i>n.a.</i> | 13,701 | 11,672 | 13,249 | 14,918 | <i>n.a.</i> |
| Kerosine .. | <i>n.a.</i> | 1,649 | 1,773 | 2,315 | 2,540 | <i>n.a.</i> |
| Gas oil .. | <i>n.a.</i> | 3,984 | 5,150 | 8,427 | 4,884 | <i>n.a.</i> |
| Fuel oil .. | <i>n.a.</i> | 1,606 | 1,444 | 1,995 | 2,286 | <i>n.a.</i> |
| Lubricating oil .. | <i>n.a.</i> | 1,174 | 1,496 | 1,115 | 980 | <i>n.a.</i> |
| Lebanon— | | | | | | |
| Crude petroleum .. | 793,790 | 731,128 | 721,709 | 721,019 | 198,462 | <i>n.a.</i> |
| Motor spirit .. | 122,305 | 146,724 | 159,252 | 187,835 | <i>n.a.</i> | <i>n.a.</i> |
| Kerosine .. | 62,645 | 77,582 | 104,658 | 128,945 | 131,456 | <i>n.a.</i> |
| Fuel oil .. | 283,594 | 399,403 | 415,363 | 444,816 | 363,367 | <i>n.a.</i> |
| Lubricating oil .. | 4,652 | 7,233 | 7,318 | 3,783 | 1,284 | <i>n.a.</i> |
| Paraffin wax .. | 267 | 302 | 222 | 234 | 231 | <i>n.a.</i> |
| Natural asphalt .. | 20,609 | 317 | 375 | 784 | 113 | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Crude petroleum .. | 743,276 | 932,760 | 789,891 | 2,248,718 | 2,988,521 | 3,559,994 |
| Aviation spirit .. | 42,003 | 29,804 | 32,658 | 18,902 | 17,621 | 20,248 |
| Motor spirit .. | 329,921 | 324,731 | 394,756 | 153,981 | 86,142 | 15,825 |
| Kerosine .. | 138,586 | 117,654 | 164,662 | 40,280 | 18,404 | 5,340 |
| Diesel oil .. | 356,796 | 316,293 | 259,126 | 125,580 | 55,491 | 40,532 |
| Fuel oils .. | 361,115 | 278,314 | 299,849 | 66,790 | 57,124 | 3,594 |
| Lubricating oils .. | 39,968 | 44,355 | 61,326 | 60,626 | 41,934 | 56,423 |
| Grease .. | 2,272 | 4,035 | 3,969 | 4,155 | 3,544 | 2,906 |
| Petroleum jelly .. | 1,274 | 1,693 | 1,723 | 1,248 | 717 | 1,213 |
| Paraffin wax .. | 5,327 | 4,766 | 6,532 | 5,389 | 6,329 | 7,336 |
| Asphalt .. | 38,646 | 15,842 | 22,556 | 19,229 | 6,238 | 955 |
| Syria— | | | | | | |
| Crude petroleum .. | — | 272,169 | 673,380 | 744,337 | 773,252 | <i>n.a.</i> |
| Motor spirit .. | 51,824 | 25,745 | 8,253 | 6,294 | 5,686 | <i>n.a.</i> |
| Kerosine .. | 40,857 | 31,586 | 4,397 | 5,724 | 5,424 | <i>n.a.</i> |
| Fuel oil and diesel oil .. | 509,282 | 408,762 | 143,895 | 110,415 | 620 | <i>n.a.</i> |
| Lubricating oil .. | 13,221 | 10,467 | 11,748 | 12,805 | 21,743 | <i>n.a.</i> |
| Natural asphalt .. | 161 | 869 | 1,259 | 405 | 9,322 | <i>n.a.</i> |
| Thailand— | | | | | | |
| Aviation spirit .. | — | 9,011 | 2,803 | 7,666 | 35,033 | 27,508 |
| Motor spirit .. | 265,474 | 298,395 | 361,084 | 353,943 | 399,155 | 361,583 |
| Kerosine .. | 88,972 | 96,882 | 114,421 | 103,756 | 100,179 | 128,123 |
| Gas, diesel and fuel oils | 492,640 | 520,955 | 568,742 | 681,050 | 812,819 | 990,294 |
| Lubricating oil .. | 23,604 | 26,833 | 34,745 | 30,471 | 47,896 | 39,540 |
| Grease .. | 1,223 | 1,843 | 1,719 | 1,537 | 2,588 | 2,917 |
| Paraffin wax .. | 1,223 | 1,160 | 2,197 | 1,714 | 2,943 | 2,057 |
| Petroleum jelly .. | 521 | 812 | 625 | 552 | 648 | 796 |
| Asphalt .. | 14,046 | 34,062 | 22,601 | 43,345 | 50,714 | 44,842 |
| Turkey— | | | | | | |
| Crude petroleum .. | — | — | — | 162,911 | 1,990,006 | 3,032,060 |
| Motor spirit .. | 193,392 | 418,636 | 351,877 | 337,164 | 182,354 | 4,879 |
| Kerosine .. | 210,456 | 374,231 | 298,361 | 290,749 | 291,743 | 37,893 |

(a) Imported chiefly for bunkering purposes. See exports.

IMPORTS OF PETROLEUM AND ALLIED PRODUCTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------------|---------|---------|---------|---------|---------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Turkey <i>(cont.)</i> — | | | | | | |
| Gas and diesel oils .. | 354,702 | 619,559 | 483,463 | 499,049 | 455,174 | 7 |
| Fuel oil | 18,842 | 36,550 | 44,494 | 70,847 | 57,314 | 100 |
| Lubricating oils and grease | 69,117 | 69,599 | 47,614 | 48,241 | 62,348 | 90,317 |
| Paraffin wax | 524 | 1,459 | 837 | 1,057 | 1,860 | 1,741 |
| Petroleum jelly .. | 162 | 161 | 165 | 258 | 20 | 163 |
| Asphalt | 432 | 1,970 | 3,005 | 1,002 | 14 | 14 |
| Vietnam (South)— | | | | | | |
| Aviation spirit | 5,290 | 1,463 | 1,758 | 527 | 1,822 | <i>n.a.</i> |
| Motor spirit | 213,118 | 157,209 | 147,160 | 149,678 | 125,266 | <i>n.a.</i> |
| Kerosine | 76,623 | 66,500 | 71,662 | 59,817 | 65,555 | <i>n.a.</i> |
| Gas oil | 45,662 | 53,033 | 57,944 | 71,368 | 85,469 | <i>n.a.</i> |
| Fuel oils | 118,774 | 182,458 | 192,989 | 256,839 | 230,314 | <i>n.a.</i> |
| Lubricating oils and grease | 11,269 | 13,548 | 13,953 | 13,346 | 16,422 | <i>n.a.</i> |
| Petroleum jelly .. | 86 | 90 | 124 | 153 | 100 | <i>n.a.</i> |
| Paraffin wax | 2,713 | 2,616 | 3,003 | 5,381 | 2,390 | <i>n.a.</i> |
| French Polynesia— | | | | | | |
| Motor spirit, etc. .. | 3,106 | 4,284 | 4,560 | 6,022 | 5,744 | } 25,464 |
| Kerosine | 1,512 | 1,843 | 2,206 | 2,805 | 2,958 | |
| Other oils | 8,125 | 8,230 | 11,363 | 13,565 | 9,471 | |
| New Caledonia— | | | | | | |
| Motor spirit, etc. .. | 14,302 | 14,665 | 14,403 | 16,528 | 16,843 | 16,690 |
| Kerosine | 3,865 | 3,640 | 3,302 | 3,725 | 3,670 | 3,789 |
| Gas and fuel oils .. | 25,993 | 19,225 | 47,183 | 66,709 | 49,463 | 47,549 |
| Lubricating oil, etc. .. | 7,237 | 35,636 | 30,250 | 31,345 | 17,324 | 64,243 |

PHOSPHATES
PRODUCTION OF PHOSPHATE-ROCK
(Including Apatite)

Long tons

| Producing Country | Estimated Tribasic Phosphate of Lime Content or equivalent | | | | | | | | | |
|-------------------------------|--|------------|-----------|------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1960 | 1961 | 1962 | 1963 |
| COMMONWEALTH COUNTRIES | | | | | | | | | | |
| Seychelles (a) (b) .. | 16,540 | 5,526 | 6,988 | 7,455 | 5,338 | 6,965 | 10,000 | 3,000 | 3,000 | 4,000 |
| Southern Rhodesia (d) .. | — | 1,676 | 3,437 | 446 | — | — | — | 1,000 | — | — |
| Tanganyika (c) .. | — | — | — | — | 19 | — | — | — | 10 | — |
| Uganda (d) .. | 2,474 | 3,124 | 4,008 | 395 | 1,105 | 6,959 | 1,200 | 1,600 | 200 | 3,500 |
| Jamaica (c) .. | 130 | 27 | 64 | 32 | 22 | — | 30 | 10 | 10 | — |
| Christmas Island (b)(g) .. | 373,750 | 494,347 | 503,440 | 694,210 | 520,750 | 651,461 | 318,000 | 420,000 | 590,000 | 554,000 |
| India (d) .. | 14,572 | r 16,092 | 14,685 | 19,822 | 28,560 | 12,920 | 5,000 | 6,000 | 7,000 | 5,000 |
| Sarawak (c) .. | 306 | 619 | n.a. | n.a. | n.a. | n.a. | 200 | 300 | n.a. | n.a. |
| Australia— | | | | | | | | | | |
| Phosphate rock .. | 7,251 | 4,775 | 2,234 | 4,759 | 4,317 | 4,925 | 3,300 | 2,100 | 2,000 | 2,000 |
| Guano .. | 170 | — | 87 | 115 | 68 | — | 100 | — | 80 | 50 |
| Nauru Island (b) .. | 1,234,450 | 1,192,240 | 1,351,257 | 1,436,032 | 1,525,650 | 1,547,242 | 1,062,000 | 1,025,000 | 1,235,000 | 1,312,000 |
| Ocean Island (b) .. | 323,800 | 314,392 | 319,526 | 337,533 | 256,650 | 356,128 | 278,000 | 270,000 | 290,000 | 306,000 |
| TOTAL .. | 1,973,000 | r2,033,000 | 2,207,000 | 2,501,000 | 2,343,000 | 2,587,000 | | | | |
| OTHER COUNTRIES | | | | | | | | | | |
| Belgium (e) .. | 17,724 | 12,973 | 8,113 | 13,795 | 12,285 | n.a. | 4,000 | 3,000 | 2,000 | n.a. |
| France (e) .. | 101,697 | 75,642 | 57,108 | 80,200 | 66,377 | 43,541 | 24,000 | 18,000 | 13,000 | 11,000 |
| Poland .. | 70,000 | 40,000 | 40,000 | 46,000 | 55,000 | f 55,000 | n.a. | n.a. | n.a. | n.a. |
| Spain .. | — | 387 | 3,198 | — | — | — | — | 250 | 2,000 | — |
| U.S.S.R. (f) — | | | | | | | | | | |
| Apatite .. | 3,940,000 | r4,040,000 | 4,720,000 | r5,610,000 | 6,400,000 | 7,280,000 | 3,440,000 | 3,530,000 | 4,900,000 | 5,590,000 |
| Phosphate rock .. | 1,970,000 | r2,260,000 | 3,050,000 | 3,450,000 | 3,450,000 | 3,640,000 | 1,300,000 | 1,300,000 | 2,010,000 | 2,400,000 |
| Algeria .. | 552,088 | 562,733 | 554,154 | 432,666 | 384,000 | 343,000 | 370,000 | 380,000 | 290,000 | 260,000 |
| Egypt .. | 549,000 | r 619,000 | r 557,000 | 617,000 | 592,000 | 602,000 | 340,000 | 380,000 | 380,000 | 370,000 |
| Madagascar .. | 5,000 | 7,000 | — | — | — | — | 4,000 | 5,000 | — | — |
| Morocco .. | 6,235,756 | 7,050,365 | 7,374,134 | 7,824,147 | 8,033,053 | 8,413,403 | 4,490,000 | 5,080,000 | 5,767,000 | 6,190,000 |
| Mozambique (a) .. | 118 | 90 | 103 | — | — | — | n.a. | n.a. | n.a. | — |

(a) Phosphate guano.

(b) Exports.

(c) Bat guano.

(d) Apatite.

(e) Including phosphatic chalk.

(f) United States Bureau of Mines' estimate.

(g) In addition, the following amounts of phosphate dust were exported (long tons): 1958—n.a.; 1959—68,733; 1960—n.a.; 1961—76,438; 1962—79,527; 1963—80,552.

PRODUCTION OF PHOSPHATE ROCK (cont.)

Long tons

| Producing Country | Estimated Tribasic Phosphate of Lime Content or equivalent | | | | | | | | | | |
|--------------------------------|--|--------------|--------------|--------------|------------|------------|------------|------------|------------|------------|------------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1960 | 1961 | 1962 | 1963 | |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | |
| Senegal— | — | — | 105,985 | 400,541 | 489,239 | 462,656 | — | — | — | — | — |
| Phosphate rock .. | — | — | 103,629 | 137,179 | 139,192 | 123,827 | 65,000 | 59,000 | 88,000 | 406,000 | 384,000 |
| Aluminium phosphates .. | 102,928 | 93,834 | — | n.a. | n.a. | n.a. | — | 86,000 | n.a. | 88,000 | 78,000 |
| Somali Republic (b) (f) .. | — | 217 | 339 | n.a. | n.a. | n.a. | — | n.a. | n.a. | n.a. | n.a. |
| South Africa— | — | — | — | — | — | — | — | — | — | — | — |
| Phosphate rock (h) .. | 213,087 | 228,005 | 263,423 | 291,904 | 302,312 | 447,729 | 110,000 | 92,000 | 173,000 | 184,000 | 264,000 |
| Guano .. | (i) 3,853 | 5,251 | 3,636 | 4,687 | 4,700 | 2,552 | 900 | 1,300 | 1,100 | 1,100 | 600 |
| South West Africa (f) .. | — | 1,187 | — | 922 | 574 | 1,355 | — | 300 | 200 | 200 | 300 |
| Togoland .. | 2,242,546 | 2,150,455 | 2,062,894 | 116,035 | 188,677 | 506,400 | — | — | 92,000 | 153,000 | 400,000 |
| Tunisia .. | n.a. | 29,000 | 27,000 | 1,951,000 | 2,064,000 | 2,330,000 | 1,458,000 | 1,398,000 | 1,341,000 | 1,268,000 | 1,515,000 |
| Mexico .. | 85,269 | 96,611 | 113,097 | 29,000 | (a) 30,000 | (a) 30,000 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Netherlands Antilles (b) .. | 14,879,000 | 15,869,000 | 17,516,000 | 149,596 | 129,474 | 126,254 | 62,000 | 71,000 | 83,000 | 109,000 | 92,000 |
| United States (e) .. | — | — | — | 18,559,000 | 19,382,000 | 19,835,000 | 10,199,000 | 10,791,000 | 11,892,000 | 12,681,000 | 13,579,000 |
| Brazil— | — | — | — | — | — | — | — | — | — | — | — |
| Apatite .. | 111,034 | 130,846 | 199,975 | 240,056 | 305,219 | 211,888 | 64,000 | 76,000 | 116,000 | 139,000 | 123,000 |
| Phosphate rock .. | 108,122 | 859,638 | 665,763 | r 408,951 | 251,406 | 62,503 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Chile— | — | — | — | — | — | — | — | — | — | — | — |
| Apatite .. | (g) 40,000 | 19,101 | 17,260 | 13,734 | 12,295 | 13,689 | 24,700 | 11,000 | 10,000 | 8,000 | 8,000 |
| Guano .. | 31,000 | 21,000 | r 18,000 | r 19,000 | 16,000 | 22,000 | 12,000 | 8,000 | 7,000 | 7,000 | 6,000 |
| Peru (f) .. | 164,000 | 125,000 | r 157,000 | r 157,000 | 203,000 | 189,000 | 40,000 | 30,000 | 40,000 | 40,000 | 50,000 |
| China (a) (d) .. | 300,000 | 500,000 | 600,000 | 500,000 | 600,000 | 700,000 | 200,000 | 350,000 | 350,000 | 350,000 | 500,000 |
| Indonesia (g) .. | 500 | (c) 2,000 | 7,000 | 9,000 | 2,000 | (c) 6,000 | 200 | 1,000 | 3,000 | 4,000 | 3,000 |
| Israel .. | 206,226 | 201,500 | 220,639 | 222,000 | 226,000 | 295,000 | 128,000 | 125,000 | 137,000 | 140,000 | 185,000 |
| Jordan .. | 289,296 | 332,292 | 356,135 | 415,839 | 670,254 | 604,732 | 211,000 | 243,000 | 260,000 | 304,000 | 441,000 |
| Philippine Republic— | — | — | — | — | — | — | — | — | — | — | — |
| Phosphate rock .. | — | 349 | 349 | — | 3,713 | 1,049 | — | — | n.a. | n.a. | n.a. |
| Guano .. | 7,116 | 373 | 9,877 | 396 | 93 | 1,450 | 2,000 | 90 | 2,400 | 95 | 20 |
| Vietnam (North) (d) .. | 133,000 | 256,000 | r 480,000 | r 555,000 | 667,000 | a 740,000 | 120,000 | 220,000 | 420,000 | 480,000 | 580,000 |
| French Polynesia (Makatea) | 320,000 | 362,967 | 406,684 | 374,679 | 312,081 | 330,000 | 262,000 | 298,000 | 333,000 | 307,000 | 271,000 |
| TOTAL .. | 33,000,000 | r 39,000,000 | r 42,000,000 | r 42,000,000 | 45,000,000 | 47,000,000 | 47,000,000 | — | — | — | — |
| WORLD'S TOTAL .. | 35,000,000 | 37,000,000 | r 41,000,000 | r 45,000,000 | 47,000,000 | 50,000,000 | — | — | — | — | — |

Phosphate rock is also known to have been produced in North Korea.

(a) United States Bureau of Mines' estimate. (b) Exports. (c) Estimated.

(g) Source : International Superphosphate Manufacturers' Association.

(i) Sales to farmers. Year ended June 30 of that stated.

(d) Apatite. (e) Marketable production. (f) Phosphatic guano.

(h) Including apatite and aluminium phosphates.

PRODUCTION OF SUPERPHOSPHATES

Long tons

| Producing Country | Estimated P ₂ O ₅ Content | | | | | | |
|-------------------------------|---|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1963 |
| COMMONWEALTH COUNTRIES | | | | | | | |
| United Kingdom— | | | | | | | |
| Single | 760,570 | 682,372 | 719,624 | 654,224 | 609,776 | 516,477 | 516,477 |
| Concentrated* | 114,906 | 148,852 | 160,679 | 172,139 | 179,452 | 70,500 | 70,500 |
| Canada*— | | | | | | | |
| Single | 170,010 | 199,845 | 213,698 | 285,100 | n.a. | n.a. | n.a. |
| India— | | | | | | | |
| Single | 167,000 | 248,000 | r 313,000 | 366,000 | 437,898 | 573,000 | 573,000 |
| Concentrated* | 50 | — | — | — | — | — | — |
| Pakistan— | | | | | | | |
| Single | 1,089 | 1,529 | 3,879 | 8,048 | 7,842 | 6,651 | 6,651 |
| Australia— | | | | | | | |
| Single (a) | 2,219,592 | 2,150,413 | 2,450,249 | 2,540,544 | 2,591,379 | 2,895,099 | 2,895,099 |
| New Zealand | | | | | | | |
| Single (b) | 818,000 | 843,000 | 1,000,000 | 1,050,000 | 1,000,000 | 1,204,000 | 1,204,000 |
| TOTAL | | | | | | | |
| | 900,000 | r 920,000 | r 1,050,000 | r 1,090,000 | r 1,100,000 | r 1,200,000 | r 1,200,000 |
| Irish Republic*— | | | | | | | |
| Single | 191,094 | 202,746 | 229,200 | 211,452 | c 290,000 | 229,400 | 229,400 |
| Concentrated | — | — | — | 22,858 | (c) 20,600 | 28,000 | 28,000 |
| OTHER COUNTRIES | | | | | | | |
| Austria*— | | | | | | | |
| Single | 119,230 | 133,899 | 150,857 | 183,998 | 243,691 | 256,300 | 256,300 |
| Belgium*— | | | | | | | |
| Single | 191,266 | 201,821 | 195,807 | 191,216 | 209,400 | 219,000 | 219,000 |
| Concentrated | 53,525 | 58,289 | (c) 61,000 | (c) 65,000 | (c) 69,600 | (c) 120,000 | (c) 120,000 |
| Bulgaria— | | | | | | | |
| Single | (c) 70,000 | (c) 170,000 | (c) 220,000 | (c) 300,000 | (c) 380,000 | n.a. | n.a. |
| Czechoslovakia— | | | | | | | |
| Single | 402,000 | 470,000 | 499,000 | 618,000 | 695,000 | n.a. | n.a. |

*Source: International Superphosphate Manufacturers' Association. (a) Years ended June 30 of that stated.

(b) Superphosphate content of all fertilizers made.

(c) Estimated.

PRODUCTION OF SUPERPHOSPHATES (cont.)

Long tons

| Producing Country | Estimated P ₂ O ₅ Content | | | | | | | | | | | |
|------------------------|---|-----------|------------|------------|------------|-----------|----------|----------|----------|---------|---------|---------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
| OTHER COUNTRIES | | | | | | | | | | | | |
| Denmark (a) — | 218,811 | 168,127 | 105,902 | 55,667 | — | — | 39,400 | 30,300 | 19,100 | 10,000 | — | — |
| Finland* — | 153,300 | 222,394 | 225,646 | 210,600 | 224,116 | 321,690 | 29,100 | 42,300 | 42,900 | 40,000 | 42,600 | 61,100 |
| Single | n.a. | 143,520 | 152,977 | 138,012 | 111,556 | 122,590 | n.a. | 27,300 | 29,100 | 26,200 | 21,200 | 28,200 |
| Kotka-phosphate | 1,220,591 | 1,149,903 | 1,203,261* | 1,286,826* | 1,437,116* | n.a. | 208,000 | 195,000 | 212,000 | 231,000 | 258,000 | n.a. |
| Single | 49,931 | 54,407 | 56,549 | 56,085 | 67,083 | 85,109 | 21,200 | 24,100 | 23,600 | 23,300 | 28,200 | 35,200 |
| Concentrated* .. | 457,201 | 444,828 | 391,104 | 288,549 | 276,450 | 283,300 | 76,800 | 84,900 | 67,200 | 52,500 | 49,800 | 51,000 |
| Germany (Federal)* — | 409,000 | 427,000 | 544,000 | 596,000 | 608,000 | 674,000 | 73,700 | 76,800 | 98,000 | 107,200 | 109,500 | 121,300 |
| Single | 209,574 | 207,396 | 168,646 | 165,737 | 160,000 | 196,900 | 33,500 | 33,100 | 30,000 | 29,000 | 30,000 | 36,400 |
| Germany (East) — | 202,119 | 227,251 | 262,241 | 322,204 | 417,651 | 504,764 | r 34,300 | r 38,700 | r 42,700 | 53,800 | 71,200 | 85,800 |
| Single | 1,721,650 | 1,732,433 | 1,473,313 | 1,507,065 | 1,393,756 | 1,452,408 | 335,000 | 341,000 | 292,000 | 299,000 | 277,000 | 289,000 |
| Italy — | 436,150 | 498,897 | 525,984 | 499,039 | 350,519 | 373,000 | 79,900 | 89,100 | 94,600 | 90,100 | 63,100 | 67,000 |
| Concentrated .. | 113,796 | 100,443 | 125,573 | 117,523 | 119,982 | 122,900 | 47,700 | 43,200 | 52,200 | 49,400 | 48,000 | 52,000 |
| Netherlands* — | 66,000 | 58,000 | 63,000 | 62,000 | 38,823 | 41,200* | 12,000 | 10,000 | 11,000 | 11,500 | 7,000 | 7,000 |
| Single | 18,005 | 39,332 | 36,847 | 25,650 | 26,054 | 30,475 | 5,900 | 12,800 | 11,000 | 9,700 | 8,300 | 10,100 |
| Concentrated* .. | 572,000 | 621,000 | 689,000 | 810,000 | 979,000 | n.a. | 94,000 | 102,000 | 114,000 | 134,000 | 162,000 | n.a. |
| Poland (b) — | 385,453 | 409,472 | 438,705 | 448,197 | 413,582 | 435,384 | 69,400 | 73,700 | 79,000 | 81,000 | 74,000 | 78,000 |
| Single | | | | | | | | | | | | |
| Concentrated .. | | | | | | | | | | | | |

*Source: International Superphosphate Manufacturers' Association.

(a) In addition the following amounts of potash superphosphate were produced (long tons): 1958—356,920; 1959—417,237; 1960—547,860; 1961—634,353; 1962—765,986; 1963—725,865

(b) In addition the following amounts of superbasic slag were produced (long tons): 1958—148,000; 1959—166,000; 1960—236,000; 1961—242,000; 1962—253,000; 1963—n.a.

PRODUCTION OF SUPERPHOSPHATES (cont.)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | Estimated P ₂ O ₅ Content | | | | | |
|-----------------------------------|------|------------|------------|------------|-----------|------------|---|-----------|-----------|-----------|-----------|-----------|
| | | | | | | | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | |
| Roumania | .. | 119,000 | 320,000 | 350,000 | 530,000 | 610,000 | 19,000 | 43,000 | 51,000 | 56,000 | 85,000 | 98,000 |
| Single | .. | 119,000 | 320,000 | 350,000 | 530,000 | 610,000 | 19,000 | 43,000 | 51,000 | 56,000 | 85,000 | 98,000 |
| Spain (a) | .. | 1,743,000 | 1,979,000 | 1,810,000 | 1,823,000 | 1,980,000 | 294,300 | 329,200 | 318,600 | 293,200 | 295,400 | 321,200 |
| Single | .. | 1,743,000 | 1,979,000 | 1,810,000 | 1,823,000 | 1,980,000 | 294,300 | 329,200 | 318,600 | 293,200 | 295,400 | 321,200 |
| Sweden* | .. | 461,509 | 476,000 | 469,673 | 455,338 | 391,390 | 89,100 | 93,900 | 93,000 | 91,600 | 88,300 | 76,300 |
| Single | .. | 461,509 | 476,000 | 469,673 | 455,338 | 391,390 | 89,100 | 93,900 | 93,000 | 91,600 | 88,300 | 76,300 |
| Concentrated | .. | — | 6,960 | 19,251 | 21,596 | 35,750 | — | 2,400 | 2,500 | 5,600 | 6,300 | 10,400 |
| Switzerland* | .. | 27,500 | 40,000 | 16,000 | 33,570 | (c) 30,000 | 4,900 | 7,000 | 7,000 | 3,000 | 6,000 | 5,000 |
| Single | .. | 27,500 | 40,000 | 16,000 | 33,570 | (c) 30,000 | 4,900 | 7,000 | 7,000 | 3,000 | 6,000 | 5,000 |
| Concentrated | .. | 344 | 100 | — | — | n.a. | 150 | — | 45 | — | — | n.a. |
| Yugoslavia | .. | 260,742 | 272,776 | 405,997 | 512,000 | n.a. | 50,000 | 52,000 | 46,000 | 77,000 | 97,000 | n.a. |
| Single | .. | 260,742 | 272,776 | 405,997 | 512,000 | n.a. | 50,000 | 52,000 | 46,000 | 77,000 | 97,000 | n.a. |
| Concentrated | .. | — | — | — | — | — | — | — | — | — | — | — |
| Algeria | .. | 93,132 | 83,903 | 54,372 | 46,200 | 53,300 | 14,900 | 13,400 | 12,600 | 8,700 | 7,400 | 8,500 |
| Single | .. | 93,132 | 83,903 | 54,372 | 46,200 | 53,300 | 14,900 | 13,400 | 12,600 | 8,700 | 7,400 | 8,500 |
| Egypt* | .. | 164,169 | 163,904 | 225,916 | 193,200 | 161,500 | 24,900 | 24,600 | 27,700 | 33,900 | 29,000 | 24,000 |
| Single | .. | 164,169 | 163,904 | 225,916 | 193,200 | 161,500 | 24,900 | 24,600 | 27,700 | 33,900 | 29,000 | 24,000 |
| Morocco | .. | 99,000 | 87,000 | 88,000* | 110,000* | 84,300* | 16,000 | 14,000 | 13,000 | 15,000 | 19,000 | 15,000 |
| Single | .. | 99,000 | 87,000 | 88,000* | 110,000* | 84,300* | 16,000 | 14,000 | 13,000 | 15,000 | 19,000 | 15,000 |
| South Africa* | .. | 663,455 | 631,610 | 664,962 | 633,157 | 837,120 | 126,100 | 120,000 | 126,300 | 120,300 | 120,000 | 159,000 |
| Single | .. | 663,455 | 631,610 | 664,962 | 633,157 | 837,120 | 126,100 | 120,000 | 126,300 | 120,300 | 120,000 | 159,000 |
| Tunisia | .. | 32,000 | 30,000 | 24,100 | 23,500 | 47,400* | 5,000 | 5,000 | 4,000 | 4,000 | 4,000 | 9,000 |
| Single | .. | 32,000 | 30,000 | 24,100 | 23,500 | 47,400* | 5,000 | 5,000 | 4,000 | 4,000 | 4,000 | 9,000 |
| Concentrated | .. | 107,000 | 122,000 | 133,000 | 144,000 | 136,000 | 46,000 | 52,000 | 52,900 | 57,000 | 62,000 | 58,000 |
| Cuba* | .. | (c) 40,000 | 46,002 | (c) 40,000 | n.a. | 38,300 | 7,000 | 7,000 | 8,300 | 7,000 | n.a. | 7,000 |
| Single | .. | (c) 40,000 | 46,002 | (c) 40,000 | n.a. | 38,300 | 7,000 | 7,000 | 8,300 | 7,000 | n.a. | 7,000 |
| Mexico* | .. | 69,644 | 100,758 | 134,994 | 107,700 | 120,300 | 13,700 | 18,600 | 25,000 | 25,000 | 20,000 | 22,000 |
| Single | .. | 69,644 | 100,758 | 134,994 | 107,700 | 120,300 | 13,700 | 18,600 | 25,000 | 25,000 | 20,000 | 22,000 |
| United States* | .. | 6,420,361 | 66,922,130 | 6,355,487 | 5,601,741 | 6,026,900 | 1,155,700 | 1,246,000 | 1,144,000 | 1,116,000 | 1,008,300 | 1,085,000 |
| Single | .. | 6,420,361 | 66,922,130 | 6,355,487 | 5,601,741 | 6,026,900 | 1,155,700 | 1,246,000 | 1,144,000 | 1,116,000 | 1,008,300 | 1,085,000 |
| Concentrated | .. | 1,653,859 | 1,653,821 | 1,981,798 | 2,073,661 | 2,207,960 | 744,200 | 744,200 | 891,800 | 933,100 | 826,100 | 993,600 |

* Source: International Superphosphate Manufacturers' Association.

(a) Including Canary Islands.

(b) Including enriched superphosphate.

(c) Estimated.

PRODUCTION OF SUPERPHOSPHATES (cont.)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | Estimated P ₂ O ₅ Content | | | | | |
|------------------------|-----------|------------|-----------|------------|------------|-----------|---|-----------|-----------|-----------|-----------|-----------|
| | | | | | | | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
| OTHER COUNTRIES | | | | | | | | | | | | |
| <i>(cont.)</i> | | | | | | | | | | | | |
| Brazil— | | | | | | | | | | | | |
| Single .. | 129,734 | 194,302 | 205,648 | 219,745 | 252,288 | 330,841 | 23,400 | 35,000 | 37,000 | 39,600 | 46,500 | 59,600 |
| Colombia— | | | | | | | | | | | | |
| Single .. | 2,097 | n.a. | 5,403* | n.a. | n.a. | n.a. | 400 | n.a. | 1,000 | n.a. | n.a. | n.a. |
| Peru* | | | | | | | | | | | | |
| Single .. | — | (a) 34,000 | 23,400 | (a) 24,000 | (a) 22,100 | 33,400 | — | 7,000 | 4,700 | 5,000 | 4,000 | 6,000 |
| Uruguay* | | | | | | | | | | | | |
| Single .. | 30,000 | (a) 30,000 | 26,997 | (a) 28,000 | (a) 24,000 | n.a. | 6,500 | 6,500 | 5,400 | 5,500 | 4,000 | n.a. |
| Venezuela* | | | | | | | | | | | | |
| Single .. | — | — | 8,956 | n.a. | (a) 10,000 | n.a. | — | — | 1,600 | n.a. | 2,000 | n.a. |
| Formosa— | | | | | | | | | | | | |
| Single .. | 102,170 | 116,875 | 119,542 | 127,947 | 141,444 | 169,441 | 18,400 | 21,000 | 22,000 | 23,000 | 25,000 | 30,000 |
| Israel* | | | | | | | | | | | | |
| Single .. | 67,440 | 71,248 | 80,196 | 79,224 | 79,559 | 70,500 | 11,200 | 11,400 | 12,700 | 12,700 | 12,700 | 11,000 |
| Concentrated | 15,788 | 6,840 | 296 | 1,709 | 1,111 | n.a. | 6,500 | 2,900 | 100 | 700 | 500 | n.a. |
| Japan* | | | | | | | | | | | | |
| Single .. | 1,715,441 | 1,784,327 | 2,097,937 | 1,817,864 | 1,728,788 | 1,636,300 | 298,300 | 309,800 | 365,300 | 317,100 | 306,000 | 291,000 |
| Concentrated | 968 | 3,150 | 7,151 | 9,333 | 14,667 | 23,300 | 400 | 1,200 | 2,600 | 3,400 | 5,400 | 9,000 |
| Jordan— | | | | | | | | | | | | |
| Single .. | — | — | 440 | 248 | 516 | 663 | — | — | 80 | 40 | 90 | 100 |
| Lebanon* | | | | | | | | | | | | |
| Single .. | 10,300 | 26,216 | 15,881 | (a) 18,000 | (a) 31,000 | 34,990 | 2,000 | 5,000 | 3,500 | 3,000 | 5,500 | 6,300 |
| Philippine Republic* | | | | | | | | | | | | |
| Single .. | — | — | 2,056 | (a) 15,000 | (a) 29,300 | n.a. | — | — | 400 | 3,000 | 6,000 | n.a. |
| Turkey— | | | | | | | | | | | | |
| Single .. | 19,660 | 61,310 | 61,470 | 20,860 | 28,000 | 172,000 | 3,100 | 9,800 | 9,800 | 3,300 | 4,500 | 27,500 |
| TOTAL | | | | | | | 5,000,000 | 5,000,000 | 6,000,000 | 6,000,000 | 6,000,000 | 6,000,000 |
| WORLD'S TOTAL | | | | | | | 6,000,000 | 6,000,000 | 7,000,000 | 7,000,000 | 7,000,000 | 7,000,000 |

An allowance has been made in the total for production in the U.S.S.R.

Single and concentrated superphosphates are also produced in Southern Rhodesia but figures are not available for publication.

*Source: International Superphosphate Manufacturers' Association. (a) Estimated.

PRODUCTION OF BASIC SLAG

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-----------|-------------|-----------|-----------|-----------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Great Britain (a) .. | 648,768 | 646,097 | 830,380 | 731,439 | 940,617 | 812,549 |
| OTHER COUNTRIES | | | | | | |
| Belgium (a) | 1,051,000 | 1,108,000 | 1,208,000 | 1,127,000 | 1,210,000 | 1,184,000 |
| France | 1,889,333 | 2,007,244 | 2,299,216 | 2,376,508 | 2,337,246 | 2,314,115 |
| Germany (Federal) .. | 2,325,000 | 2,635,000 | 3,531,000 | 3,436,000 | 3,170,000 | 3,006,000 |
| Germany (East) .. | 87,000 | 100,000 | 107,000 | 108,000 | 115,000 | 112,000 |
| Italy | 80,700 | 78,016 | 97,303 | 115,506 | 123,272 | 110,082 |
| Luxemburg | 674,199 | 704,648 | 768,125 | 782,995 | 773,923 | 755,297 |
| Saar | 562,435 | <i>n.a.</i> | (b) | (b) | (b) | (b) |
| Sweden | 52,155 | 60,076 | 50,166 | 35,574 | 33,691 | <i>n.a.</i> |

Basic slag has also been produced in Czechoslovakia, Poland, U.S.S.R., United States and Japan.

(a) Years ended June 30 of that stated.

(b) Included with Germany (Federal).

EXPORTS OF PHOSPHATES, ETC.

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|--------------|--------------|--------------|--------------|--------------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Phosphatic fertilizers .. | 1,058 | 166 | 607 | 9,871 | 9,280 | 839 |
| Seychelles— Phosphatic guano .. | 16,540 | 5,526 | 6,988 | 7,455 | 5,338 | 6,965 |
| Uganda— Phosphate-rock .. | 2,630 | 3,121 | 4,004 | 453 | 584 | 464 |
| Canada— Phosphatic fertilizers .. | (£4,531,308) | (£8,510,822) | (£7,684,873) | (£6,933,905) | (£6,475,384) | (£4,329,440) |
| Christmas Island— Phosphate-rock .. | 373,750 | 494,347 | 503,440 | 694,210 | 520,750 | 651,461 |
| Phosphate dust .. | n.a. | 68,733 | n.a. | 76,438 | 79,527 | 80,552 |
| Hong Kong— Phosphatic fertilisers .. | 30,340 | — | — | — | 3 | — |
| Malaya— Phosphate-rock .. | 534 | 782 | 427 | 238 | 783 | 1,499 |
| Phosphatic fertilizers .. | 63 | 62 | 62 | 111 | 31 | 113 |
| Australia (a)— Superphosphates .. | 2,064 | 1,919 | 623 | 36 | 16 | — |
| New Zealand— Superphosphates .. | 81 | 93 | 98 | 37 | 110 | n.a. |
| Nauru Island— Phosphate-rock .. | 1,234,450 | 1,192,240 | 1,351,257 | 1,436,032 | 1,525,650 | 1,547,242 |
| Ocean Island— Phosphate-rock .. | 323,800 | 314,392 | 319,526 | 337,533 | 256,650 | 356,128 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg E.U.— Phosphate-rock .. | 3,329 | 3,204 | 3,124 | 9,863 | 20,197 | 25,056 |
| Superphosphates— Single .. | 130,458 | 95,835 | 109,567 | 107,832 | 148,388 | } 211,812 |
| Concentrated .. | 45,047 | 58,506 | 61,366 | 65,694 | 69,485 | |
| Di-calcium phosphate .. | 185,206 | 200,018 | n.a. | n.a. | n.a. | n.a. |
| Basic slag .. | 1,393,917 | 1,499,170 | 1,403,422 | 1,218,800 | 1,558,412 | 1,717,465 |
| France— Phosphate-rock .. | 839 | 1,956 | 1,846 | 3,508 | 1,209 | 2,549 |
| Superphosphates .. | 17,971 | 28,921 | 83,545 | 49,318 | 31,927 | 38,290 |
| Basic slag .. | 334,550 | 344,662 | 294,874 | 283,407 | 294,591 | 298,105 |
| Di-calcium phosphates .. | 1,751 | 940 | 750 | 805 | 595 | 465 |
| Germany (Federal)— Phosphate-rock .. | 12,643 | 16,142 | 24,960 | 29,687 | 33,013 | 35,653 |
| Superphosphates .. | 9,069 | 14,413 | 17,258 | 17,921 | 14,941 | 14,489 |
| Basic slag .. | 175,589 | 370,229 | 389,771 | 357,866 | 360,459 | 401,772 |
| Other phosphatic fertilizers .. | 3,898 | 4,875 | 3,922 | 23,017 | 21,465 | 9,252 |
| Hungary— Superphosphates .. | 37,086 | 31,300 | 33,741 | 6,289 | 31,586 | 15,957 |
| Italy— Superphosphates .. | 135,135 | 130,146 | 109,646 | 96,820 | 68,480 | 47,705 |
| Netherlands— Phosphate-rock .. | 6,937 | 9,420 | 4,978 | 5,056 | 3,596 | 3,450 |
| Superphosphates .. | 372,478 | 413,186 | 468,076 | 421,792 | 364,472 | 370,075 |
| Norway— Superphosphates .. | 9,754 | 20,002 | 25,121 | 30,706 | 25,949 | 23,749 |
| Portugal— Superphosphates .. | 15,122 | 34,453 | 35,451 | 82,042 | 55,328 | 91,412 |
| Spain— Superphosphates, etc. .. | 9,169 | 57,856 | 45,254 | 76,269 | 59,682 | 32,342 |
| Sweden— Phosphate-rock .. | n.a. | — | — | — | — | 628 |
| Superphosphates .. | 4,029 | 14,258 | — | — | — | — |
| Di-calcium phosphates .. | n.a. | 2,055 | 716 | 808 | 1,333 | 7,330 |
| Basic slag .. | 17,224 | 33,439 | 14,166 | 5,345 | 8,020 | 6,712 |

(a) Years ended June 30 of that stated.

EXPORTS OF PHOSPHATES, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| U.S.S.R.— | | | | | | |
| Apatite ore | 98,900 | 91,600 | 119,500 | 164,200 | 140,600 | 80,100 |
| do. concentrates .. | 1,480,900 | 1,634,500 | 1,777,100 | 2,020,900 | 2,206,700 | 2,187,000 |
| Superphosphates .. | 93,500 | 117,200 | 200,000 | 334,900 | 316,600 | 290,400 |
| Yugoslavia— | | | | | | |
| Superphosphates .. | — | — | 41,002 | 75,943 | 59,161 | — |
| Algeria— | | | | | | |
| Phosphate-rock .. | 545,924 | 490,186 | 462,695 | 373,200 | 400,558 | 320,556 |
| Superphosphates .. | 2,170 | 1,755 | 2,175 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt— | | | | | | |
| Phosphate-rock .. | 416,579 | 441,641 | 296,901 | 414,458 | 212,015 | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Phosphate-rock .. | 1,968 | 8,859 | — | — | — | — |
| Morocco— | | | | | | |
| Phosphate-rock .. | 6,173,749 | 6,948,240 | 7,463,502 | 7,502,119 | 7,999,454 | 8,386,884 |
| Hyperphosphates .. | 8,842 | 983 | 5,955 | 5,636 | 3,723 | 5,040 |
| Superphosphates .. | — | 9,482 | — | 17,918 | 1 | 6,102 |
| Senegal— | | | | | | |
| Phosphate-rock .. | 60,371 | — | 58,190 | 303,686 | 344,847 | 340,785 |
| Aluminium phosphates | | 69,367 | 93,797 | 88,842 | 84,671 | 4,860 |
| Phosphate fertilizers .. | | 16,500 | 7,222 | 18,681 | 32,292 | 13,364 |
| Somali Republic (a)— | | | | | | |
| Phosphatic guano .. | — | 217 | 339 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Superphosphates .. | 4,200 | 540 | 843 | 3,296 | 1,746 | <i>n.a.</i> |
| South West Africa— | | | | | | |
| Phosphatic guano .. | — | 762 | — | — | 237 | <i>n.a.</i> |
| Togoland— | | | | | | |
| Phosphate-rock .. | — | — | — | 56,259 | 181,808 | 434,462 |
| Tunisia— | | | | | | |
| Phosphate-rock .. | 1,923,949 | 1,827,936 | 1,604,275 | 1,601,311 | 1,804,707 | <i>n.a.</i> |
| Hyperphosphates .. | 92,229 | 101,690 | 56,838 | 63,432 | 35,780 | <i>n.a.</i> |
| Superphosphates .. | 115,831 | 108,213 | 110,141 | 154,211 | 113,271 | <i>n.a.</i> |
| Mexico— | | | | | | |
| Phosphate-rock .. | 13,387 | 28,795 | 21,995 | 23,960 | 27,289 | 23,590 |
| Netherlands Antilles— | | | | | | |
| Phosphate-rock .. | 85,269 | 96,611 | 113,097 | 149,596 | 129,474 | 126,254 |
| United States— | | | | | | |
| Phosphate-rock .. | 2,818,073 | 3,239,722 | 4,250,970 | 4,122,733 | 4,239,121 | 4,612,300 |
| Superphosphates— | | | | | | |
| Single | 195,967 | 140,917 | 136,786 | 131,927 | 115,928 | 601,887 |
| Concentrated .. | 314,423 | 271,714 | 280,146 | 337,271 | 442,260 | |
| Venezuela— | | | | | | |
| Superphosphates .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 6,810 | 20,038 | 23,501 |
| French Polynesia (Makatea)— | | | | | | |
| Phosphate-rock .. | 304,370 | 305,678 | 357,381 | 362,960 | 321,574 | 316,173 |
| Israel— | | | | | | |
| Phosphate-rock .. | 58,483 | 91,573 | 94,265 | 92,236 | 64,385 | 145,288 |
| Japan— | | | | | | |
| Phosphate-rock .. | 2,430 | 12,130 | 10,686 | 4,698 | 11,815 | 11,128 |
| Superphosphates .. | 139,613 | 102,355 | 101,599 | 29,971 | 64,898 | 33,716 |
| Thermal phosphates .. | 3,902 | 10,169 | 25,779 | 37,620 | 117,582 | 43,312 |
| Other phosphatic fertilizers .. | 941 | 3,207 | 6,303 | 18,485 | 5,546 | 8,892 |
| Jordan— | | | | | | |
| Phosphate-rock .. | 228,638 | 243,829 | 313,796 | 376,763 | 352,685 | 351,497 |
| Lebanon— | | | | | | |
| Superphosphates .. | 3,252 | 20,902 | 11,034 | 11,215 | <i>n.a.</i> | <i>n.a.</i> |

(a) Former British Protectorate only.

IMPORTS OF PHOSPHATES, ETC.

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-------------|-----------|-------------|-----------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Phosphate-rock.. .. | 1,067,452 | 1,055,685 | 1,429,515 | 1,355,649 | 1,399,288 | 1,413,829 |
| Superphosphates | 1,625 | 9,419 | 33,952 | 28,390 | 25,520 | 25,738 |
| Basic slag | 114,958 | 105,808 | 80,459 | 71,411 | 76,837 | 96,821 |
| Ammonium phosphate | 8,123 | 10,834 | 11,730 | 17,912 | 14,820 | 10,904 |
| Ghana— | | | | | | |
| Superphosphates | 87 | 124 | 45 | 66 | 47 | 118 |
| Other phosphatic fertilizers | 66 | 31 | 210 | 459 | 1,595 | 1,039 |
| Kenya— | | | | | | |
| Phosphate-rock.. .. | — | 52 | 937 | — | — | — |
| Superphosphates | 14,151 | 10,406 | 10,768 | 11,163 | 10,390 | 12,079 |
| Other phosphatic fertilizers | 644 | 3,637 | 2,204 | 1,382 | 1,276 | 1,893 |
| Mauritius— | | | | | | |
| Phosphatic guano | 10,237 | 8,292 | 9,620 | 10,521 | 7,494 | 8,928 |
| Phosphatic fertilizers | 914 | 1,883 | 2,879 | 5,496 | 7,016 | 7,910 |
| Nigeria— | | | | | | |
| Phosphate-rock.. .. | 1 | 54 | 444 | 47 | 11 | } 8,269 |
| Superphosphates | 411 | 495 | 308 | 159 | 3,199 | |
| Other phosphatic fertilizers | 3,078 | 693 | 999 | 1,807 | 8,628 | |
| Rhodesia and Nyasaland— | | | | | | |
| Phosphate-rock.. .. | 18,703 | 64,570 | 59,466 | 66,236 | 66,504 | 84,816 |
| Superphosphates | 39,933 | 14,140 | 17,296 | 21,188 | 20,203 | 27,491 |
| Other phosphatic fertilizers | <i>n.a.</i> | <i>n.a.</i> | 81 | 529 | 3,991 | 1,744 |
| Sierra Leone— | | | | | | |
| Superphosphates | 100 | 7 | 281 | — | 1 | 374 |
| Other phosphatic fertilizers | — | 52 | 3 | 467 | 10 | 566 |
| Tanganyika— | | | | | | |
| Superphosphates | 699 | 816 | 1,315 | 1,135 | 570 | 630 |
| Other phosphatic fertilizers | 42 | (a) 31 | 67 | 8 | 33 | 15 |
| Uganda— | | | | | | |
| Superphosphates | 1,694 | 1,440 | 1,033 | 1,185 | 1,402 | 647 |
| Other phosphatic fertilizers | 18 | 27 | 1,345 | 1 | 310 | 2 |
| Canada— | | | | | | |
| Phosphate-rock.. .. | 664,432 | 711,663 | 841,070 | 943,647 | 1,032,113 | 1,158,417 |
| Superphosphates, triple do. other | 39,507 | 57,436 | 74,234 | 60,210 | 49,548 | 37,452 |
| Basic slag | 154,872 | 126,913 | 106,865 | 111,218 | 98,043 | 74,944 |
| Other phosphatic fertilizers | 750 | 350 | 500 | 491 | 268 | — |
| Total | 2,969 | 3,558 | 5,575 | 6,008 | 19,232 | 33,051 |
| Antigua— | | | | | | |
| Phosphatic fertilizers | 15 | — | 3 | 3 | 52 | <i>n.a.</i> |
| Barbados— | | | | | | |
| Phosphatic fertilizers | 40 | 10 | 345 | 10 | 34 | 50 |
| Grenada— | | | | | | |
| Superphosphates | — | 600 | 599 | 310 | 635 | 33 |
| Other phosphatic fertilizers | 10 | 65 | 55 | <i>n.a.</i> | 90 | 368 |
| Jamaica— | | | | | | |
| Phosphatic fertilizers | 2,383 | 1,409 | 1,588 | 812 | 1,568 | 2,075 |
| St. Lucia— | | | | | | |
| Phosphatic fertilizers | <i>n.a.</i> | 376 | 290 | 83 | 1,280 | 7 |
| St. Vincent— | | | | | | |
| Superphosphates | 84 | 150 | 48 | 24 | — | — |
| Trinidad and Tobago— | | | | | | |
| Superphosphates | 1,305 | 1,377 | 1,815 | 1,287 | 1,029 | <i>n.a.</i> |
| Basic slag | 30 | 20 | — | — | — | <i>n.a.</i> |

(a) Excess of re-exports.

IMPORTS OF PHOSPHATES, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|-----------|------------|-------------|-------------|------------|------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| British Guiana— | | | | | | |
| Superphosphates .. | 2,530 | 113 | 2,817 | 1,711 | 555 | n.a. |
| Basic slag .. | 35 | 249 | 223 | 1,138 | 5 | n.a. |
| Other phosphatic fertilizers .. | r 2,028 | r 1,654 | r 1,139 | r 3,169 | 456 | n.a. |
| Ceylon— | | | | | | |
| Phosphate-rock .. | 19,397 | 60,077 | 72,119 | 57,704 | 52,275 | 72,174 |
| Superphosphates .. | 1,296 | 3,258 | 966 | 847 | 1,452 | 1,193 |
| Basic slag .. | 183 | 184 | 135 | 40 | 26 | 25 |
| Other phosphatic fertilizers .. | 26,125 | 4,644 | 74 | 349 | 15 | 20 |
| Cyprus— | | | | | | |
| Superphosphates .. | 31,201 | 31,124 | 35,140 | 37,421 | 32,403 | 33,305 |
| Basic slag, etc. .. | — | 1,059 | 340 | 683 | 198 | 27 |
| Hong Kong— | | | | | | |
| Phosphatic fertilizers .. | 29,062 | 130 | 104 | 213 | 84 | 85 |
| India— | | | | | | |
| Phosphate-rock .. | 121,260 | 188,864 | (b)249,833 | (b)249,956 | (b)301,065 | (b)331,458 |
| Other phosphates .. | r 4,495 | r 4,348 | (b) r 6,810 | (b) r 2,579 | (b) 4,518 | (b) 3,412 |
| Superphosphates .. | 266 | 5,348 | (b) 596 | (b) 737 | (b) 2,213 | (b) 534 |
| Ammonium phosphate | 47 | 228 | (b) 5 | (b) 8 | (b) 9,846 | (b) 23,581 |
| Malaya— | | | | | | |
| Phosphate-rock .. | 29,879 | 65,637 | 64,879 | 78,960 | 79,881 | 103,212 |
| Phosphatic fertilizers .. | 3,122 | 3,334 | 18,050 | 8,932 | 6,570 | 7,904 |
| Sabah— | | | | | | |
| Superphosphates .. | 41 | 243 | 33 | 81 | — | n.a. |
| Other phosphatic fertilizers .. | 1,218 | 475 | 476 | 44 | 1,279 | n.a. |
| Sarawak— | | | | | | |
| Natural phosphates .. | 484 | 4 | 1 | 19 | 797 | 1,511 |
| Phosphatic fertilizers .. | 2,069 | 3,138 | 5,026 | 5,146 | 5,018 | 6,999 |
| Australia (a)— | | | | | | |
| Phosphate-rock .. | 1,273,766 | 1,353,739 | 1,322,173 | 1,723,518 | 1,835,070 | 1,694,916 |
| Superphosphates .. | 1 | — | — | r 96 | 126 | 95 |
| Fiji— | | | | | | |
| Phosphatic fertilizers .. | n.a. | n.a. | n.a. | n.a. | n.a. | 3,870 |
| New Zealand— | | | | | | |
| Phosphate-rock .. | 486,292 | 469,373 | 608,202 | 597,568 | 580,620 | 645,756 |
| Phosphatic guano .. | 8,500 | — | — | — | 5,324 | n.a. |
| Superphosphates .. | 392 | 70 | — | 54 | 49 | n.a. |
| Basic slag .. | 41,648 | 25,344 | 29,670 | 31,516 | 21,522 | 21,341 |
| Other phosphates .. | 1,968 | 304 | 2,527 | 4,750 | 4,849 | 7,697 |
| Irish Republic— | | | | | | |
| Phosphate-rock .. | r 121,562 | r 135,840 | r 163,030 | 221,938 | 221,806 | 226,935 |
| Superphosphates .. | r 72,282 | 77,697 | 87,210 | 14,031 | 2,358 | 4,744 |
| Basic slag .. | 38,358 | 85,252 | 49,950 | 65,655 | 121,378 | 121,527 |
| Other phosphatic fertilizers .. | r 9,802 | 18,415 | 11,226 | 13,637 | 16,179 | 24,328 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Phosphate-rock .. | 69,154 | 109,921 | 121,905 | 124,248 | 190,273 | 195,017 |
| Superphosphates .. | 114,363 | (c) 72,437 | (c) 76,495 | (c) 26,902 | (c) 11,750 | (c) 9,750 |
| Basic slag .. | 224,285 | 242,540 | 267,189 | 264,049 | 269,146 | 316,404 |

(a) Years ended June 30 of that stated.

(c) Including other phosphatic fertilizers.

(b) Years ended March 31 following that stated.

IMPORTS OF PHOSPHATES, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Phosphate-rock | 571,697 | 609,667 | 642,026 | 886,094 | 865,992 | 993,935 |
| Superphosphates | 4 | 71 | 255 | 1,254 | 6,307 | 304 |
| Di-calcium phosphates .. | 6 | 8 | 137 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Basic slag | 57 | 352 | 100 | 44 | 4 | 5 |
| Czechoslovakia— | | | | | | |
| Phosphatic fertilizers (a) | 120,000 | 124,000 | 146,000 | 170,000 | 191,000 | <i>n.a.</i> |
| Denmark— | | | | | | |
| Phosphate-rock | 269,738 | 279,544 | 259,558 | 302,353 | 281,522 | 307,792 |
| Superphosphates | 97,095 | 99,666 | 167,709 | 188,398 | 126,929 | 101,733 |
| Di-calcium phosphates .. | <i>n.a.</i> | <i>n.a.</i> | 26,868 | 23,544 | 25,981 | 26,214 |
| Basic slag | 7,229 | 7,818 | 6,024 | 6,146 | 9,365 | 8,370 |
| Finland— | | | | | | |
| Phosphate-rock | 234,198 | 238,866 | 231,786 | 273,625 | 231,706 | 230,066 |
| Superphosphates | — | 15,843 | 68,293 | 73,302 | 62,335 | 16,187 |
| Basic slag | 6 | 25,194 | 24,292 | 10,089 | 10,947 | 10,366 |
| Di-calcium phosphates .. | 11,217 | 12,858 | 7,689 | 165 | 888 | 1,426 |
| France— | | | | | | |
| Phosphate-rock | 1,763,638 | 1,655,983 | 1,707,582 | 1,762,437 | 1,998,572 | 2,118,068 |
| Aluminium phosphates .. | 71,092 | 71,497 | 103,067 | 87,427 | 85,189 | 81,271 |
| Superphosphates | 68,353 | 101,728 | 221,547 | 270,980 | 287,682 | 329,634 |
| Calcined phosphates | 36,173 | 15,796 | 15,427 | 13,195 | 19,123 | 16,957 |
| Basic slag | 248,199 | 284,680 | 428,223 | 598,419 | 871,444 | 873,203 |
| Di-calcium phosphates .. | 19,412 | 10,476 | 12,724 | 22,505 | 27,113 | 18,597 |
| Germany (Federal)— | | | | | | |
| Phosphate-rock, etc. .. | 1,216,183 | 1,433,115 | 1,616,786 | 1,488,526 | 1,596,262 | 1,615,589 |
| Superphosphates | 2,448 | 5,197 | 6,303 | 18,636 | 34,935 | 38,160 |
| Basic slag | 373,154 | 592,224 | 866,335 | 521,858 | 436,911 | 406,447 |
| Other phosphatic fertilizers .. | 1 | 61 | 91 | 117 | 273 | 631 |
| Germany (East) (a)— | | | | | | |
| Phosphatic fertilizers .. | 61,250 | 62,450 | 56,164 | 58,217 | 25,136 | 44,303 |
| Greece— | | | | | | |
| Phosphate-rock | 186,891 | 178,902 | 180,675 | 141,260 | 145,632 | 200,842 |
| Other phosphatic fertilizers .. | 29,481 | 30,811 | 8,765 | 17,994 | 73,334 | 81,193 |
| Hungary— | | | | | | |
| Phosphate-rock | 157,618 | 135,751 | 174,807 | 185,744 | 227,319 | 301,634 |
| Iceland— | | | | | | |
| Superphosphates | 7,972 | 8,485 | 8,120 | 6,617 | 10,789 | 3,554 |
| Italy— | | | | | | |
| Phosphate-rock | 1,303,749 | 1,180,856 | 1,444,811 | 1,363,315 | 1,548,820 | 1,455,257 |
| Superphosphates | 195 | 7,234 | 8,120 | — | 9 | 1,162 |
| Basic slag | 64,702 | 56,536 | 2,240 | 11,590 | 23,247 | 17,762 |
| Netherlands— | | | | | | |
| Phosphate-rock | 616,175 | 605,289 | 719,800 | 700,260 | 555,807 | 664,480 |
| Superphosphates | 86 | 2,519 | 30,149 | 36,897 | 77,073 | 52,922 |
| Basic slag | 289,559 | 302,205 | 270,668 | 131,862 | 146,177 | 152,219 |
| Di-calcium phosphates .. | 20,787 | 26,114 | 14,456 | 3,621 | 185 | 9,490 |
| Ammonium phosphates .. | 10,563 | 6,515 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Norway— | | | | | | |
| Phosphate-rock | 122,274 | 135,300 | 132,590 | 150,507 | 165,708 | 147,418 |
| Basic slag | 6,816 | 8,111 | 8,444 | 9,039 | 7,779 | 6,247 |
| Poland— | | | | | | |
| Apatite concentrates | 202,300 | 227,400 | 269,200 | 334,900 | <i>n.a.</i> | 312,190 |
| Phosphate rock | 270,600 | 285,100 | 351,900 | 446,400 | <i>n.a.</i> | 475,765 |
| Portugal— | | | | | | |
| Phosphate-rock | 218,674 | 245,200 | 251,360 | 271,063 | 238,388 | 268,982 |
| Superphosphates | 4,183 | — | — | — | — | — |
| Basic slag | 22,083 | 22,811 | 13,028 | 11,417 | 9,351 | 9,900 |

(a) P₂O₅ content.

IMPORTS OF PHOSPHATES, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Roumania— | | | | | | |
| Phosphate-rock (a) .. | 25,600 | 54,300 | 71,700 | 78,500 | 101,200 | 147,926 |
| Spain— | | | | | | |
| Phosphate-rock .. | 920,418 | 1,005,055 | 926,232 | 926,640 | 1,010,040 | 985,844 |
| Superphosphates, etc. .. | — | — | — | — | — | 539 |
| Basic slag .. | 49,875 | 86,192 | 16,975 | 13,262 | 29,649 | 41,199 |
| Sweden— | | | | | | |
| Phosphate-rock .. | 294,506 | 331,982 | 339,063 | 367,750 | 391,464 | 378,970 |
| Superphosphates .. | 1,649 | 3,026 | 13,085 | 938 | 10 | 281 |
| Di-calcium phosphates | <i>n.a.</i> | 10,310 | 12,466 | 7,822 | 5,586 | 3,941 |
| Switzerland— | | | | | | |
| Phosphate-rock .. | (b) 22,000 | (b) 23,000 | 37,054 | 34,530 | 30,641 | 34,021 |
| Super phosphates, etc. .. | 14,211 | 13,759 | 10,414 | 11,885 | 12,600 | 12,304 |
| Basic slag .. | 162,502 | 168,522 | 168,258 | 172,023 | 176,664 | 180,799 |
| Di-calcium phosphates | <i>n.a.</i> | <i>n.a.</i> | 1,278 | 2,302 | 2,665 | 3,677 |
| Yugoslavia— | | | | | | |
| Phosphate-rock .. | 144,736 | 157,259 | 197,183 | 250,616 | 319,154 | 532,056 |
| Superphosphates .. | 152,042 | 162,492 | 54,511 | 2,953 | 73,877 | 215,240 |
| Basic slag .. | 104,746 | 179,035 | 54,888 | 2,814 | 7,598 | 76,279 |
| Algeria— | | | | | | |
| Superphosphates .. | 9,961 | 8,604 | 12,216 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Basic slag .. | 2,711 | 1,910 | 3,263 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Di-calcium phosphates | 3,888 | 2,618 | 1,736 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Angola— | | | | | | |
| Superphosphates .. | 292 | 1,177 | 623 | 715 | 1,565 | 982 |
| Cameroun— | | | | | | |
| Phosphatic fertilizers .. | 617 | 340 | 93 | 257 | 405 | 265 |
| Canary Islands— | | | | | | |
| Phosphate-rock .. | 16,723 | 16,573 | 11,420 | 16,598 | 14,293 | <i>n.a.</i> |
| Egypt— | | | | | | |
| Superphosphates .. | — | — | 29,365 | 129,647 | 73,921 | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Phosphatic fertilizers .. | 720 | 430 | 742 | 344 | 401 | 262 |
| Morocco— | | | | | | |
| Superphosphates .. | 6 | 586 | 39 | — | 438 | 541 |
| Di-calcium phosphates | 3,124 | 4,378 | 6,066 | 2,923 | 1,756 | 487 |
| Reunion— | | | | | | |
| Phosphate fertilizers .. | 360 | 4,512 | 3,745 | 1,729 | 790 | 873 |
| South Africa— | | | | | | |
| Phosphate-rock .. | 389,659 | 338,797 | 378,114 | 364,471 | 443,691 | <i>n.a.</i> |
| Phosphatic guano .. | — | 500 | — | — | — | <i>n.a.</i> |
| Superphosphates .. | 1,385 | 1,204 | 1,743 | 2,662 | 6,321 | <i>n.a.</i> |
| Basic slag .. | 51,721 | 42,752 | 39,658 | 51,157 | 44,053 | <i>n.a.</i> |
| Sudan— | | | | | | |
| Superphosphates .. | 1,032 | 700 | 1,007 | 579 | 1,144 | 62 |
| Tunisia— | | | | | | |
| Phosphatic fertilizers .. | 1,146 | 738 | 236 | 68 | — | 346 |
| Costa Rica— | | | | | | |
| Phosphatic fertilizers .. | 18,908 | 27,160 | 34,725 | 21,495 | 8,675 | 387 |
| Cuba— | | | | | | |
| Superphosphates .. | 38,623 | 35,939 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Calcium phosphates .. | 14,779 | 9,887 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Dominican Republic— | | | | | | |
| Superphosphates .. | 5,060 | 8,154 | 3,749 | 4,732 | 5,321 | <i>n.a.</i> |
| French West Indies— | | | | | | |
| Guadeloupe— | | | | | | |
| Phosphatic fertilizers .. | <i>n.a.</i> | 316 | 1,103 | 523 | 184 | 345 |
| Martinique— | | | | | | |
| Phosphatic fertilizers .. | <i>n.a.</i> | 2,064 | 2,815 | 3,041 | 2,470 | 1,071 |
| Guatemala— | | | | | | |
| Phosphatic fertilizers .. | <i>n.a.</i> | 2,346 | 2,133 | 508 | 5,395 | <i>n.a.</i> |

 (a) P_2O_5 content.

(b) Estimated on imports from producing countries.

IMPORTS OF PHOSPHATES, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-----------|-----------|-----------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Honduras— | | | | | | |
| Phosphatic fertilizers .. | 71 | 245 | 152 | 135 | 579 | 32 |
| Mexico— | | | | | | |
| Phosphate-rock | 37,123 | 48,674 | 65,269 | 65,263 | 121,265 | 196,109 |
| Superphosphates | 7,298 | 11,639 | 20,059 | 34,195 | 6,513 | 5,961 |
| Ammonium phosphates | 15,773 | 13,371 | 14,893 | 11,509 | 16,720 | 3,527 |
| Nicaragua— | | | | | | |
| Phosphatic fertilizers .. | 751 | 732 | 212 | 341 | 714 | 1,937 |
| Panama Republic— | | | | | | |
| Phosphatic fertilizers .. | 509 | 323 | 519 | 674 | <i>n.a.</i> | <i>n.a.</i> |
| Salvador— | | | | | | |
| Phosphatic fertilizers .. | <i>n.a.</i> | 4,342 | 1,707 | 1,109 | 1,131 | 1,338 |
| United States— | | | | | | |
| Phosphate-rock | 108,182 | 139,891 | 129,290 | 134,004 | 133,628 | 160,708 |
| Superphosphates— | | | | | | |
| Single | 83 | 128 | 1,112 | 1,151 | 13,860 | } 64,144 |
| Concentrated | 495 | 856 | 915 | 1,946 | 44,352 | |
| Ammoniated | 1,329 | 2,733 | 237 | 140 | 954 | |
| Basic slag | 160 | 237 | — | 46 | 2,012 | 527 |
| Di-calcium phosphates | 4,078 | 3,287 | 5,164 | 10,149 | 9,193 | 4,326 |
| Ammonium phosphates | 141,716 | 192,596 | 107,087 | 100,887 | 144,722 | 115,812 |
| Brazil— | | | | | | |
| Phosphate-rock | 88,146 | 89,191 | 66,836 | 56,632 | 54,997 | 218,387 |
| Superphosphates— | | | | | | |
| Single | 40,619 | 12,454 | 8,655 | 20,534 | 14,012 | 9,626 |
| Concentrated | 105,958 | 49,327 | 61,850 | 51,376 | 43,502 | 70,282 |
| Calcined phosphates .. | 3,314 | 362 | 1,062 | 2,809 | 2,046 | 4,399 |
| Di-calcium phosphate .. | 2,104 | 747 | 2,566 | 2,708 | 2,879 | 2,398 |
| Basic slag | 10,228 | 3,083 | 2,896 | 4,310 | 2,262 | 4,650 |
| Chile— | | | | | | |
| Superphosphates | 8,356 | 14,401 | 21,954 | 35,128 | 58,788 | <i>n.a.</i> |
| Basic slag | 591 | 4,886 | 4,267 | 13,585 | 15,529 | <i>n.a.</i> |
| Di-calcium phosphates | 17,250 | 21,057 | 21,241 | 35,137 | 31,498 | <i>n.a.</i> |
| Other phosphatic fertilizers | 9,608 | 3,556 | 2,610 | 18,556 | 31,184 | <i>n.a.</i> |
| Colombia— | | | | | | |
| Phosphate-rock | 1,494 | 1,397 | 2,396 | 3,347 | 8,191 | 16,829 |
| Superphosphates | 11,572 | 1,578 | 8,477 | 4,351 | 13,983 | 28,963 |
| Di-calcium phosphates | 24,189 | 21,101 | 21,965 | 31,354 | 9,623 | 7,364 |
| Peru— | | | | | | |
| Phosphate-rock | 1,427 | 11,530 | 14,461 | 11,993 | 13,119 | 11,606 |
| Phosphatic fertilizers .. | 998 | 72 | 1,975 | 2,568 | 3,472 | 206 |
| Venezuela— | | | | | | |
| Calcium phosphates and superphosphates .. | 4,918 | 9,106 | 7,597 | 10,408 | 4,664 | 6,847 |
| Formosa— | | | | | | |
| Apatite | 63,817 | 79,713 | 79,540 | — | — | <i>n.a.</i> |
| Phosphatic fertilizers .. | 54,377 | 78,254 | 44,772 | 43,370 | 6,060 | 17,553 |
| Indonesia— | | | | | | |
| Superphosphates | 26,114 | 18,328 | 22,204 | 121,553 | <i>n.a.</i> | <i>n.a.</i> |
| Phosphatic fertilizers .. | 13,085 | 3,678 | 24,268 | 15,149 | <i>n.a.</i> | <i>n.a.</i> |
| Iraq— | | | | | | |
| Phosphatic fertilizers .. | 2,662 | 655 | 1,581 | 2,113 | 1,073 | <i>n.a.</i> |
| Japan— | | | | | | |
| Phosphate-rock | 1,483,589 | 1,695,122 | 2,013,932 | 2,070,072 | 1,864,237 | 2,026,148 |
| Jordan— | | | | | | |
| Phosphatic fertilizers .. | 1,140 | 1,057 | 2,811 | 722 | 2,219 | 1,709 |
| Korea (South)— | | | | | | |
| Superphosphates | 144,421 | 83,305 | 121,925 | 46,530 | 55,479 | 27 |
| Lebanon— | | | | | | |
| Phosphatic fertilizers .. | 10,501 | 17,836 | 9,566 | 8,641 | 8,394 | 12,513 |

IMPORTS OF PHOSPHATES, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|--------|--------|--------|--------|--------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Philippine Republic— | | | | | | |
| Phosphate-rock | 9,693 | 12,489 | 6,248 | 10,185 | 12,292 | 11,985 |
| Superphosphates | 897 | 498 | — | — | 1,493 | 886 |
| Ammonium phosphate | 2,781 | 24,364 | 21,301 | 24,858 | 19,708 | 6,882 |
| Other phosphatic fertilizers | 18,702 | 7,895 | 7,720 | 17,086 | 52,430 | 4,682 |
| Syria— | | | | | | |
| Phosphatic fertilizers | 4,615 | 4,274 | 14,884 | 27,940 | 13,852 | <i>n.a.</i> |
| Thailand— | | | | | | |
| Superphosphates | 569 | 1,038 | 858 | 788 | 2,783 | 3,030 |
| Phosphatic fertilizers | 3,265 | 10,941 | 7,519 | 11,317 | 18,209 | 26,996 |
| Turkey— | | | | | | |
| Phosphate-rock | 12,421 | 31,051 | 18,433 | 18,572 | 32,823 | 204,412 |
| Superphosphates | — | 3,265 | — | 36,659 | 37,996 | 19,202 |
| Vietnam (South)— | | | | | | |
| Phosphatic fertilizers | 5,016 | 5,752 | 5,707 | 6,084 | 8,078 | <i>n.a.</i> |

PLATINUM
PRODUCTION OF PLATINUM METALS

Troy ounces

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|---------|-----------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Sierra Leone— | | | | | | |
| Crude platinum .. (a) | 8 | — | — | — | — | — |
| Canada— | | | | | | |
| Recovered from Ontario nickel-copper ores (c)— | | | | | | |
| Platinum | 146,092 | 150,382 | } 483,604 | 418,278 | 470,787 | 357,651 |
| Other platinum metals | 154,366 | 177,713 | | | | |
| Australia— | | | | | | |
| New South Wales— | | | | | | |
| Concentrates (Pt content) | 22 | — | 4 | 2 | 2 | 4 |
| Tasmania— | | | | | | |
| Osmiridium | 42 | 3 | — | — | — | — |
| New Guinea— | | | | | | |
| Platinum | 28 | 19 | 4 | 5 | 4 | 4 |
| OTHER COUNTRIES | | | | | | |
| U.S.S.R.— | | | | | | |
| Crude platinum (d) .. | 250,000 | 300,000 | 330,000 | r 500,000 | 800,000 | 800,000 |
| Congo Republic— | | | | | | |
| Platinum | 32 | — | — | — | — | — |
| Palladium | 129 | — | — | — | — | — |
| Ethiopia— | | | | | | |
| Crude platinum .. | 180 | 68 | 189 | 180 | 180 | (d) 180 |
| South Africa— | | | | | | |
| Crude and matte (Pt metals content) (d) | 300,000 | 375,000 | r 400,000 | r 350,000 | 300,000 | 300,000 |
| Osmiridium (crude) .. (b) | 4,873 | (b) 4,843 | (b) 6,334 | (d) 7,000 | (d) 6,000 | (d) 5,500 |
| United States (e)— | | | | | | |
| New platinum metals recovered by refineries from crude platinum and gold and copper ores of domestic origin | | | | | | |
| Platinum | 9,025 | 9,791 | 10,232 | 17,155 | 14,244 | 20,818 |
| Palladium | 4,291 | 4,179 | 8,274 | 22,668 | 14,141 | 28,099 |
| Iridium | 1,685 | 767 | 810 | 1,284 | 739 | 1,381 |
| Osmium | 368 | 103 | 118 | 147 | 95 | 189 |
| Rhodium | 271 | 83 | 769 | 932 | 439 | 1,073 |
| Ruthenium | 22 | 92 | 163 | 306 | 146 | 398 |

(a) Exports.

(b) Sales.

(c) Metal content of concentrates produced from nickel-copper ores.

(d) United States Bureau of Mines' estimate.

(e) Secondary platinum metals recovered in the United States were as follows (troy ounces):

| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------|--------|--------|--------|--------|--------|--------|
| Platinum | 36,426 | 58,945 | 33,861 | 51,218 | 71,817 | 54,084 |
| Palladium | 38,883 | 68,279 | 35,465 | 32,451 | 56,273 | 59,993 |
| Iridium | 1,223 | 1,188 | 914 | 193 | 767 | 440 |
| Osmium | 335 | 361 | 279 | 6 | 99 | 273 |
| Rhodium | 2,639 | 5,631 | 953 | 1,836 | 2,570 | 1,990 |
| Ruthenium | 2,008 | 1,592 | 385 | 267 | 576 | 319 |

PRODUCTION OF PLATINUM METALS (cont.)

Troy ounces

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------|----------------|------------------|------------------|--------------------|------------------|------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Colombia (a)— | | | | | | |
| Crude platinum .. | 16,036 | 18,322 | 16,923 | 20,232 | 14,100 | 22,983 |
| Japan— | | | | | | |
| Platinum | 442 | 470 | 1,396 | 2,247 | 1,872 | 1,714 |
| Palladium | 240 | 324 | 563 | 1,550 | 1,372 | 1,326 |
| Iridium | 600 | — | <i>n.a.</i> | <i>n.a.</i> | — | — |
| Philippine Republic— | | | | | | |
| Platinum | — | — | — | 177 | 172 | — |
| Palladium | — | — | — | 215 | 141 | — |
| WORLD'S TOTAL (b) | 900,000 | 1,000,000 | 1,300,000 | r 1,300,000 | 1,600,000 | 1,500,000 |

(a) Exports. Total production may be very much greater.

(b) Estimated.

EXPORTS OF PLATINUM*

Troy ounces

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|--------------|---------|---------|---------|---------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Platinum— | | | | | | |
| Ingots, grain and powder | 249,860 | 278,534 | 311,617 | 307,461 | 253,320 | 509,580 |
| Other kinds (a) .. | 25,617 | 34,740 | 37,583 | 39,616 | 58,018 | 76,307 |
| Other platinum metals and alloys | 146,064 | 145,840 | 308,309 | 363,471 | 259,998 | 279,899 |
| Sierra Leone— | | | | | | |
| Crude platinum .. | 8 | — | — | — | — | — |
| Canada— | | | | | | |
| Concentrates, etc. (b) .. | (£3,707,218) | 357,898 | 403,240 | 626,876 | 542,985 | 506,782 |
| Platinum metals .. | n.a. | n.a. | n.a. | 4,619 | 28,262 | 42,845 |
| Scrap | 295 | 995 | 701 | n.a. | n.a. | n.a. |
| Hong Kong— | | | | | | |
| Platinum and platinum group metals | (£923) | — | 251 | 223 | 643 | 6,999 |
| Australia (c)— | | | | | | |
| Platinum and platinum group metals | 862 | 57 | 369 | 677 | 101 | 417 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unwrought platinum and platinum metals | 6,141 | 611 | 12,700 | 1,157 | 579 | 354 |
| Denmark— | | | | | | |
| Rods, sheets, wire, scrap, etc. | 804 | — | 32 | n.a. | — | — |
| France— | | | | | | |
| Unwrought platinum and scrap (a) | 10,931 | 12,828 | 4,861 | 6,714 | 14,277 | 28,270 |
| Palladium (inc. scrap)(a) | 44,529 | 9,227 | 4,694 | 7,748 | 8,809 | 17,972 |
| Drawn or rolled platinum | 8,263 | 8,713 | 7,052 | 16,886 | 17,573 | 9,646 |
| Germany (Federal)— | | | | | | |
| Platinum metals (a) .. | 129,526 | 69,145 | 61,491 | 90,439 | 123,041 | 121,147 |
| Italy— | | | | | | |
| Unwrought platinum .. | 5,948 | — | 3,086 | 15,175 | 11,831 | 22,216 |
| Netherlands— | | | | | | |
| Unwrought platinum and platinum metals .. | 75,393 | 63,787 | 5,787 | 21,541 | 8,359 | 22,120 |
| Drawn or rolled .. | 54,045 | 112,881 | 38,420 | 46,554 | 33,083 | 25,367 |
| Norway— | | | | | | |
| Platinum (incl. scrap) .. | 13,568 | 21,380 | 15,465 | 10,706 | 15,786 | 10,610 |
| Sweden— | | | | | | |
| Unwrought platinum .. | 262,800 | n.a. | n.a. | n.a. | n.a. | — |
| Switzerland— | | | | | | |
| Unwrought platinum .. | 3,215 | 2,186 | 3,054 | 3,151 | 7,105 | 6,720 |

*Official figures which, in many cases, do not include platinum sent by post.

(a) Including alloys.

(b) Platinum and platinum metals contained in concentrates and other forms.

(c) Years ended June 30 of that stated.

EXPORTS OF PLATINUM (cont.)

Troy ounces

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|----------------|----------------|----------------|----------------|----------------|----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| U.S.S.R. | (a) | (a) | (a) | (a) | (a) | (a) |
| South Africa— | | | | | | |
| Crude platinum metals | } (£3,700,563) | } (£4,339,441) | } (£8,617,784) | } (£8,700,183) | } (£6,639,594) | n.a. |
| Osmiridium | | | | | | |
| United States— | | | | | | |
| Ores, etc. (<i>Pt content</i>) . . | } 35,075 | } 18,560 | } 49,497 | } 41,385 | } 49,651 | } 51,236 |
| Ingots, sheets, wire, etc. | | | | | | |
| Palladium, rhodium, etc. and alloys | | | | | | |
| Colombia— | 12,293 | 12,845 | 15,652 | 20,460 | 10,940 | 11,776 |
| Platinum | 16,036 | 18,322 | 16,923 | 20,232 | 14,100 | 22,983 |

(a) Exports of platinum metals from U.S.S.R. are not published, but imports into the under-mentioned countries from U.S.S.R. were as follows (troy ounces):

| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------|---------|---------|---------|---------|---------|---------|
| United Kingdom | 52,529 | 47,790 | 23,357 | 23,378 | 13,889 | 39,402 |
| France | 22,505 | 7,941 | 25,688 | 49,470 | 87,808 | 56,824 |
| Germany (Federal) | 107,433 | 108,156 | 127,778 | 113,653 | 141,017 | 163,916 |
| Netherlands | 24,499 | 20,834 | 20,448 | 30,479 | 27,264 | 35,655 |
| United States | 93,583 | 130,413 | 111,105 | 227,632 | 113,989 | 230,855 |
| Japan | 47,072 | 56,725 | 66,842 | 100,905 | 127,171 | 92,933 |

IMPORTS OF PLATINUM*

Troy ounces

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|--------------|--------------|---------------|---------------|---------------|---------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ores and concentrates | (£8,703,882) | (£9,957,176) | (£15,906,931) | (£15,806,086) | (£14,532,560) | (£12,506,237) |
| Platinum and platinum group metals | 99,875 | 101,755 | 76,033 | 89,344 | 99,373 | 78,474 |
| Canada— | | | | | | |
| Platinum and platinum group metals | (£1,372,800) | (£821,828) | (£1,671,639) | (£500,864) | (£1,432,386) | (£1,141,090) |
| Nigeria— | | | | | | |
| Platinum and platinum group metals | 1 | 3 | — | — | — | 7,712 |
| Sierra Leone— | | | | | | |
| Platinum and platinum group metals | — | — | — | — | 5 | 908 |
| Hong Kong— | | | | | | |
| Platinum and platinum group metals | (£114,722) | 6,714 | 5,470 | 5,811 | 11,275 | 22,426 |
| India— | | | | | | |
| Platinum | 2,176 | 2,135 | (a) 1,607 | (a) 2,827 | (a) 2,117 | (a) 2,336 |
| Malaya— | | | | | | |
| Unwrought platinum .. | 90 | 12,900 | 40 | 430 | 220 | 4,395 |
| Australia (c)— | | | | | | |
| Platinum bars, rods, sheets, etc. | 63 | 229 | 604 | 784 | 362 | 138 |
| Bars, rods, sheets, etc. of other platinum metals | 1,872 | 666 | 2,017 | 1,937 | 22 | 5 |
| Platinum metal powder | 1,926 | 1,102 | 5,780 | 669 | 1,071 | 2,914 |
| Wire | 1,194 | 2,012 | 1,532 | 2,127 | 1,546 | 720 |
| New Zealand— | | | | | | |
| Platinum and platinum group metals | 1,663 | 1,415 | 2,027 | 2,874 | 2,763 | n.a. |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unwrought platinum and platinum metals | 2,315 | 1,672 | 7,877 | 2,379 | 997 | 5,626 |
| Denmark— | | | | | | |
| Rods, sheets, wire and scrap | 1,736 | 1,318 | 2,058 | 1,640 | 1,800 | 1,865 |
| Finland— | | | | | | |
| Unwrought platinum etc. | 1,653 | 5,057 | 6,398 | 8,809 | 21,380 | 4,003 |
| France— | | | | | | |
| Unwrought platinum, alloys and scrap | 56,360 | 68,642 | 63,057 | 87,319 | 101,198 | 107,607 |
| Unwrought palladium, alloys and scrap | 60,122 | 77,676 | 29,096 | 31,218 | 52,084 | 61,729 |
| Drawn or rolled platinum | 96 | 64 | 378 | 703 | 10,352 | 2,266 |
| Germany (Federal)— | | | | | | |
| Platinum metals and alloys | 194,188 | 187,344 | 224,910 | 219,439 | 215,803 | 325,349 |
| Italy— | | | | | | |
| Unwrought platinum .. | 8,198 | 11,381 | 15,593 | 33,823 | 33,790 | 33,019 |
| Drawn or rolled | 2,990 | 4,790 | 4,180 | 31,894 | 11,060 | 7,652 |
| Other platinum metals | 23,888 | 15,175 | 11,896 | 20,416 | 33,983 | 22,698 |

*Official figures, which in many cases do not include platinum sent by post.

(a) Years ended March 31 following that stated.

(c) Years ended June 30 of that stated.

(b) Excess of re-exports.

IMPORTS OF PLATINUM (cont.)

Troy ounces

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Netherlands— | | | | | | |
| Unwrought platinum and platinum metals .. | 64,559 | 150,433 | 57,646 | 66,359 | 48,194 | 65,427 |
| Drawn or rolled .. | 7,073 | 8,777 | 6,623 | 11,639 | 12,732 | 12,539 |
| Norway— | | | | | | |
| Unwrought platinum .. | 2,476 | 2,765 | 6,945 | 2,218 | 1,640 | 1,350 |
| Drawn or rolled .. | 261 | 22,698 | 1,254 | 1,198 | 1,244 | 1,377 |
| Portugal— | | | | | | |
| Sheets, wire, etc. .. | 236 | 144 | 12 | 41 | 130 | 22 |
| Spain— | | | | | | |
| Bars, sheets, wire, etc. . . | 39 | 965 | 1,039 | 6,559 | 4,083 | 32 |
| Sweden— | | | | | | |
| Unwrought platinum .. | 3,408 | n.a. | n.a. | n.a. | n.a. | — |
| Switzerland— | | | | | | |
| Unwrought platinum .. | 15,272 | 23,599 | 24,402 | 26,524 | 32,569 | 42,117 |
| Yugoslavia— | | | | | | |
| Unwrought platinum .. | 13,214 | 9,163 | 4,115 | 9,227 | 15,754 | 19,162 |
| Egypt— | | | | | | |
| Ingots, bars, sheets, etc. | 10 | 4 | n.a. | n.a. | n.a. | n.a. |
| South Africa— | | | | | | |
| Platinum | 541 | 512 | 1,243 | 845 | 2,403 | n.a. |
| Cuba— | | | | | | |
| Ingots and bars .. | 64 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Palladium | 2,765 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Mexico— | | | | | | |
| Platinum | 249 | 263 | 204 | 240 | 149 | 17 |
| Palladium | 1,256 | 2,241 | 2,063 | 2,088 | 3,679 | 3,428 |
| United States— | | | | | | |
| Ore (a) | — | 503 | 401 | 568 | — | — |
| Grains and nuggets (a) .. | 21,635 | 77,763 | 30,338 | 22,997 | 23,366 | 50,691 |
| Sponge and scrap (a) (b) | 112,739 | 58,764 | 134,122 | 110,057 | 417,575 | n.a. |
| Ingots, bars, sheets (a) (b) | 148,191 | 205,890 | 107,273 | 138,352 | 93,202 | n.a. |
| Iridium | 1,156 | 7,772 | 4,253 | 4,366 | 9,001 | 13,059 |
| Osmium and osmiridium .. | 1,595 | 3,344 | 277 | 3,067 | 1,086 | 2,091 |
| Palladium | 360,077 | 610,740 | 368,256 | 571,693 | 431,872 | 503,843 |
| Rhodium and ruthenium .. | 25,038 | 44,021 | 35,719 | 26,363 | 38,622 | 40,417 |
| Brazil— | | | | | | |
| Unwrought platinum .. | 1,350 | 96 | 36 | 514 | 7,268 | — |
| Palladium | 1,093 | — | 23 | 900 | 1,125 | — |
| Colombia— | | | | | | |
| Unwrought platinum .. | — | — | 129 | 1,254 | 932 | 64 |
| Uruguay— | | | | | | |
| Platinum metals .. | 12 | 148 | 597 | n.a. | n.a. | n.a. |
| Venezuela— | | | | | | |
| Unwrought platinum .. | 9,099 | 1,575 | 53,049 | 3,762 | 13,310 | 36,523 |
| Japan— | | | | | | |
| Platinum | 60,401 | 74,355 | 73,155 | 95,193 | 133,843 | 221,844 |
| Palladium | 32,526 | 46,296 | 56,465 | 96,541 | 87,494 | 147,070 |
| Rhodium | 870 | 2,530 | 2,199 | 1,605 | 1,711 | 2,950 |
| Iridium, etc. | 1,224 | 1,610 | 1,827 | 1,489 | 2,666 | 2,267 |
| Lebanon— | | | | | | |
| Unwrought platinum .. | 5,754 | 4,783 | 3,903 | 2,861 | 4,559 | n.a. |
| Turkey— | | | | | | |
| Sheets | 643 | — | — | 900 | n.a. | 3,440 |

(a) Platinum content.

(b) As recorded in official trade returns. According to the U.S. Bureau of Mines, however, these items have been re-classified as follows:

| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------|---------|---------|---------|---------|---------|---------|
| Sponge and scrap .. | 13,167 | 5,666 | 3,905 | 11,550 | 6,185 | 7,647 |
| Platinum metal .. | 247,763 | 260,524 | 238,307 | 236,859 | 210,220 | 701,213 |

POTASH MINERALS
PRODUCTION OF POTASH

| Producing Country and Description | K ₂ O Content or Equivalent | | | | | | | Long tons | | | | | | | |
|--|--|--------------------------------------|---|---------------------------------------|---|---|----------------------------------|--------------------------------------|------------------------------------|-----------------------------------|-----------------------------------|---------------------------------------|------------|------------|-----------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1963 | | | | | | | | |
| COMMONWEALTH COUNTRIES | | | | | | | | | | | | | | | |
| Canada— Potash salts | — | <i>n.a.</i> | — | — | <i>n.a.</i> | <i>n.a.</i> | — | <i>c</i> 130,000 <i>c</i> 559,696 | | | | | | | |
| OTHER COUNTRIES | | | | | | | | | | | | | | | |
| France (b)— Sylvinitic, 12–22% K ₂ O Fertilizer salts 30–40% K ₂ O.. | 9,230,061 | 9,382,550 | 9,788,231 | 10,717,502 | <i>n.a.</i> | <i>n.a.</i> | [40,590 199,514 1,213,599 | 46,843 124,047 1,267,920 | | | | | | | |
| Chloride 50% K ₂ O and over | | | | | | | | | 41,500 | — | — | — | — | — | — |
| Germany— Federal Republic— Kainite, sylvinitic, etc. Eastern— Potash salts | | | | | | | | | 16,401,000 | 17,147,000 | 18,347,418 | 19,200,561 | 18,121,975 | 18,244,498 | 1,987,000 | 2,110,000 |
| Italy— Crude potash salts Netherlands (a)— Potassium chloride (over 45% K ₂ O) Potassium sulphate .. . | <i>n.a.</i> 64,903 <i>n.a.</i> | <i>n.a.</i> 75,208 <i>n.a.</i> | <i>n.a.</i> r 326,272 <i>n.a.</i> | <i>n.a.</i> 849,009 <i>n.a.</i> | <i>n.a.</i> 1,022,188 <i>n.a.</i> | <i>n.a.</i> <i>n.a.</i> <i>n.a.</i> | 1,624,000 9,100 | 1,618,000 9,600 | 2,279,608 1,640,000 r 48,500 | 2,361,889 1,649,000 114,000 | 2,227,977 1,724,000 140,000 | 2,247,152 1,816,000 <i>n.a.</i> | | | |
| | | | | | | | | | | | | | | | |

(a) Years ended June 30 of that stated.

(b) Crude salts as mined. The K₂O content by salts relates to the marketable product only.

(c) United States Bureau of Mines' estimate.

PRODUCTION OF POTASH (cont.)

| Producing Country and Description | Long tons | | | | | | | | | | | |
|--|-----------|-----------|------------|------------|-----------|-----------|--|-----------|-----------|-----------|-----------|------------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | K ₂ O Content or Equivalent | | | | 1963 | |
| | | | | | | | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
| OTHER COUNTRIES | | | | | | | | | | | | |
| Poland— (cont.) | | | | | | | | | | | | |
| Potash salts | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 24,500 | n.a. | n.a. | n.a. |
| Spain— Carnallite, sylvinite, etc. | 1,516,412 | 1,570,962 | 1,642,926 | 1,695,397 | 1,553,577 | 1,819,025 | 234,529 | 237,755 | 283,903 | 289,375 | 260,386 | 295,683 |
| U.S.S.R. (a)— Potash salts | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 1,000,000 | 1,040,000 | 1,082,600 | 1,299,000 | 1,470,000 | 1,674,000 |
| United States— Potash salts (b) | 3,250,000 | 3,601,000 | 3,993,000 | 4,133,000 | 3,721,000 | 4,346,000 | 1,917,563 | 2,127,910 | 2,355,870 | 2,439,823 | 2,190,108 | 2,558,536 |
| Chile— Nitrate | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 8,760 | 13,823 | (a)14,700 | 13,843 | 17,447 | (a)18,300 |
| Israel— Chloride | 105,507 | 103,150 | c/d130,000 | c/d140,000 | d152,000 | d185,000 | 64,000 | 63,000 | 81,500 | 83,600 | 89,500 | 110,000 |
| Japan— Alumite | 6,494 | 2,747 | 2,470 | 1,784 | — | — | n.a. | n.a. | n.a. | n.a. | — | — |
| World's TOTAL (c) .. . | | | | | | | 8,300,000 | 8,700,000 | 9,300,000 | 9,900,000 | 9,900,000 | 11,000,000 |

(a) United States Bureau of Mines' estimate.

(b) Marketable production.

(c) Estimated.

(d) Years ended March 31 of year following that stated.

EXPORTS OF POTASH SALTS

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Nitrate | } 125 | 25 | 48 | 255 | 35 | 12 |
| Sulphate | | | | | | |
| Other compounds | | 2,846 | 3,678 | 4,312 | 4,117 | 4,473 | n.a. |
| Hong Kong— | | | | | | |
| Nitrate | 368 | 356 | 190 | 286 | 307 | 283 |
| Chlorate | 373 | 265 | 242 | 340 | 343 | 306 |
| India— | | | | | | |
| Nitrate | 16 | 44 | (a) 39 | (a) 8 | (a) 8 | (a) 5 |
| Malaya— | | | | | | |
| Fertilizer salts | 42 | 68 | 95 | 139 | 130 | 88 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Fertilizer salts | 765 | 212 | 2,029 | 3,962 | 595 | 344 |
| Carbonate | 2,260 | 2,754 | 2,775 | 1,469 | 2,496 | 2,352 |
| Caustic potash | 5,022 | 5,918 | n.a. | n.a. | n.a. | n.a. |
| Chloride | 714,323 | 701,031 | 766,860 | 795,950 | 770,048 | 768,648 |
| Chlorates | 1 | — | — | — | 1 | 6 |
| Nitrate | 32 | 25 | 36 | — | 1 | 1 |
| Sulphate | 240,532 | 236,885 | 265,584 | 279,715 | 250,789 | 286,197 |
| Finland— | | | | | | |
| Chlorate | 27 | 109 | 48 | 77 | 39 | — |
| France— | | | | | | |
| Sylvinite, etc. | 368,607 | 314,330 | 276,792 | 240,880 | 137,666 | 72,043 |
| Carbonate | 7,265 | 9,123 | 12,165 | 13,916 | 13,154 | 16,165 |
| Caustic potash | 8,114 | 13,139 | 10,126 | 9,820 | 11,111 | 10,459 |
| Chlorate | 948 | 932 | 903 | 1,198 | 1,055 | 13,109 |
| Chloride | 795,688 | 800,778 | 1,094,430 | 1,228,067 | 1,028,710 | 1,082,522 |
| Sulphate | 185,927 | 231,269 | 38,739 | 10,830 | 13,291 | 11,327 |
| Nitrate | 2,876 | 2,149 | 1,653 | 2,079 | 2,322 | 2,762 |
| Germany (Federal)— | | | | | | |
| Fertilizer salts | 1,233,852 | 1,370,091 | 1,568,379 | 1,650,061 | 1,343,640 | 1,507,028 |
| Carbonate | 4,260 | 5,432 | 6,864 | 7,485 | 6,984 | 7,967 |
| Caustic potash | 3,791 | n.a. | n.a. | n.a. | n.a. | 11,690 |
| Chlorate | 233 | 61 | 351 | 736 | 597 | 542 |
| Nitrate | 11,790 | 9,633 | 13,082 | 11,582 | 12,254 | 12,746 |
| Germany (East)— | | | | | | |
| Fertilizer salts | | | | | | |
| (K ₂ O content) | 970,000 | 1,025,000 | 1,075,000 | 1,030,000 | 1,129,000 | 1,142,664 |
| Carbonate | 10,543 | 9,511 | 8,753 | 7,946 | 9,614 | 9,910 |
| Caustic potash | 8,374 | 7,144 | 6,563 | 5,904 | 5,640 | 6,422 |
| Italy— | | | | | | |
| Nitrate | 264 | 235 | 606 | 971 | 925 | 910 |
| Caustic potash | 1 | 49 | 1,417 | 1,750 | 3,455 | 4,162 |
| Sulphate | 84 | 59 | 5,116 | 58,304 | 55,362 | 75,391 |
| Netherlands— | | | | | | |
| Carbonate | 274 | 220 | 101 | 57 | 93 | 1,248 |
| Caustic potash | 23 | 7 | 17 | 10 | 10 | 32 |
| Chloride | 779 | 916 | 1,267 | 643 | 738 | 786 |
| Nitrate | 65 | 53 | 68 | 84 | 134 | 70 |
| Sulphate | 98 | 405 | 362 | 233 | 373 | 518 |
| Poland— | | | | | | |
| Caustic potash | 814 | 1,197 | 1,170 | 1,729 | n.a. | n.a. |
| Chlorate | 188 | 470 | 459 | 739 | n.a. | n.a. |
| Portugal— | | | | | | |
| Chloride | 200 | 27 | 850 | 161 | 94 | 60 |
| Spain— | | | | | | |
| Chloride | 260,495 | 290,861 | 354,176 | 288,349 | 225,113 | 253,374 |

(a) Years ended March 31 following that stated.

EXPORTS OF POTASH SALTS (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|---------|---------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sweden— | | | | | | |
| Carbonate | 4 | — | 4 | — | 1 | — |
| Caustic potash | 1,918 | 2,441 | 2,703 | 2,491 | 2,278 | 2,462 |
| Switzerland— | | | | | | |
| Nitrate (crude) | 2,927 | 15 | — | — | — | — |
| U.S.S.R.— | | | | | | |
| Fertilizer salts | 388,400 | 431,800 | 619,000 | 749,600 | 863,800 | 976,530 |
| United States— | | | | | | |
| Chloride | 414,969 | 471,348 | 698,323 | 644,614 | 717,856 | 593,113 |
| Other fertilizer salts | 28,607 | 28,653 | 29,821 | 48,981 | 39,241 | 38,171 |
| Caustic potash | 3,299 | 3,362 | 3,262 | 2,087 | 3,246 | 3,627 |
| Other compounds | 5,301 | 6,746 | 11,296 | 23,927 | 8,223 | <i>n.a.</i> |
| Chile— | | | | | | |
| Nitrate | 54,635 | 86,018 | 53,545 | 67,301 | <i>n.a.</i> | <i>n.a.</i> |
| Israel— | | | | | | |
| Fertilizer salts | 77,917 | 102,571 | 118,549 | 72,264 | <i>n.a.</i> | <i>n.a.</i> |
| Chloride | | | 985 | 80,368 | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Chlorate | 766 | 680 | 539 | 688 | 873 | 1,365 |
| Chloride | 1,005 | 1,498 | 1,850 | 6,604 | 3,520 | 5,665 |
| Sulphate | 24 | 59 | 2,291 | 2,153 | 105 | 267 |

IMPORTS OF POTASH SALTS

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|---------|---------|---------|---------|--------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Fertilizer salts | 38,378 | 43,564 | 41,976 | 52,997 | 52,165 | 28,855 |
| Carbonate | 5,168 | 4,819 | 6,943 | 5,535 | 4,719 | 5,836 |
| Caustic potash and lyes | 1,660 | 1,833 | 2,042 | 1,937 | 1,832 | <i>n.a.</i> |
| Chlorate | 1,106 | 960 | 1,099 | 1,031 | 1,077 | (<i>a</i>) |
| Chloride | 581,713 | 610,400 | 711,972 | 693,156 | 666,464 | 680,098 |
| Nitrate | 2,639 | 2,740 | 2,683 | 3,368 | 3,434 | 2,793 |
| Sulphate | 16,143 | 25,026 | 22,819 | 21,710 | 23,995 | 27,742 |
| Other compounds | 1,073 | 7,046 | 4,056 | 3,210 | 6,557 | 13,975 |
| Ghana— | | | | | | |
| Fertilizer salts | 92 | 254 | 510 | 672 | 455 | 1,075 |
| Kenya— | | | | | | |
| Fertilizer salts | 11 | — | 80 | 30 | 28 | 376 |
| Mauritius— | | | | | | |
| Fertilizer salts | 7,751 | 8,527 | 9,296 | 8,450 | 11,143 | 13,304 |
| Nigeria— | | | | | | |
| Fertilizer salts | 1,040 | 703 | 1,799 | 1,394 | 1,341 | 655 |
| Rhodesia and Nyasaland— | | | | | | |
| Fertilizer salts | 16,247 | 22,987 | 28,958 | 28,973 | 26,263 | 31,005 |
| Compounds | 267 | 353 | 529 | 351 | 680 | 430 |
| Sierra Leone— | | | | | | |
| Fertilizer compounds .. | 12 | 28 | 21 | 11 | 76 | 374 |
| Tanganyika— | | | | | | |
| Fertilizer salts | 610 | 536 | 609 | 537 | 667 | 1,659 |
| Uganda— | | | | | | |
| Fertilizer salts | 305 | 191 | 136 | 521 | 2,835 | 1,981 |
| Canada— | | | | | | |
| Caustic potash | 3,946 | 3,788 | 3,937 | 1,524 | 1,482 | 1,936 |
| Chlorate | 36 | 39 | 35 | 45 | 52 | 21 |
| Crude chloride | 117,236 | 85,089 | 130,969 | 151,587 | 132,119 | 66,137 |
| Nitrate | 607 | 662 | 662 | 818 | 815 | 760 |
| Crude sulphate | 13,874 | 22,091 | 21,378 | 23,641 | 21,412 | 16,888 |
| Other compounds | 3,599 | 5,091 | 6,321 | 6,393 | 5,922 | 4,698 |
| Antigua— | | | | | | |
| Fertilizer salts | <i>n.a.</i> | — | 92 | 5 | 2,928 | <i>n.a.</i> |
| Barbados— | | | | | | |
| Fertilizer salts | 2,881 | 4,325 | 3,585 | 6,535 | 3,372 | 4,204 |
| Grenada— | | | | | | |
| Fertilizer salts | 108 | 254 | 153 | 266 | 50 | 150 |
| Jamaica— | | | | | | |
| Fertilizer salts | 3,848 | 5,809 | 4,539 | 5,434 | 2,121 | 6,430 |
| St. Lucia— | | | | | | |
| Potassic fertilizers .. | <i>n.a.</i> | 460 | 157 | 100 | 200 | 586 |
| St. Vincent— | | | | | | |
| Chloride | 519 | 178 | 27 | 7 | 7 | 83 |
| Trinidad and Tobago— | | | | | | |
| Chloride and sulphate .. | 1,978 | 2,758 | 1,794 | 3,300 | 2,755 | <i>n.a.</i> |
| British Guiana— | | | | | | |
| Fertilizer salts | 3,261 | 4,663 | 2,355 | 3,625 | 3,862 | <i>n.a.</i> |
| Ceylon— | | | | | | |
| Kainite and sylvinite .. | 50 | 331 | 245 | 417 | 100 | 120 |
| Chloride | 35,080 | 42,596 | 39,054 | 47,483 | 38,516 | 60,569 |
| Nitrate of potash refuse | 2 | 3 | 28 | 2 | 108 | 100 |
| Sulphate | 400 | 870 | 2,750 | 315 | 120 | 195 |
| Cyprus— | | | | | | |
| Fertilizer salts | 268 | 390 | 512 | 507 | 468 | 385 |
| Hong Kong— | | | | | | |
| Nitrate | 1,079 | 621 | 378 | 585 | 991 | 908 |
| Chlorate | 316 | 371 | 281 | 430 | 442 | 378 |
| Other fertilizer salts .. | 14 | 530 | 620 | 331 | 47 | 27 |

 (*a*) Included, if any, with "Other compounds".

IMPORTS OF POTASH SALTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-----------|-----------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| India— | | | | | | |
| Fertilizer salts | 6,011 | — | (a) — | (a) — | (a) — | (a) — |
| Carbonate | 652 | 1,015 | (a) 630 | (a) 1,207 | (a) 1,227 | (a) 1,172 |
| Caustic potash | 703 | 1,553 | (a) 2,222 | (a) 2,488 | (a) 2,480 | (a) 3,304 |
| Nitrate | — | 5 | (a) 11 | (a) 6 | (a) 19 | (a) 2 |
| Sulphate | 2,983 | 10,107 | (a) 10,847 | (a) 8,812 | (a) 3,218 | (a) 4,242 |
| Chlorate | 450 | 542 | (a) 7 | (a) 2 | (a) — | (a) 74 |
| Chloride | 25,038 | 52,544 | (a) 22,535 | (a) 43,815 | (a) 76,661 | (a) 69,684 |
| Malaya— | | | | | | |
| Fertilizer salts | 10,951 | 13,865 | 16,538 | 13,001 | 15,285 | 22,327 |
| Pakistan— | | | | | | |
| Chlorate | 538 | 300 | 516 | 694 | 599 | 145 |
| Other compounds | 193 | 204 | 766 | n.a. | n.a. | 87 |
| Sabah— | | | | | | |
| Fertilizer salts | 21 | 336 | 118 | 157 | 155 | n.a. |
| Sarawak— | | | | | | |
| Fertilizer salts | 26 | 47 | 25 | 30 | 552 | 443 |
| Australia (c)— | | | | | | |
| Carbonate | 771 | 863 | 1,117 | 679 | 774 | 969 |
| Caustic potash | 636 | 958 | 981 | 805 | 898 | 969 |
| Chloride | 48,786 | 38,044 | 31,573 | 45,109 | 65,214 | 47,472 |
| Nitrate | 470 | 354 | 451 | 519 | 355 | 424 |
| Sulphate | 4,793 | 5,708 | 4,574 | 7,417 | 8,842 | 10,343 |
| Other compounds | 543 | 827 | 1,019 | 1,240 | 365 | 353 |
| New Zealand— | | | | | | |
| Chloride | 52,088 | 73,016 | 82,383 | 120,366 | 96,945 | 100,460 |
| Nitrate | 138 | 144 | 128 | 196 | 116 | n.a. |
| Sulphate | 2,900 | 2,641 | 3,422 | 3,595 | 2,687 | 3,671 |
| Other fertilizer salts | 75 | 13 | 140 | 248 | 7,873 | 1,080 |
| Compounds other than fertilizer | 294 | 317 | 300 | 340 | 241 | n.a. |
| Irish Republic— | | | | | | |
| Fertilizer salts | r 1,082 | r 1,653 | r 1,741 | 3,082 | 3,343 | 4,967 |
| Chloride | 93,133 | 108,743 | 107,401 | 117,434 | 142,725 | 158,217 |
| Other compounds | 542 | 538 | 604 | 591 | 811 | 235 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Fertilizer salts | 202,669 | 196,932 | 212,166 | 232,236 | 228,394 | 240,502 |
| Caustic potash | 431 | 358 | 429 | 397 | 385 | 435 |
| Carbonate | 786 | 908 | 763 | 968 | 821 | 966 |
| Chloride | 128 | 8,992 | 6,098 | 6,871 | 28,017 | 39,313 |
| Nitrate | 264 | 279 | 367 | 428 | 320 | 399 |
| Sulphate | 150 | 3,718 | 12,624 | 9,639 | 10,564 | 14,471 |
| Belgium-Luxemburg | | | | | | |
| E. U.— | | | | | | |
| Fertilizer salts | 193,424 | 158,864 | 185,644 | 223,108 | 190,310 | 286,541 |
| Carbonate | 536 | 663 | 1,084 | 866 | 997 | 899 |
| Caustic potash | 614 | 624 | n.a. | n.a. | n.a. | n.a. |
| Chlorates | 423 | 542 | 544 | 591 | 298 | 482 |
| Chloride | 1,100,611 | 1,153,374 | 1,165,682 | 1,269,205 | 1,158,098 | 1,108,101 |
| Nitrate | 1,962 | 2,053 | 2,007 | 2,279 | 2,156 | 2,631 |
| Sulphate (b) | 21,511 | 10,932 | 17,682 | 24,246 | 20,837 | 22,944 |
| Czechoslovakia— | | | | | | |
| Fertilizer salts (K ₂ O content) | 214,000 | 229,000 | 213,900 | 198,000 | 233,000 | n.a. |

(a) Years ended March 31 following that stated.

(c) Years ended June 30 of that stated.

(b) Including patent potash.

IMPORTS OF POTASH SALTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|---------|---------|---------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Denmark— | | | | | | |
| Carbonate | 378 | 317 | 304 | 379 | 363 | 354 |
| Caustic potash | 809 | 943 | 1,148 | 1,000 | 1,019 | 960 |
| Chlorate | 116 | 136 | 125 | 91 | 76 | 106 |
| Chloride | 294,454 | 303,945 | 326,710 | 371,940 | 281,323 | 279,700 |
| Nitrate | 956 | 843 | 1,188 | 879 | 1,034 | 1,206 |
| Sulphate | 1,702 | 1,434 | 1,874 | 1,833 | 2,238 | 1,963 |
| Finland— | | | | | | |
| Fertilizer salts | 76,668 | 102,769 | 170,500 | 125,176 | 127,210 | 128,797 |
| Carbonate | 258 | 332 | 415 | 407 | 513 | 522 |
| Caustic potash | 226 | 188 | 168 | 215 | 301 | 203 |
| Nitrate | 115 | 249 | 140 | 263 | 383 | 168 |
| Sulphate | 1,481 | 1,473 | <i>n.a.</i> | 6,765 | 9,681 | 8,785 |
| France— | | | | | | |
| Chloride | — | 1 | 8,829 | — | 1,467 | — |
| Sulphate | 19,080 | 10,005 | 10,624 | 19,441 | 40,936 | 47,942 |
| Caustic potash | 38 | 47 | 113 | 70 | 74 | 88 |
| Patent potash | <i>n.a.</i> | <i>n.a.</i> | 2,709 | 4,409 | 4,784 | 5,356 |
| Germany (Federal)— | | | | | | |
| Fertilizer salts | — | 22 | 27,412 | 27,934 | 36,327 | 47,807 |
| Carbonate | — | 70 | 409 | 1,439 | 1,678 | 5,647 |
| Caustic potash | 230 | <i>n.a.</i> | 572 | 621 | 718 | 813 |
| Chlorate | 355 | 631 | 650 | 599 | 1,074 | 959 |
| Nitrate | 186 | 331 | 337 | 756 | 1,069 | 1,188 |
| Greece— | | | | | | |
| Carbonate | 1,369 | 913 | 610 | 677 | 1,076 | 1,497 |
| Caustic potash | 22 | 23 | 19 | 57 | 29 | 47 |
| Nitrate | 132 | 109 | 123 | 89 | 95 | 79 |
| Sulphate | 13,119 | 10,664 | 12,686 | 20,475 | 15,835 | 22,192 |
| Hungary— | | | | | | |
| Fertilizer salts | 57,278 | 81,520 | 73,723 | 114,259 | 195,475 | 214,385 |
| Iceland— | | | | | | |
| Fertilizer salts | 3,988 | 4,087 | 3,751 | 2,999 | 5,167 | 4,676 |
| Carbonate | 12 | 5 | 11 | 8 | 16 | 59 |
| Caustic potash | 28 | 42 | 35 | 30 | 53 | 66 |
| Italy— | | | | | | |
| Fertilizer salts | 60,542 | 74,829 | 60,550 | 47,483 | 37,657 | 37,389 |
| Carbonate | 2,338 | 2,604 | 3,941 | 4,016 | 4,408 | 3,653 |
| Caustic potash | 2,723 | 2,901 | 2,518 | 1,678 | 1,411 | 1,059 |
| Chloride | 56,904 | 74,401 | 154,492 | 105,549 | 154,643 | 130,094 |
| Nitrate | 638 | 964 | 1,240 | 758 | 727 | 1,027 |
| Sulphate | 43,149 | 43,369 | 39,684 | 20,244 | 11,632 | 8,531 |
| Netherlands— | | | | | | |
| Kainite | 45,538 | 46,427 | 39,228 | 23,098 | 22,271 | 25,236 |
| Fertilizer salts | | | | | | |
| (20% K ₂ O) | 42,777 | 38,112 | 40,238 | 25,001 | 17,144 | 26,833 |
| do. (40% K ₂ O) | 230,638 | 219,990 | 194,019 | 152,510 | 120,810 | 132,461 |
| Carbonate | 4,975 | 5,207 | 6,950 | 5,156 | 6,306 | 7,081 |
| Caustic potash | 6,136 | 7,564 | 6,374 | 8,163 | 7,939 | 17,834 |
| Chloride | 47,385 | 52,158 | 67,947 | 89,881 | 104,518 | 112,758 |
| Nitrate | 1,470 | 1,755 | 1,293 | 1,841 | 2,477 | 2,807 |
| Sulphate | 28,798 | 26,113 | 47,326 | 46,291 | 64,275 | 53,672 |
| Patent potash | 55,374 | 48,997 | 49,363 | 44,296 | 44,093 | 47,365 |
| Norway— | | | | | | |
| Fertilizer salts | 21,241 | 367 | 818 | 409 | 307 | 516 |
| Carbonate | 265 | 346 | 312 | 708 | 329 | 300 |
| Caustic potash | 973 | 1,182 | 1,323 | 1,276 | 1,265 | 1,350 |
| Chlorate | 130 | 131 | 154 | 132 | 137 | 126 |
| Chloride | 54,822 | 77,770 | 75,760 | 76,164 | 81,004 | 100,407 |
| Nitrate | 155 | 146 | 164 | 156 | 215 | 308 |
| Sulphate | 17,867 | 13,663 | 17,283 | 12,935 | 4,435 | 9,178 |

IMPORTS OF POTASH SALTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|---------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Poland— | | | | | | |
| Fertilizer salts | 603,900 | 769,900 | 808,900 | 791,200 | <i>n.a.</i> | 735,694 |
| Carbonate | 1,193 | 412 | 246 | 1,471 | <i>n.a.</i> | 1,713 |
| Chloride | 10,009 | 7,821 | 9,457 | 11,538 | <i>n.a.</i> | 14,271 |
| Sulphates | <i>n.a.</i> | <i>n.a.</i> | 2,183 | 2,911 | <i>n.a.</i> | 3,364 |
| Portugal— | | | | | | |
| Carbonate | 103 | 89 | 125 | 62 | 144 | 109 |
| Caustic potash | 64 | 30 | 56 | 100 | 707 | 257 |
| Chlorate | 159 | 148 | 227 | 214 | 220 | 178 |
| Chloride | 11,763 | 13,888 | 9,818 | 14,003 | 13,890 | 21,398 |
| Nitrate | 415 | 377 | 321 | 402 | 291 | 296 |
| Sulphate | 1,181 | 2,893 | 544 | 1,595 | 1,132 | 1,329 |
| Roumania— | | | | | | |
| Fertilizer salts (c) .. | 1,100 | 1,100 | 3,900 | 11,800 | 10,100 | 5,700 |
| Sweden— | | | | | | |
| Fertilizer salts | | | | | | |
| (40% K ₂ O) | 530 | } 825 | 2,057 | 448 | 736 | 826 |
| do. (other) | 130,027 | | | | | |
| Carbonate | 1,129 | 1,083 | 1,408 | 920 | 890 | 966 |
| Caustic potash | 332 | 204 | 287 | 212 | 260 | 252 |
| Chloride | 7,736 | 127,671 | 152,547 | 137,821 | 144,294 | 134,852 |
| Nitrate | 801 | 838 | 976 | 873 | 1,129 | 1,005 |
| Sulphate | 7,323 | 8,495 | 13,843 | 13,646 | 13,673 | 20,602 |
| Switzerland— | | | | | | |
| Fertilizer salts | 79,292 | 70,836 | 102,369 | 96,104 | 101,437 | 104,111 |
| Carbonate | 1,236 | 2,043 | 1,995 | 1,760 | 2,114 | 1,933 |
| Caustic potash | 1,589 | 1,793 | 2,227 | 2,143 | 2,033 | 1,483 |
| Chloride | 15,936 | 21,230 | (a) | (a) | (a) | (a) |
| Nitrate | (b) 938 | (b) 2,035 | 737 | 560 | 768 | 839 |
| Sulphate | <i>n.a.</i> | <i>n.a.</i> | 1,331 | 1,037 | 950 | 540 |
| U.S.S.R.— | | | | | | |
| Caustic potash | 2,500 | 3,000 | 4,300 | 3,100 | 2,700 | 6,594 |
| Yugoslavia— | | | | | | |
| Fertilizer salts | 123,549 | 173,782 | 139,234 | 75,664 | 107,166 | 289,531 |
| Caustic potash | 95 | 412 | 335 | 636 | 482 | 738 |
| Chloride | 72,050 | 10,224 | 27,749 | 35,226 | 13,367 | 19,080 |
| Nitrate | 10 | — | — | — | — | — |
| Sulphate | 1,191 | 2,822 | 2,574 | 4,234 | 4,178 | 2,928 |
| Algeria— | | | | | | |
| Chloride | 14,817 | 13,449 | 12,233 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 10,859 | 8,112 | 9,753 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Carbonate | 1 | 36 | 32 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Caustic potash | 44 | 44 | 46 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Nitrate | 241 | 244 | 151 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Angola— | | | | | | |
| Chloride | 9 | 267 | 229 | 553 | 457 | 576 |
| Sulphate | 180 | 195 | 226 | 200 | 79 | 183 |
| Cameroun— | | | | | | |
| Fertilizer salts | 323 | 1,748 | 1,722 | 2,212 | 2,010 | 782 |
| Canary Islands— | | | | | | |
| Fertilizer salts | 10 | 50 | 81 | — | — | <i>n.a.</i> |
| Egypt— | | | | | | |
| Fertilizer salts | 4,457 | 11,791 | 1,968 | — | — | <i>n.a.</i> |
| Carbonate | 369 | 208 | 298 | 272 | 401 | <i>n.a.</i> |
| Caustic potash | 136 | 75 | 256 | 383 | 37 | <i>n.a.</i> |
| Chlorate | 196 | 223 | 268 | 256 | <i>n.a.</i> | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Fertilizer salts | 2,351 | 1,482 | 1,159 | 946 | 382 | 694 |
| Morocco— | | | | | | |
| Chloride | 3,525 | 4,290 | 4,396 | 5,063 | 4,214 | 4,672 |
| Sulphate | 4,534 | 4,587 | 3,203 | 7,513 | 6,877 | 8,001 |
| Reunion— | | | | | | |
| Fertilizer salts | 6,125 | 2,421 | 1,951 | 2,154 | 755 | 1,092 |

(a) Included with fertilizer salts.

(b) Includes sodium nitrate.

 (c) K₂O content.

IMPORTS OF POTASH SALTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| South Africa— | | | | | | |
| Fertilizer salts | 3,085 | 5,723 | 58,888 | 65,169 | 80,305 | <i>n.a.</i> |
| Nitrate | 195 | 199 | 329 | 605 | 849 | <i>n.a.</i> |
| Caustic potash | 349 | 317 | 382 | 283 | 376 | <i>n.a.</i> |
| Chloride | 43,358 | 57,449 | 2,992 | — | — | <i>n.a.</i> |
| Other compounds | 1,046 | 878 | 1,235 | 1,147 | 1,248 | <i>n.a.</i> |
| Sudan— | | | | | | |
| Caustic potash | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 67 |
| Tunisia— | | | | | | |
| Fertilizer salts | 3,843 | 2,480 | 4,224 | 2,477 | 4,426 | 5,063 |
| Caustic potash | 11 | 4 | 13 | 2,340 | 2,203 | 2,836 |
| Costa Rica— | | | | | | |
| Fertilizer salts | 1,345 | 352 | 550 | 968 | 3,000 | 671 |
| Cuba— | | | | | | |
| Nitrate | 7,972 | 953 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Chlorate | 163 | 197 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Chloride | 9,627 | 17,389 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sulphate | 9,560 | 17,317 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Dominican Republic— | | | | | | |
| Chloride | <i>n.a.</i> | 1,630 | 3,344 | 4,348 | <i>n.a.</i> | <i>n.a.</i> |
| French West Indies— | | | | | | |
| Guadeloupe— | | | | | | |
| Fertilizer salts | <i>n.a.</i> | 10,971 | 11,071 | 7,235 | 5,788 | 3,079 |
| Martinique— | | | | | | |
| Fertilizer salts | <i>n.a.</i> | 8,703 | 9,114 | 7,686 | 6,059 | 4,161 |
| Guatemala— | | | | | | |
| Fertilizer salts | <i>n.a.</i> | 1,202 | 745 | 82 | 68 | <i>n.a.</i> |
| Chlorate | 88 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Nitrate | 60 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Caustic potash | 14 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Honduras— | | | | | | |
| Fertilizer salts | 47 | 48 | 24 | 88 | 1,820 | 1,711 |
| Mexico— | | | | | | |
| Carbonate | 267 | 361 | 353 | 440 | 476 | 578 |
| Chloride | 16,384 | 12,209 | 9,878 | 13,981 | 20,790 | 19,986 |
| Caustic potash | 284 | 202 | 375 | 482 | 533 | 497 |
| Sulphate | 1,034 | 1,559 | 1,480 | 100 | 11 | 8 |
| Nicaragua— | | | | | | |
| Fertilizer salts | 229 | 104 | 128 | 165 | 444 | 361 |
| Panama Republic— | | | | | | |
| Fertilizer salts | 241 | 288 | 281 | 450 | <i>n.a.</i> | <i>n.a.</i> |
| Salvador— | | | | | | |
| Fertilizer salts | <i>n.a.</i> | 1,411 | 2,616 | 1,083 | 902 | 1,129 |
| United States— | | | | | | |
| Carbonate | 197 | 152 | 536 | 159 | 103 | 228 |
| Caustic potash | 483 | 621 | 594 | 856 | 1,125 | 932 |
| Chlorates | 417 | 470 | 415 | 392 | 601 | 704 |
| Chloride | 266,379 | 299,814 | 292,433 | 296,343 | 407,650 | 788,153 |
| Cyanide | 719 | 653 | 792 | 681 | 858 | 774 |
| Nitrate | 2,314 | 2,080 | 2,739 | 3,961 | 5,646 | 7,110 |
| Potassium-sodium nitrate mixtures | 20,989 | 32,561 | 16,636 | 12,322 | 24,376 | 34,000 |
| Sulphate | 58,770 | 117,280 | 58,133 | 80,512 | 99,322 | 92,593 |
| Argentina— | | | | | | |
| Carbonate | 128 | 392 | 580 | 561 | 235 | 388 |
| Caustic potash | 285 | 503 | 543 | 484 | 432 | 794 |
| Chlorate | 515 | 541 | 596 | 1,096 | 419 | 461 |
| Nitrate | — | 15 | 156 | 68 | 2 | — |
| Sulphate | 621 | 25 | 85 | 355 | 98 | 20 |
| Brazil— | | | | | | |
| Caustic potash | 120 | 573 | 592 | 553 | 907 | 1,541 |
| Nitrate | 494 | 602 | 1,337 | 749 | 802 | 777 |
| Nitrate of potash and soda | — | 7,690 | 15,841 | 2,989 | 12,104 | 16,429 |

IMPORTS OF POTASH SALTS (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|---------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Brazil <i>(cont.)</i> — | | | | | | |
| Chloride | 99,320 | 89,048 | 166,491 | 109,374 | 104,082 | 144,184 |
| Sulphate | 9,339 | 4,811 | 6,197 | 7,333 | 6,266 | 4,232 |
| Carbonate | 404 | 464 | 543 | 523 | 541 | 891 |
| Chlorate | 3 | — | — | 20 | — | 10 |
| Chile — | | | | | | |
| Caustic potash | 165 | 181 | 201 | 122 | 118 | <i>n.a.</i> |
| Chlorate | 119 | 144 | 79 | 60 | 12 | <i>n.a.</i> |
| Chloride | 10,103 | 9,762 | 394 | 1,669 | 1,472 | <i>n.a.</i> |
| Sulphate | 2,652 | 2,245 | 3,785 | 8,411 | 6,538 | <i>n.a.</i> |
| Colombia — | | | | | | |
| Chlorate | 264 | 206 | 207 | 370 | 224 | 362 |
| Chloride | 22,067 | 11,348 | 12,746 | 14,671 | 15,691 | 29,593 |
| Nitrate | 283 | 222 | 205 | 247 | 208 | 401 |
| Sulphate | 5,789 | 2,766 | 3,592 | 3,710 | 1,771 | 4,444 |
| Other fertilizer salts | 179 | 49 | 99 | 143 | — | — |
| Peru — | | | | | | |
| Fertilizer salts | 3,054 | 2,190 | 3,617 | 2,364 | 4,045 | 2,332 |
| Nitrate | 71 | 78 | 129 | 76 | 62 | 9 |
| Carbonate | 21 | 68 | 43 | 28 | 45 | 38 |
| Chloride | 39 | 30 | 28 | 24 | 110 | 35 |
| Caustic potash | 39 | 16 | 29 | 27 | 34 | 18 |
| Uruguay — | | | | | | |
| Nitrate | 914 | 2 | 111 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Caustic potash | 338 | 408 | 443 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela — | | | | | | |
| Carbonate | 19 | 39 | 37 | 69 | 61 | 23 |
| Chlorate | 136 | 153 | 164 | 317 | 164 | 116 |
| Chloride | 5,027 | 1,084 | 2,540 | 2,740 | 1,970 | 2,288 |
| Nitrate | 51 | 158 | 137 | 172 | 105 | 210 |
| Sulphate | — | 2,003 | 7,363 | 7,021 | 5,746 | 4,145 |
| Burma — | | | | | | |
| Fertilizer salts | — | — | — | — | 414 | 257 |
| Formosa — | | | | | | |
| Fertilizer salts | 48,867 | 19,841 | 76,862 | 42,792 | 49,878 | 46,730 |
| Indonesia — | | | | | | |
| Fertilizer salts | 4,094 | 18,244 | 18,311 | 13,434 | <i>n.a.</i> | <i>n.a.</i> |
| Nitrate | 142 | 219 | 181 | 76 | <i>n.a.</i> | <i>n.a.</i> |
| Iraq — | | | | | | |
| Fertilizer salts | 405 | 246 | 344 | 247 | 615 | <i>n.a.</i> |
| Japan — | | | | | | |
| Kainite, etc. | — | 50 | — | 492 | 1,279 | 5,445 |
| Chloride | 578,215 | 671,237 | 903,292 | 918,040 | 691,305 | 954,105 |
| Sulphate | 89,433 | 117,605 | 87,243 | 136,189 | 38,398 | 99,268 |
| Jordan — | | | | | | |
| Fertilizer salts | 936 | 1,166 | 2,001 | 1,648 | 766 | 1,488 |
| Korea (South) — | | | | | | |
| Chloride | 7,240 | — | 7,468 | 1 | 8,084 | 14,672 |
| Lebanon — | | | | | | |
| Fertilizer salts | 2,513 | 3,699 | 3,700 | 3,792 | 3,608 | <i>n.a.</i> |
| Philippine Republic — | | | | | | |
| Caustic potash | 75 | 15 | 65 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Chlorate | 565 | 612 | 711 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Nitrate | 105 | 989 | 3,512 | <i>n.a.</i> | <i>n.a.</i> | 28 |
| Sulphate | 1,064 | 1,359 | 2,814 | <i>n.a.</i> | 2,686 | 4,592 |
| Other fertilizer salts | 9,863 | 18,185 | 13,700 | 33,855 | 40,156 | 9,021 |
| Thailand — | | | | | | |
| Chlorate | 326 | 201 | 295 | 177 | 301 | 143 |
| Chloride | 116 | 238 | 415 | 64 | 72 | 53 |
| Nitrate | 823 | 829 | 787 | 705 | 743 | 933 |
| Sulphate | 246 | 794 | 463 | 305 | 886 | 937 |

IMPORTS OF POTASH SALTS (*cont.*)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|-------|-------|-------|--------|-------|-------------|
| Turkey— | | | | | | |
| Carbonate | 496 | 1,411 | 1,125 | 1,687 | 1,150 | 648 |
| Caustic potash | 275 | 456 | 213 | 379 | 363 | 246 |
| Chlorates | 105 | 810 | 158 | 70 | 221 | 170 |
| Sulphate | 5,413 | 7,992 | 1 | 31 | 1,547 | 570 |
| Vietnam (South)— | | | | | | |
| Fertilizer salts | 5,221 | 8,625 | 7,666 | 15,399 | 7,597 | <i>n.a.</i> |

PYRITES

PRODUCTION OF PYRITES

(see also Sulphur)

(including Cupreous Pyrites)

Long tons

| Producing Country | Estimated Sulphur Content | | | | | | | | | | | |
|-------------------------------|---------------------------|-----------|-------------|-----------|-----------|-----------|---------|---------|---------|-----------|---------|---------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
| COMMONWEALTH COUNTRIES | | | | | | | | | | | | |
| United Kingdom .. | 3,202 | 776 | 132 | 164 | 26,988 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Southern Rhodesia .. | 58,268 | 40,237 | 49,298 | 58,442 | 50,456 | 65,054 | 22,100 | 15,300 | 18,700 | 22,200 | 19,200 | 24,700 |
| Canada (c) .. | 1,064,046 | 981,754 | 921,686 | 461,837 | 461,882 | 425,391 | 457,524 | 415,724 | 390,884 | r 228,014 | 229,539 | 210,187 |
| Cyprus (a) .. | 1,010,000 | 869,864 | 914,232 | 824,771 | 809,263 | 904,697 | 487,000 | 423,000 | 445,000 | 398,000 | 388,000 | 440,000 |
| India .. | — | 15 | — | — | — | — | — | 6 | — | — | — | — |
| Australia (b) .. | 226,744 | 223,004 | 238,630 | 213,423 | 148,566 | 194,044 | 108,600 | 106,900 | 114,500 | 102,100 | 65,100 | 84,600 |
| TOTAL .. | 2,362,000 | 2,115,650 | 2,123,978 | 1,558,637 | 1,497,155 | 1,600,000 | — | — | n.a. | n.a. | n.a. | — |
| Irish Republic .. | 4,873 | 3,930 | 21,666 | 49,921 | 37,229 | — | n.a. | n.a. | n.a. | n.a. | n.a. | — |
| OTHER COUNTRIES | | | | | | | | | | | | |
| Bulgaria (b) .. | 82,713 | 112,789 | 116,638 | 119,785 | 140,056 | 128,000 | 35,000 | 47,000 | 49,000 | 50,000 | 59,000 | 54,000 |
| Czechoslovakia (b) .. | 379,000 | 365,000 | 384,000 | 363,000 | 395,000 | n.a. | 141,000 | 144,000 | 149,000 | 141,000 | 153,000 | n.a. |
| Finland (b) .. | 249,000 | 259,000 | r 256,000 | r 270,000 | 468,000 | 529,000 | 105,000 | 109,000 | 108,000 | 114,000 | 215,000 | 248,000 |
| France (d) .. | 327,329 | 289,738 | 272,717 | 280,930 | 299,153 | 247,353 | 141,200 | 120,802 | 116,562 | 117,769 | 124,592 | 103,000 |
| Germany (Federal) .. | r 572,082 | r 446,730 | r 498,795 | r 501,475 | 380,717 | 351,813 | 206,835 | 164,999 | 184,401 | 194,057 | 148,133 | 145,474 |
| Germany (East) .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 51,000 | 49,000 | 46,000 | 40,000 | 41,000 | 43,000 |
| Greece .. | 160,304 | 127,050 | 161,407 | 184,917 | 128,885 | 135,925 | 75,000 | 59,000 | 75,000 | 86,000 | 60,000 | 63,000 |
| Italy .. | 1,490,413 | 1,496,373 | r 1,522,965 | 1,555,229 | 1,559,499 | 1,376,747 | 679,000 | 682,000 | 694,000 | 709,000 | 711,000 | 628,000 |
| Norway .. | 780,286 | 732,410 | 819,562 | 721,808 | 797,077 | 710,052 | 339,000 | 320,000 | 356,000 | 319,000 | 355,000 | 323,000 |
| Poland .. | 208,000 | 217,000 | 223,000 | 198,000 | 219,000 | n.a. | 75,000 | 79,000 | 83,000 | 76,000 | 82,000 | n.a. |
| Portugal .. | 588,719 | 621,572 | 644,578 | 642,609 | 631,164 | 592,559 | 270,810 | 285,923 | 296,506 | 295,600 | 290,336 | 272,577 |
| Roumania .. | 202,000 | 231,000 | 263,000 | 259,000 | 300,000 | n.a. | 81,000 | 93,000 | 105,000 | 103,000 | 120,000 | n.a. |

(a) Saleable.

(b) Pyrite concentrate.

(c) Producers shipments of pyrites produced as a by-product in the treatment of copper and copper-zinc ores.

(d) In addition the sulphur content of mispickel and auriferous pyrites was as follows (long tons): 1958—7,517; 1959—9,102; 1960—8,988; 1961—8,217; 1962—9,018; 1963—10,000.

PRODUCTION OF PYRITES (cont.)

| Producing Country | Long tons | | | | | | | | | | | |
|------------------------|---------------------------|--------------|--------------|--------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Estimated Sulphur Content | | | | | | | | | | | |
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1962 | 1961 | 1960 | 1963 | | |
| OTHER COUNTRIES | | | | | | | | | | | | |
| Spain | 2,014,052 | 2,086,086 | 2,217,233 | 2,096,877 | 2,095,432 | 1,995,226 | 931,000 | 961,000 | 1,053,000 | 1,001,000 | 997,000 | 950,000 |
| Sweden | 329,472 | 341,397 | 406,361 | r 431,322 | 370,200 | 391,500 | 102,766 | 171,616 | 205,591 | 220,424 | 190,000 | 200,000 |
| U.S.S.R. (c) | 1,968,000 | 2,559,000 | 2,756,000 | 2,756,000 | 2,953,000 | 3,149,000 | 1,043,000 | 1,358,000 | 1,457,000 | 1,457,000 | 1,565,000 | 1,673,000 |
| Yugoslavia (a) | 326,000 | 285,000 | 410,000 | 358,000 | 407,000 | 350,000 | r 130,000 | r 114,000 | r 164,000 | r 143,000 | 163,000 | 140,000 |
| Algeria | 24,261 | 28,591 | 37,892 | 48,085 | 42,000 | 37,154 | 11,137 | 13,300 | 17,400 | 22,000 | 19,000 | 17,000 |
| Morocco | 18,159 | 14,190 | 13,226 | 13,855 | 20,417 | 22,777 | 6,000 | 5,000 | 5,000 | 5,000 | 7,000 | 7,000 |
| South Africa | 493,184 | 495,388 | 492,173 | 439,751 | 434,030 | 411,943 | 205,000 | 195,000 | 212,000 | 176,000 | 174,000 | 152,000 |
| Cuba | 33,334 | 70,645 | n.a. | n.a. | n.a. | n.a. | 17,000 | 32,000 | n.a. | n.a. | n.a. | n.a. |
| United States (b) | 974,114 | 1,056,617 | 1,016,263 | 987,309 | 915,890 | 824,800 | 403,373 | 436,871 | 416,213 | 398,519 | 379,046 | 343,566 |
| Venezuela | 13,917 | 4,193 | — | — | — | — | 4,000 | 1,000 | — | — | — | — |
| China (c) | 689,000 | 837,000 | 984,000 | 984,000 | 1,083,000 | 1,181,000 | 310,000 | 374,000 | 443,000 | 443,000 | 492,000 | 531,000 |
| Formosa | 32,499 | 33,243 | 42,318 | 46,717 | 44,772 | 46,021 | 12,200 | 12,500 | 15,900 | 17,500 | 16,800 | 17,300 |
| Japan (d) | r 2,022,593 | r 2,099,850 | r 2,278,185 | r 2,476,924 | 2,539,396 | 2,514,762 | 921,453 | 955,217 | 1,036,740 | 1,132,112 | 1,170,121 | 1,162,706 |
| Korea (South) | 277 | 506 | 1,058 | 723 | — | — | n.a. | n.a. | n.a. | 300 | — | — |
| Korea (North) (c) | n.a. | 197,000 | 246,000 | 295,000 | 344,000 | 394,000 | n.a. | 79,000 | 98,000 | 118,000 | 138,000 | 157,000 |
| Philippine Republic | 18,693 | 24,791 | 25,000 | 50,776 | 55,409 | 57,138 | 8,000 | 9,900 | 11,900 | 24,000 | 27,000 | 27,000 |
| Turkey | 80,302 | 87,275 | 41,617 | 96,863 | 105,389 | 95,549 | 39,000 | 42,000 | 20,000 | 46,000 | 51,000 | 46,000 |
| TOTAL* | r 14,300,000 | r 15,200,000 | r 16,300,000 | r 16,300,000 | 16,900,000 | 16,600,000 | 7,500,000 | 7,900,000 | 8,400,000 | 8,200,000 | 8,500,000 | 8,400,000 |
| WORLD'S TOTAL* | r 16,600,000 | r 17,300,000 | r 18,400,000 | r 17,900,000 | 18,400,000 | 18,200,000 | 7,500,000 | 7,900,000 | 8,400,000 | 8,200,000 | 8,500,000 | 8,400,000 |

*Excluding pyrites known to have been produced in Brazil.

(c) United States Bureau of Mines' estimate.

(d) Including pyrrhotite.

(a) Concentrates.

(b) Including by-product pyrites.

EXPORTS OF PYRITES

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|-------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia and Nyasaland— | | | | | | |
| Iron pyrites | 33,824 | 1,972 | — | — | — | — |
| Canada (a) | (£688,370) | (£378,665) | (£462,923) | (£316,927) | (£297,827) | (£310,557) |
| Cyprus— | | | | | | |
| Iron pyrites | 819,835 | 659,370 | 815,412 | 822,263 | 790,020 | 748,786 |
| Cupreous pyrites .. | 228,821 | 307,026 | 248,931 | 138,477 | 105,622 | 103,848 |
| OTHER COUNTRIES | | | | | | |
| Austria | 15,691 | 19,451 | 27,102 | 18,285 | 3,925 | — |
| Belgium-Luxemburg | | | | | | |
| E.U. | 4,786 | — | — | 828 | — | — |
| Finland— | | | | | | |
| Concentrate | 3,394 | 40,969 | 124,984 | 68,047 | 69,889 | 53,761 |
| Germany (Federal) .. | 6,250 | 6,643 | 1,225 | 591 | 1 | 12 |
| Greece | 79,088 | 35,792 | 51,882 | 16,643 | 46,710 | 43,995 |
| Italy— | | | | | | |
| Iron pyrites | 153,837 | } 164,721 | 232,912 | 223,990 | 155,768 | 100,245 |
| Cupreous pyrites .. | 1,959 | | | | | |
| Netherlands— | | | | | | |
| Iron pyrites | 183,530 | 195,706 | 435,932 | 225,388 | 120,076 | 118,495 |
| Norway | 388,590 | 401,708 | 458,782 | 431,799 | 550,880 | 629,369 |
| Portugal— | | | | | | |
| Iron pyrites | 351,749 | 350,932 | 336,879 | 260,980 | 287,469 | 269,668 |
| Cupreous pyrites .. | 1,910 | 2,077 | 1,967 | 2,241 | 2,102 | 2,153 |
| Spain— | | | | | | |
| Iron pyrites | 1,061,651 | 982,010 | } 1,206,407 | 1,017,327 | 1,006,004 | 1,015,116 |
| Cupreous pyrites .. | 58,431 | 41,391 | | | | |
| Sweden | 67,683 | 35,542 | 28,916 | 40,169 | 23,511 | 13,833 |
| U.S.S.R. | n.a. | n.a. | 870,000 | 652,500 | 768,700 | 999,954 |
| Yugoslavia | 274,909 | 183,826 | 338,701 | 271,474 | 289,346 | 276,646 |
| Algeria | — | 10,383 | 16,849 | 31,953 | 34,144 | 32,381 |
| Turkey | 50,546 | 48,876 | 51,582 | 89,988 | 108,938 | 84,145 |

(a) Sulphur in ores (pyrite).

IMPORTS OF PYRITES

Long tons

| Importing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-------------|-------------|-----------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 245,147 | 213,448 | 269,981 | 267,719 | 281,527 | 200,323 |
| Irish Republic | 29,445 | 36,204 | 31,605 | 15,913 | 2,638 | 1,381 |
| OTHER COUNTRIES | | | | | | |
| Austria | 64,719 | 46,513 | 64,699 | 53,094 | 30,126 | 24,409 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 262,552 | 265,988 | 422,917 | 331,394 | 313,586 | 297,329 |
| Czechoslovakia | 66,000 | 49,000 | 50,000 | 43,000 | 68,000 | <i>n.a.</i> |
| Denmark | 133,731 | 127,693 | 150,184 | 124,156 | 134,388 | 130,380 |
| France | 493,633 | 444,501 | 473,394 | 464,090 | 432,379 | 389,375 |
| Germany (Federal) .. | 1,306,900 | 1,313,029 | 1,691,849 | 1,263,767 | 1,315,889 | 1,476,010 |
| Germany (East) (a) .. | 80,018 | 98,990 | 120,635 | 108,376 | 92,638 | 88,653 |
| Hungary | 101,996 | 112,309 | 122,626 | 100,077 | 91,660 | 122,248 |
| Italy | 217,972 | 154,422 | 300,377 | 523,877 | 679,026 | 754,010 |
| Netherlands | 328,119 | 373,584 | 372,737 | 289,661 | 245,552 | 237,071 |
| Poland | 95,900 | 79,600 | 40,400 | 59,700 | <i>n.a.</i> | 23,916 |
| Sweden | 108,343 | 76,347 | 95,617 | 92,191 | 82,120 | 62,922 |
| Switzerland | <i>n.a.</i> | <i>n.a.</i> | 41,621 | 53,872 | 34,450 | 36,735 |
| Algeria | 14,343 | 2,286 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt | <i>n.a.</i> | 72,252 | 74,250 | 50,215 | 33,498 | <i>n.a.</i> |
| Morocco | 1,470 | 1,457 | — | — | — | 806 |
| Tunisia | 9,063 | 8,971 | 4,500 | 6,520 | 3,861 | 12,750 |
| United States | 343,060 | 280,638 | 306,216 | 281,604 | 301,899 | 194,171 |

 (a) *S content.*

RARE EARTH AND THORIUM MINERALS

PRODUCTION OF RARE EARTH AND THORIUM MINERALS

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Nigeria— | | | | | | |
| Monazite | 57 | 13 | 12 | 7 | 10 | 11 |
| Thorite (c) | 53 | <i>n.a.</i> | 1 | — | — | — |
| Canada— | | | | | | |
| Thorium (e) | — | 21 | 58 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ceylon— | | | | | | |
| Monazite | 111 | 84 | 330 | 213 | — | — |
| Malaya (a)— | | | | | | |
| Monazite | 428 | 236 | 42 | 696 | 623 | 885 |
| Australia (b)— | | | | | | |
| High-grade concentrates | 423 | (h) 331 | (h) 344 | (h) 1,463 | (h) 772 | (h) 1,942 |
| OTHER COUNTRIES | | | | | | |
| Malagasy Republic— | | | | | | |
| Monazite | — | — | 420 | 448 | 627 | 605 |
| Uranothorianite (f) | 477 | 572 | 498 | 404 | 500 | 473 |
| Mozambique— | | | | | | |
| Monazite | — | — | 1 | — | — | <i>n.a.</i> |
| Rwanda and Burundi— | | | | | | |
| Bastnaesite | 3 | — | — | — | — | — |
| South Africa— | | | | | | |
| Monazite | (g) 7,243 | (g) 2,145 | — | — | (i) 4,755 | (i) 2,054 |
| Gadolinite | — | — | — | — | — | 1 |
| United States (d)— | | | | | | |
| Monazite, bastnaesite and thorite | 1,804 | 1,021 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Brazil— | | | | | | |
| Monazite | 1,037 | 1,091 | 1,029 | (h) 830 | 3,445 | 1,673 |
| Indonesia— | | | | | | |
| Monazite | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 99 | 137 | <i>n.a.</i> |
| Korea (South)— | | | | | | |
| Monazite | 317 | 58 | 12 | 1 | 674 | — |

Monazite is also produced in India but for security reasons figures are no longer published.

(a) Exports.

(b) Monazite content.

(c) Between 5% and 6% ThO₂.

(d) Shipments from mine.

(e) Obtained as a by-product during the treatment of uranium.

(f) Containing an average of 60% Th.

(g) Rare earths and thorium oxides content as follows:—
1958—49.68%; 1959—51.15%.

(h) Estimated.

(i) ThO₂ content as follows: 1962—5.4%; 1963—5.76%.

EXPORTS OF RARE EARTH MINERALS, ETC.

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|--------------|-------------|--------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Nigeria— | | | | | | |
| Monazite | 57 | 13 | 12 | 7 | 10 | 11 |
| Thorite (a) | 53 | <i>n.a.</i> | 1 | — | — | — |
| Ceylon— | | | | | | |
| Monazite | — | — | — | — | — | 300 |
| India— | | | | | | |
| Monazite | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 279 |
| Malaya— | | | | | | |
| Monazite | 428 | 236 | 42 | 696 | 623 | 885 |
| Australia— | | | | | | |
| Concentrates | 102 | 150 | 158 | 1,802 | 1,460 | 2,313 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Salts of rare earth minerals | 92 | (b) 79 | (b) 192 | (b) 266 | (b) 143 | (b) 201 |
| France— | | | | | | |
| Salts of rare earth minerals | 220 | 132 | 147 | 207 | 888 | 275 |
| Germany (Federal)— | | | | | | |
| Compounds of rare earth minerals | 6 | 6 | 7 | 20 | 838 | 13 |
| Rwanda and Burundi— | | | | | | |
| Bastnaesite | 18 | — | 1 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Monazite | — | — | 360 | <i>r</i> 429 | 569 | 683 |
| Uranothorianite | 138 | <i>r</i> 591 | <i>r</i> 49 | <i>r</i> 394 | 535 | 474 |
| United States— | | | | | | |
| Cerium ores, metals, etc. | 13 | 12 | 7 | 3 | 2 | 1 |
| Thorium ore, concentrates and compounds | 55 | 101 | 32 | 46 | 489 | 21 |
| Brazil— | | | | | | |
| Cerium chloride .. | 196 | 1,061 | 2,272 | 1,369 | 906 | 851 |

 (a) Between 5% and 6% ThO₂.

(b) Including uranium salts.

IMPORTS OF RARE EARTH MINERALS, ETC.

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Rare earth compounds .. | 105 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada— Thorium and cerium salts | (£8,022) | (£16,206) | (£6,821) | (£10,892) | (£7,789) | (£2,570) |
| OTHER COUNTRIES | | | | | | |
| Austria— Salts of rare earth minerals | 324 | (a) 382 | (a) 1,004 | (a) 974 | (a) 1,128 | (a) 1,042 |
| France— Monazite | 397 | (b) 1,235 | (b) 846 | (b) 1,425 | (b) 1,779 | (b) 1,040 |
| Salts of rare earth minerals | 14 | 327 | 602 | 626 | 42 | 45 |
| Germany (Federal)— Rare earth minerals .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | — | (a) 25 | (a) 20 |
| Salts of rare earth minerals | (a) 384 | (a) 697 | (a) 1,144 | (a) 931 | (a) 838 | (a) 723 |
| United States— Monazite sand and other thorium ore | 5,859 | 2,112 | — | 2,691 | 6,830 | 5,741 |

Rare earth minerals are also imported into the United Kingdom and Canada but statistics of imports are not recorded in the trade returns of these countries.

(a) Including uranium salts.

(b) Rare earth minerals.

SALT
PRODUCTION OF SALT

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Rock-salt | 116,482 | 142,831 | 149,990 | 285,000 | 477,000 | 752,000 |
| Brine-salt | 1,085,547 | 1,132,419 | 1,232,979 | 1,189,354 | 1,259,960 | 1,388,788 |
| Salt in brine (a) .. | 3,732,899 | 4,185,058 | 4,385,010 | 4,194,854 | 4,243,786 | 4,251,621 |
| Malta— | | | | | | |
| Sea-salt | 1,435 | 1,065 | 1,399 | 1,720 | 1,846 | <i>n.a.</i> |
| Ghana | (b) 22,000 | (b) 22,000 | 12,000 | 18,000 | 19,000 | <i>n.a.</i> |
| Kenya | 18,721 | 19,242 | 21,916 | 22,650 | 18,568 | 32,683 |
| Mauritius— | | | | | | |
| Sea-salt | 3,800 | 3,700 | 4,200 | 4,000 | 3,700 | 4,100 |
| Nigeria | 554 | 400 | 666 | 340 | 326 | 276 |
| Northern Rhodesia | — | — | — | — | 125 | — |
| Tanganyika | 35,232 | 36,722 | 32,811 | 25,726 | 29,377 | 31,908 |
| Uganda | 9,919 | 8,781 | 4,891 | 6,493 | 3,159 | 3,072 |
| Canada— | | | | | | |
| Rock-salt | 696,512 | 1,111,523 | 1,179,212 | r 1,204,221 | 1,667,486 | 1,563,782 |
| Other salt (c) | 1,411,200 | 1,850,118 | 1,777,460 | r 1,745,602 | 1,604,605 | 1,740,738 |
| West Indies— | | | | | | |
| Sea-salt— | | | | | | |
| Bahamas (d) | 105,750 | 176,571 | 171,286 | 168,643 | 154,571 | 105,857 |
| St. Kitts (d) | 2,054 | 2,496 | 156 | 722 | 1,332 | 783 |
| Virgin Islands (d) .. | — | 11 | 31 | 2 | 6 | <i>n.a.</i> |
| Turks and Caicos Islands | 20,000 | 31,546 | 24,408 | 29,651 | (b) 30,000 | <i>n.a.</i> |
| Aden | 155,000 | 175,000 | 127,641 | r 84,000 | 77,000 | 79,000 |
| Ceylon | 17,883 | 30,253 | 54,000 | 34,427 | 45,796 | 22,531 |
| Cyprus | 5,048 | 5,351 | — | 2,055 | 5,663 | 6,848 |
| India— | | | | | | |
| Rock-salt | 5,115 | 3,637 | 4,243 | 4,232 | 4,400 | 3,300 |
| Other salt | r 4,162,844 | 3,123,824 | 3,377,172 | 3,406,830 | 3,820,300 | 4,463,500 |
| Goa | 4,486 | 3,811 | 8,000 | <i>n.a.</i> | 10,000 | <i>n.a.</i> |
| Pakistan— | | | | | | |
| Rock-salt | 177,601 | 163,014 | 184,755 | 216,387 | 187,902 | 244,645 |
| Sea-salt | 193,837 | 130,645 | 248,176 | 183,580 | 252,484 | 213,733 |
| Australia | 429,534 | 467,532 | 463,296 | r 508,657 | 536,019 | 582,787 |
| New Zealand | 7,650 | 20,300 | 17,020 | 5,017 | 8,900 | 11,000 |
| TOTAL | 12,400,000 | 12,800,000 | 13,500,000 | 13,300,000 | 14,500,000 | 15,600,000 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Rock-salt | 738 | 1,022 | 1,697 | 3,316 | 5,033 | 5,005 |
| Evaporated salt | 116,372 | 123,601 | 130,379 | 136,517 | 144,366 | 163,450 |
| Bulgaria | 110,000 | 87,000 | r 86,000 | 124,000 | 146,000 | 104,000 |
| Czechoslovakia | 159,070 | 158,279 | 165,086 | 184,985 | 178,980 | <i>n.a.</i> |
| France— | | | | | | |
| Rock-salt (incl. refined) | 540,658 | 566,023 | 598,345 | 657,694 | 677,365 | 749,000 |
| Salt in brine | 2,190,448 | 2,086,440 | 2,353,322 | 2,252,198 | 2,255,604 | 2,129,000 |
| Sea-salt | 808,904 | 758,541 | 713,903 | 874,210 | 1,247,267 | 752,000 |
| Germany (Federal)— | | | | | | |
| Rock-salt | 3,726,282 | 3,908,289 | 4,291,127 | 4,277,614 | 4,487,751 | 5,150,981 |
| Brine-salt | 332,301 | 323,994 | 333,739 | 335,744 | 340,491 | 357,515 |

(a) Used for purposes other than salt-making.

(b) Estimated.

(c) Including salt in brine.

(d) Exports.

PRODUCTION OF SALT (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|-------------|------------|--------------|--------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (East) | 1,750,000 | 1,659,000 | 1,757,000 | 1,968,000 | (a)2,000,000 | (a)2,000,000 |
| Greece— | | | | | | |
| Sea-salt | 94,000 | 96,000 | 95,131 | 117,000 | 113,000 | (a) 84,000 |
| Italy— | | | | | | |
| Rock-salt and brine-salt | 1,012,428 | 1,260,478 | r 1,556,609 | 1,589,177 | 1,699,280 | 1,912,104 |
| Sea-salt | 917,497 | 673,578 | 979,182 | n.a. | n.a. | n.a. |
| Spring-salt | 22,126 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Netherlands (brine-salt) | 782,650 | 970,497 | 1,078,360 | 1,096,578 | 1,242,000 | 1,456,000 |
| Poland— | | | | | | |
| Rock-salt | 386,000 | 500,000 | 513,000 | 598,000 | 598,000 | 635,000 |
| Brine-salt | 225,000 | 224,000 | 219,000 | 232,000 | 238,000 | 241,000 |
| Other salt | 974,000 | 1,075,000 | 1,183,000 | 1,188,000 | 1,205,000 | 1,221,000 |
| Portugal— | | | | | | |
| Rock-salt | 58,482 | 61,282 | 68,845 | 71,689 | 72,631 | 77,723 |
| Sea-salt | 306,000 | 211,000 | 211,000 | 262,610 | 309,836 | 263,527 |
| Roumania | 720,000 | 827,000 | 1,028,000 | 1,309,000 | 1,454,000 | 1,611,000 |
| Spain— | | | | | | |
| Rock-salt | 551,239 | 550,294 | 528,027 | 604,591 | 616,200 | 688,344 |
| Sea-salt | 846,902 | 748,919 | 815,450 | 937,706 | 965,600 | 951,300 |
| Other salt | 16,414 | 17,373 | 14,087 | 17,871 | 18,036 | 13,976 |
| Switzerland | 122,575 | 135,058 | 146,953 | 154,793 | 165,291 | 187,704 |
| U.S.S.R. (a) | 6,400,000 | 6,400,000 | 6,600,000 | 7,400,000 | 8,400,000 | 8,600,000 |
| Yugoslavia— | | | | | | |
| Sea-salt | 60,000 | 22,000 | 35,000 | 44,000 | 86,000 | } 164,000 |
| Evaporated salt .. | 109,000 | 113,000 | 114,000 | 114,000 | 126,000 | |
| Algeria— | | | | | | |
| Brine-salt and sea-salt .. | 130,516 | 125,620 | 235,990 | 126,325 | n.a. | n.a. |
| Angola | 68,052 | 68,137 | 56,904 | 65,754 | 59,413 | 67,520 |
| Canary Islands (sea-salt) | 14,945 | 12,981 | 11,361 | 14,074 | 14,112 | 17,673 |
| Cape Verde Islands .. | 7,697 | 19,949 | 23,383 | 17,089 | 26,437 | n.a. |
| Congo Republic(rock-salt) | 477 | 569 | n.a. | 551 | n.a. | n.a. |
| Egypt | 396,000 | 377,000 | 513,000 | 509,000 | 551,000 | 386,000 |
| Ethiopia (d) | 163,000 | 139,000 | 155,000 | 149,000 | 182,000 | n.a. |
| Libya (sea-salt) | 12,000 | 15,000 | 12,000 | r 12,000 | 14,000 | 19,000 |
| Morocco | 60,026 | 33,231 | 29,843 | 20,866 | 27,135 | 36,752 |
| Mozambique— | | | | | | |
| Rock-salt | 5 | n.a. | 40 | 40 | n.a. | 40 |
| Sea-salt | 21,526 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Senegal | 70,000 | 69,000 | 48,809 | 42,759 | 47,442 | 59,033 |
| South Africa | 215,132 | 233,362 | 248,849 | 204,647 | 251,081 | 194,656 |
| South West Africa— | | | | | | |
| Rock-salt | 6,293 | 4,887 | 4,025 | 4,296 | 4,379 | 5,010 |
| Other salt | 80,000 | 44,600 | 67,000 | 50,000 | 70,000 | 59,000 |
| Sudan | 53,000 | 53,087 | 52,573 | 52,267 | 56,956 | 36,418 |
| Tunisia (sea-salt) | 167,000 | 91,000 | 162,900 | 149,482 | 159,000 | 303,254 |
| Costa Rica | (a) 29,000 | 12,000 | (b) 10,000 | (b) 10,000 | (b) 10,000 | (b) 10,000 |
| Cuba (sea-salt) | 58,129 | 79,432 | 57,671 | n.a. | n.a. | n.a. |
| Dominican Republic— | | | | | | |
| Rock-salt | 43,233 | 62,818 | 65,259 | 74,506 | 31,704 | 28,854 |
| Sea-salt | 15,520 | 19,831 | 19,210 | 19,782 | 9,740 | n.a. |
| Guatemala (sea-salt) .. | 15,395 | 15,642 | 14,846 | 15,425 | 16,583 | n.a. |
| Haiti (b) | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 |
| Honduras | (b) 10,000 | (b) 10,000 | (b) 10,000 | (b) 13,000 | 10,000 | (b) 10,000 |
| Mexico | 357,000 | 512,000 | 979,000 | 1,046,000 | 1,271,000 | (a)1,210,000 |
| Netherlands Antilles .. | 500 | 300 | (c) 112 | 150 | (c) 119 | (c) 106 |
| Nicaragua (sea-salt) .. | 9,883 | 10,658 | 11,318 | 11,929 | 12,531 | 16,234 |
| Panama (sea-salt) | 5,524 | 7,722 | 7,000 | 7,607 | 10,333 | 9,923 |
| Salvador (b) | n.a. | n.a. | n.a. | 30,000 | 30,000 | 30,000 |

(a) United States Bureau of Mines' estimate.

(b) Estimated.

(c) Exports.

(d) Years ended September 10 of year stated.

PRODUCTION OF SALT (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States (e)— | | | | | | |
| Rock-salt | 4,828,000 | 5,500,000 | 5,773,000 | 5,749,000 | 6,898,000 | 7,451,000 |
| Salt in brine | 11,378,000 | 13,413,000 | 13,313,000 | 13,287,000 | 14,677,000 | 15,647,000 |
| Evaporated salt.. .. | 3,358,000 | 3,554,000 | 3,664,000 | 3,917,000 | 4,146,000 | 4,262,000 |
| Argentina | 564,150 | 511,000 | 540,000 | 410,900 | 505,946 | 170,000 |
| Brazil (sea-salt) | 939,923 | 840,978 | 908,338 | 874,902 | 1,220,812 | 1,097,490 |
| Chile | <i>n.a.</i> | 41,998 | <i>n.a.</i> | 45,384 | 50,207 | 47,480 |
| Colombia— | | | | | | |
| Rock-salt | 216,621 | 210,104 | 231,624 | 262,368 | 262,030 | 258,770 |
| Sea-salt | 69,713 | 50,053 | 66,775 | 68,610 | 38,602 | 33,622 |
| Brine-salt | 143,410 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ecuador (sea-salt) | 19,124 | 21,434 | 26,868 | 31,000 | (a)(b)31,000 | (a)(b)31,000 |
| Peru— | | | | | | |
| Rock-salt | 8,649 | 104,000 | 104,000 | 8,922 | 10,678 | 86,000 |
| Sea-salt | 85,996 | | | | | |
| Brine-salt | 9,103 | | | | | |
| Venezuela (sea-salt) | 86,817 | 76,494 | 77,655 | 144,618 | 142,512 | 75,200 |
| Afghanistan (f) | 25,200 | 27,100 | 25,500 | r 22,400 | <i>n.a.</i> | 21,000 |
| Burma— | | | | | | |
| Sea-salt | 109,066 | 110,048 | 154,006 | 123,242 | 151,971 | <i>n.a.</i> |
| Brine-salt | 793 | 803 | 1,231 | 1,304 | 1,267 | <i>n.a.</i> |
| China | 10,240,000 | 10,870,000 | a 13,000,000 | 11,000,000 | a 10,000,000 | a 10,000,000 |
| Formosa (sea-salt) | 436,908 | 422,877 | 446,086 | 424,823 | 585,322 | 616,233 |
| Cambodia | 63,000 | 49,000 | 37,000 | 54,000 | (a)(b)54,000 | (a)(b)54,000 |
| Indonesia | 230,898 | 309,775 | 194,614 | 142,376 | 299,000 | <i>n.a.</i> |
| Iran (g) | 130,000 | 131,185 | 128,000 | 143,000 | 143,000 | <i>n.a.</i> |
| Iraq | (c) 25,893 | (c) 37,000 | 36,209 | 35,500 | 37,471 | (c) 38,000 |
| Israel | 33,160 | 33,451 | 36,632 | 43,412 | 44,302 | 50,799 |
| Japan— | | | | | | |
| Government-licensed plants (d) | 1,041,046 | 1,146,790 | 867,696 | 814,938 | 843,000 | 770,000 |
| Jordan (brine-salt) | 10,725 | 15,500 | 12,077 | 17,486 | 17,799 | 17,444 |
| Korea (North) | 432,000 | (a)(b)433,000 | 319,000 | 386,000 | 414,000 | (a)(b)450,000 |
| Korea (South) | 429,516 | 383,733 | 392,962 | 119,823 | 381,947 | 226,454 |
| Lebanon (sea-salt) (a) | 15,000 | 15,000 | 15,000 | 10,000 | 16,000 | 18,000 |
| Philippine Republic— | | | | | | |
| Sea-salt | 137,433 | 171,788 | 93,249 | 91,818 | 94,155 | 69,014 |
| Syria | 17,000 | 8,000 | 10,000 | 7,000 | 18,000 | (a)(b)18,000 |
| Thailand | 421,000 | r 452,000 | 329,000 | 246,000 | 147,000 | 196,000 |
| Turkey— | | | | | | |
| Rock-salt | 35,131 | 34,226 | 31,061 | 29,000 | 28,000 | 29,000 |
| Lake and spring salt | 101,232 | 448,823 | 407,455 | 234,000 | 396,000 | 362,000 |
| Sea-salt | 344,220 | | | | | |
| Vietnam (North) | <i>n.a.</i> | 128,000 | 115,000 | 104,000 | 142,000 | (a)(b)147,000 |
| Vietnam (South) | 106,144 | 153,230 | 103,355 | 98,000 | 190,000 | <i>n.a.</i> |
| Yemen | — | 98,000 | 98,000 | 118,000 | 147,000 | (a)(b)100,000 |
| TOTAL* | 61,000,000 | 65,000,000 | r71,000,000 | 70,000,000 | 75,000,000 | 77,000,000 |
| WORLD'S TOTAL* | 73,000,000 | 78,000,000 | r85,000,000 | 83,000,000 | 90,000,000 | 93,000,000 |

*Salt is known to have been produced in many countries for which statistics are not available. An allowance has been made for these in the total.

(a) Estimated.

(b) United States Bureau of Mines.

(c) Years ended March 31 of year following that stated.

(d) In addition there is a production of salt in other plants which in 1948 amounted to 47,012 tons.

(e) Sold or used by producers.

(f) Years ended March 21 of year following that stated.

(g) Years ended March 20 of year following that stated.

EXPORTS OF SALT

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 287,577 | 295,575 | 310,007 | 323,755 | 319,928 | 362,866 |
| Kenya | 64 | 18 | 5 | 752 | 681 | 85 |
| Tanganyika | 8,676 | 11,869 | 11,781 | 12,246 | 9,654 | 12,553 |
| Uganda | 1,966 | 2,270 | 1,393 | 1,127 | 660 | 565 |
| Canada | 363,131 | 1,137,569 | 3,090,505 | 2,526,016 | 3,560,418 | n.a. |
| Bahamas (d) | 105,750 | 176,571 | 171,286 | 168,643 | 154,571 | 105,857 |
| St. Kitts | 2,054 | 2,496 | 156 | 722 | 1,332 | 783 |
| Virgin Islands | — | 11 | 31 | 2 | 6 | n.a. |
| Turks and Caicos Islands | 18,156 | 19,095 | 31,717 | 16,150 | (f) 22,700 | (f) 26,000 |
| Aden | 147,050 | 168,506 | 101,279 | 116,379 | 99,858 | 72,574 |
| Ceylon | — | — | 4 | — | — | — |
| Hong Kong | 194 | 529 | 464 | 534 | 676 | 616 |
| India | 252,996 | 340,765 | (c) 392,548 | (c) 50,457 | (c) 167,832 | (c) 191,611 |
| Goa | 5,315 | — | 152 | n.a. | n.a. | n.a. |
| Malaya | 12,472 | 2,754 | 2,369 | 1,993 | 2,108 | 1,641 |
| Pakistan | 6,799 | 15,619 | 34,855 | 121,591 | 89,304 | 56,151 |
| Australia (a)— | | | | | | |
| Refined salt | 113 | 857 | 642 | 1,727 | 95 | 253 |
| Other salt | 19,091 | 18,470 | 16,815 | 31,242 | 73,702 | 74,606 |
| OTHER COUNTRIES | | | | | | |
| Austria | 1,274 | 15 | — | 1,372 | 2,430 | 1,244 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 217 | 332 | 162 | 238 | 648 | 526 |
| Denmark | 313 | 343 | 300 | 481 | 298 | 235 |
| France | 87,035 | 103,420 | 108,316 | 96,538 | 103,097 | 135,101 |
| Germany (Federal) | 697,342 | 669,846 | 714,799 | 688,812 | 780,216 | 876,238 |
| Italy | 63,197 | 40,665 | 18,509 | 42,400 | 28,365 | 74,266 |
| Netherlands— | | | | | | |
| Common salt | 5,294 | 7,652 | 8,371 | 507 | — | — |
| Refined salt | 450,019 | 536,609 | 627,306 | 651,618 | 724,458 | 849,511 |
| Norway— | | | | | | |
| Common salt | 5,132 | 4,243 | 4,607 | 6,477 | 3,000 | 5,932 |
| Refined salt | 412 | 15 | 18 | 2 | 2 | — |
| Poland | 102,865 | 117,707 | 149,644 | 130,596 | 137,000 | 35,727 |
| Portugal | 3,131 | 1,488 | 478 | 409 | 2,269 | 81 |
| Roumania | 134,000 | 151,900 | 185,300 | 280,700 | 287,200 | 304,317 |
| Spain | 354,925 | 435,712 | (e) 490,912 | (e) 427,791 | (e) 503,206 | (e) 457,880 |
| Sweden | 40 | 35 | 14 | 53 | 292 | 1,225 |
| Switzerland | 1 | 2 | 2 | 1 | 1 | 2,569 |
| U.S.S.R. | 92,100 | 68,200 | 86,600 | 112,900 | 131,800 | 136,017 |
| Algeria | 36,898 | 40,458 | 59,298 | n.a. | n.a. | n.a. |
| Angola | 22,701 | 23,518 | 23,176 | 24,663 | 22,506 | 23,958 |
| Cape Verde Islands | 20,224 | 20,019 | 25,621 | 35,952 | 30,766 | n.a. |
| Egypt | 327,886 | 230,144 | 385,620 | 352,315 | 205,544 | n.a. |
| Ethiopia | (b) 46,325 | (b) 73,041 | (b) 52,604 | (b) 53,173 | n.a. | 57,276 |
| French Somaliland | — | — | — | — | — | — |
| Malagasy Republic | 2,163 | 2,073 | 2,272 | 2,335 | 1,307 | 2,364 |
| Mozambique | 4,756 | 4,323 | 4,778 | 4,079 | 4,296 | — |
| Morocco | 51 | 104 | 143 | — | 13 | 10 |
| Senegal | n.a. | 10,628 | 10,226 | 10,519 | 12,212 | 44,685 |
| South Africa | 11,458 | 11,344 | 16,555 | 19,229 | 24,725 | 25,308 |
| South West Africa— | | | | | | |
| Rock-salt | 1,596 | 1,831 | 1,794 | 2,093 | 1,895 | 2,271 |
| Coarse salt | 41,091 | 37,788 | 31,843 | 36,704 | 35,854 | 42,558 |
| Other salt | 577 | 398 | 1,405 | 1,487 | 1,104 | 1,512 |

(a) Years ended June 30 of that stated.

(f) Estimated.

(b) Years ended September 10 of that stated.

(c) Years ending March 31 following that stated.

(d) Converted from bushels at the rate of 28 bushels = 1 long ton.

(e) Excluding exports to Spanish Dependencies.

EXPORTS OF SALT (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Sudan | 22,504 | 34,745 | 11,560 | 923 | 516 | 506 |
| Tunisia | 128,329 | 135,142 | 87,255 | 146,600 | 128,764 | 263,206 |
| Cuba | 204 | 226 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Dominican Republic | 44,370 | 54,738 | 58,011 | 57,592 | 26,162 | <i>n.a.</i> |
| Honduras | 2,002 | 4,393 | 2,835 | 939 | 1,709 | 3,139 |
| Mexico | 120,265 | 208,490 | 489,473 | 707,310 | 1,047,209 | 990,573 |
| Netherlands Antilles | 181 | 219 | 112 | 102 | 119 | 106 |
| Salvador | 582 | 739 | 1,312 | 1,146 | 1,920 | 1,888 |
| United States | 324,115 | 378,883 | 375,287 | 573,184 | 593,931 | 251,014 |
| Argentina | 26,429 | 21,747 | 17,869 | 23,598 | 37,198 | 56,498 |
| Peru | 198 | 104 | 395 | 472 | 1,011 | 578 |
| Burma | — | — | 9,999 | 9,000 | 9,240 | 10,000 |
| Formosa | 285,996 | 283,103 | 287,531 | 289,089 | 233,137 | 278,959 |
| Iran (a) | 1,082 | 1,693 | 3,230 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan | 98 | 99 | 86 | 6 | 20 | 39 |
| Thailand | 243,272 | 257,105 | 220,356 | 187,071 | 132,874 | 114,933 |
| Turkey | — | 31,396 | 142,676 | 78,487 | 52,611 | 57,809 |
| Vietnam (South) | 29,122 | 82,315 | 51,080 | 21,702 | 35,677 | <i>n.a.</i> |

(a) Years ended March 20 of year following that stated.

IMPORTS OF SALT

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|----------|-----------|----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Salt for use of fisheries.. | 49,698 | 53,731 | 52,375 | 35,046 | 42,055 | 170,399 |
| Channel Islands .. | 667 | 621 | 698 | 631 | 535 | 5,575 |
| Malta— | | | | | | |
| Refined salt | (£3,869) | (£5,683) | (£4,526) | (£5,137) | (£3,774) | (£4,055) |
| Other salt | 412 | 675 | 370 | 508 | — | 5 |
| Gambia | 810 | 406 | 301 | 403 | 325 | 94 |
| Ghana | 17,465 | 10,620 | 8,342 | 7,930 | 353 | 2,652 |
| Kenya | 4,194 | 2,874 | 1,944 | 3,078 | 6,748 | 9,658 |
| Mauritius | 10 | 7 | 1,021 | 74 | 35 | 158 |
| Nigeria | 103,834 | 99,755 | 103,926 | 110,913 | 111,449 | 124,005 |
| Rhodesia and Nyasaland | 31,211 | 34,705 | 38,251 | 36,208 | 39,858 | 38,570 |
| Seychelles | 578 | 251 | 234 | 416 | 216 | 343 |
| Sierra Leone | 7,225 | 6,204 | 7,394 | 7,230 | 6,361 | 8,720 |
| Tanganyika | 957 | 798 | 623 | 1,575 | 6,961 | 4,130 |
| Uganda | 13,442 | 15,528 | 18,573 | 18,826 | 23,739 | 25,838 |
| Zanzibar | 1,156 | 1,333 | 1,295 | 1,287 | 1,593 | 1,479 |
| Canada— | | | | | | |
| Salt for use of fisheries.. | 50,872 | 56,955 | 58,125 | 54,031 | 42,564 | 59,674 |
| Refined salt | 37 | 156 | 671 | 1,226 | 1,060 | — |
| Other salt | 253,454 | 273,217 | 112,579 | 122,747 | 175,871 | 237,273 |
| Antigua | 190 | 210 | 183 | 213 | 178 | n.a. |
| Barbados— | | | | | | |
| Rock and coarse salt .. | 101 | 184 | 109 | 51 | 53 | n.a. |
| Refined salt | 1,984 | 2,234 | — | 2,120 | 2,098 | 648 |
| Bermuda | 150 | 326 | 169 | 172 | 132 | n.a. |
| British Honduras | 485 | 603 | 515 | 514 | 501 | 613 |
| Dominica | 390 | 422 | 336 | 258 | 610 | 363 |
| Grenada | 643 | 586 | 14,215 | 520 | 528 | 585 |
| Jamaica— | | | | | | |
| Rock-salt | 17 | 24 | 3 | 48 | 36 | 56 |
| Other salt | 12,736 | 12,211 | 10,863 | 11,392 | 10,865 | 11,360 |
| Montserrat | 47 | 54 | 16 | 37 | 38 | 27 |
| St. Kitts | 12 | 2 | 78 | 94 | 96 | 82 |
| St. Lucia— | | | | | | |
| Common salt | 426 | 341 | 306 | 719 | 854 | 474 |
| Refined salt | 63 | 85 | 39 | 38 | 78 | 14 |
| St. Vincent— | | | | | | |
| Unrefined salt | 329 | 124 | 139 | 95 | 78 | 150 |
| Refined salt | 318 | 230 | 330 | 274 | 315 | 334 |
| Trinidad and Tobago— | | | | | | |
| Rock and coarse salt .. | 803 | 674 | 838 | 2,217 | 1,024 | } 6,803 |
| Refined salt | 5,056 | 5,259 | 5,003 | 3,949 | 5,114 | |
| Virgin Islands | 3 | 3 | 3 | 7 | 9 | n.a. |
| British Guiana— | | | | | | |
| Rock and coarse salt .. | 120 | 315 | 16 | 16 | 71 | n.a. |
| Refined salt, etc. .. | 2,172 | 2,242 | 2,662 | 2,669 | 1,505 | n.a. |
| Aden | — | 37 | 101 | 67 | 45 | 29 |
| Brunei | 292 | 298 | 290 | 386 | 335 | 3,273 |
| Ceylon— | | | | | | |
| Refined salt | 7 | 10 | 22 | 66 | 28 | 41 |
| Other salt | 7 | 132 | — | — | 54,919 | 36,632 |
| Cyprus | 172 | 233 | 190 | 262 | 211 | 270 |
| Hong Kong | 24,720 | 30,796 | 29,867 | 36,156 | 38,733 | 34,280 |
| India | 17 | 365 | (b) 158 | (b) 8 | (b) 1,902 | (b) 28 |
| Malaya— | | | | | | |
| Refined salt | 243 | 278 | 278 | 313 | 259 | 260 |
| Other salt | 90,209 | 69,807 | 80,652 | 73,720 | 83,546 | 78,748 |
| Pakistan | (a) 2,860 | (a) 2,170 | (a) 1,100 | 5,775 | 8,910 | 1,915 |
| Sabah | 4,128 | 3,073 | 3,856 | 3,054 | 2,916 | n.a. |
| Sarawak | 4,986 | 4,849 | 4,516 | 5,115 | 5,036 | 6,117 |

(a) Exports from India to Pakistan by land.

(b) Years ended March 31 following that stated.

IMPORTS OF SALT (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|-----------|-----------|---------|---------|---------|---------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Australia (a)— | | | | | | |
| Rock-salt | 3,147 | 1,246 | 1,428 | 5 | — | — |
| Refined salt | 1,783 | 1,054 | 681 | 923 | 366 | 11 |
| Other salt | 5,018 | 5,590 | 10,406 | 14,730 | 7,766 | 7,203 |
| Fiji | 1,441 | 1,563 | 1,899 | 1,795 | 2,066 | 2,308 |
| New Guinea (a) | 854 | 966 | 982 | 1,219 | 1,386 | 1,352 |
| New Hebrides | 142 | 161 | 98 | 162 | 164 | 276 |
| New Zealand | 48,047 | 46,504 | 44,350 | 53,899 | 51,759 | 57,565 |
| Papua (a) | 769 | 936 | 484 | 310 | 348 | 356 |
| Solomon Islands | 37 | — | 51 | 65 | 54 | 65 |
| Western Samoa | 231 | 297 | 219 | 360 | 352 | n.a. |
| Irish Republic— | | | | | | |
| Refined salt | 3,507 | 4,568 | 3,833 | 4,112 | 4,395 | 4,515 |
| Other salt | 29,917 | 28,514 | 31,934 | 32,817 | 36,841 | 34,886 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Common salt | 21 | 10 | 153 | 67 | 102 | 364 |
| Belgium-Luxembourg E.U.— | | | | | | |
| Common salt | 429,686 | 493,253 | 528,804 | 514,646 | 585,304 | 426,605 |
| Refined salt | 78,010 | 71,751 | 78,637 | 85,736 | 94,926 | 221,106 |
| Denmark— | | | | | | |
| Rock-salt | 60 | 50,655 | 68,159 | 62,963 | 68,436 | 89,707 |
| Refined salt | 135,632 | 86,136 | 76,922 | 76,188 | 76,248 | 78,079 |
| Faroe Islands | 20,262 | 14,763 | 14,133 | 16,241 | 19,605 | 33,292 |
| Finland | 161,429 | 183,740 | 196,711 | 219,893 | 270,100 | 263,110 |
| France | 48,356 | 47,279 | 45,524 | 68,269 | 76,521 | 61,720 |
| Germany (Federal) | 923 | 7,329 | 15,920 | 15,091 | 24,759 | 55,520 |
| Iceland— | | | | | | |
| Common salt | 45,333 | 39,948 | 51,830 | 47,785 | 56,147 | 53,806 |
| Refined salt | 156 | 189 | 212 | 172 | 207 | 238 |
| Italy | 124,577 | 41,822 | 137,168 | 137,441 | 141,440 | 54,969 |
| Netherlands— | | | | | | |
| Rock-salt | 42,911 | 24,606 | 17,762 | 12,744 | 9,559 | 26,886 |
| Sea-salt, etc. | 7,474 | 7,438 | 19,250 | 17,380 | 14,142 | 34,952 |
| Refined salt | 33 | 38 | | | | |
| Norway— | | | | | | |
| Common salt | 204,616 | 152,872 | 169,844 | 132,812 | 141,186 | 158,438 |
| Refined salt | 32,426 | 61,058 | 75,799 | 91,286 | 101,625 | 103,974 |
| Portugal | 151 | 182 | 170 | 3,028 | 5,776 | 11,495 |
| Sweden | 444,443 | 454,869 | 510,095 | 544,803 | 586,971 | 628,295 |
| Switzerland | 736 | 1,008 | 1,164 | 1,174 | 774 | 2,791 |
| Yugoslavia | 48,159 | 38,154 | 79,384 | 131,876 | 27,722 | 88,186 |
| Algeria | 219 | 284 | 370 | n.a. | n.a. | n.a. |
| Cameroun | 11,071 | 12,751 | 10,932 | 13,878 | 12,482 | 11,221 |
| Canary Islands | 369 | 1,290 | n.a. | n.a. | n.a. | n.a. |
| Ceuta | 752 | 862 | n.a. | n.a. | n.a. | n.a. |
| Congo Republic | 46,890 | 49,809 | n.a. | n.a. | n.a. | n.a. |
| Dahomey | 958 | 621 | 1,601 | 1,548 | 944 | 1,121 |
| Egypt | 9 | 8 | 5 | 4 | 11 | n.a. |
| Equatorial African Community | 10,721 | 8,240 | 10,537 | 8,881 | 8,829 | 13,868 |
| Ethiopia | (b) 1,787 | (b) 1,387 | (b) 594 | (b) 172 | n.a. | n.a. |
| Ivory Coast | 10,974 | 15,286 | 15,874 | 17,502 | 5,629 | 24,937 |
| Liberia | 266 | 1,396 | 1,515 | 674 | 3,317 | n.a. |
| Malagasy Republic | 192 | 194 | 253 | 315 | 3,408 | 526 |
| Melilla | 979 | 1,024 | n.a. | n.a. | n.a. | n.a. |

(a) Years ended June 30 of that stated.

(b) Years ended September 10 of that stated.

IMPORTS OF SALT (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Morocco | 2,296 | 4,134 | 2,753 | 602 | 584 | 1,921 |
| Mozambique | 6,956 | 2,021 | 2,058 | 3,075 | <i>n.a.</i> | <i>n.a.</i> |
| Niger | 119 | 107 | 1,569 | 4,401 | 16,839 | 5,229 |
| Reunion | 1,496 | 1,421 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| S. Tome and Principe | 472 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Senegal | 350 | 110 | 137 | 160 | 103 | 177 |
| Somali Republic (b) | 81 | 12 | 596 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South Africa | 5,110 | 3,702 | 4,092 | 3,005 | 2,284 | <i>n.a.</i> |
| Sudan | 17 | 59 | 25 | 53 | 77 | 59 |
| Togo | 11,494 | 5,552 | 4,911 | 8,099 | 9,103 | 10,761 |
| Upper Volta | 206 | 1,024 | 926 | 5,168 | 7,315 | 10,858 |
| Costa Rica | 142 | 156 | 96 | 141 | 95 | 103 |
| Cuba | 5,497 | 14,846 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| French West Indies— | | | | | | |
| Guadeloupe | 596 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Martinique | 2,040 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Greenland | 15,051 | 12,090 | 12,595 | 8,757 | 7,356 | 7,555 |
| Guatemala | 82 | 187 | 376 | 245 | 142 | <i>n.a.</i> |
| Honduras | 934 | 750 | 1,156 | 968 | 1,876 | 1,755 |
| Mexico | 1,434 | 7,048 | 2,556 | 1,187 | 862 | 1,220 |
| Netherlands Antilles | 550 | 568 | 541 | 523 | 619 | 523 |
| Nicaragua | 421 | 574 | 595 | 677 | 681 | 580 |
| St. Pierre and Miquelon.. .. . | 604 | 593 | 1,375 | 2,264 | 2,414 | 232 |
| Salvador | 2,004 | 4,344 | 2,741 | 983 | 1,724 | 2,764 |
| United States | 545,574 | 914,847 | 943,775 | 937,575 | 1,226,588 | 1,224,503 |
| Bolivia | 5 | 53 | 53 | 163 | 199 | 161 |
| Brazil | 19 | 10 | 46 | 26 | — | — |
| Colombia | 31 | 3 | 4 | 3 | 3 | 7 |
| French Guiana | 224 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Peru | 8 | 86 | 74 | 91 | 2,420 | 3,439 |
| Surinam | 878 | 975 | 1,065 | <i>n.a.</i> | 1,000 | 1,001 |
| Uruguay | 31,139 | 57,484 | 47,603 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Burma | 325 | 1,080 | 1,557 | 957 | 1,779 | 1,451 |
| Indonesia | 6,288 | 84 | 85 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Iran (a) | 100 | — | 99 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Iraq | 43 | 40 | 1,606 | 90 | 377 | <i>n.a.</i> |
| Japan | 1,674,643 | 1,911,882 | 2,323,639 | 2,366,506 | 2,610,880 | 2,901,189 |
| Laos | <i>n.a.</i> | 675 | 2,234 | 1,341 | <i>n.a.</i> | <i>n.a.</i> |
| Lebanon | 6,270 | 4,421 | 5,493 | 5,109 | 1,876 | <i>n.a.</i> |
| Syria | 410 | 47 | <i>n.a.</i> | <i>n.a.</i> | 17,818 | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Crude | 7,259 | 2,943 | 8,931 | 3,971 | 582 | 553 |
| Refined | 485 | 170 | 704 | 4,235 | 239 | 147 |
| French Polynesia | 285 | 350 | 332 | 324 | 402 | — |
| New Caledonia | 449 | 444 | 411 | 446 | 419 | 474 |

(a) Years ended March 20 of year following that stated. (b) Former British Protectorate only.

SELENIUM
PRODUCTION OF SELENIUM

Lb. avdp.

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Northern Rhodesia (a) .. | 24,388 | 33,448 | 50,119 | 38,292 | 40,526 | 62,891 |
| Canada | 306,990 | 368,107 | 521,638 | 430,612 | 487,066 | 482,960 |
| OTHER COUNTRIES | | | | | | |
| Belgium (b) | 48,900 | 124,600 | 72,500 | 51,800 | 29,500 | 54,013 |
| Finland | 13,051 | 13,196 | 11,358 | 13,296 | 11,797 | 15,417 |
| Sweden | 84,135 | 133,170 | 176,880 | 213,471 | 155,060 | 156,222 |
| Mexico | 107,580 | 8,891 | 6,945 | 5,642 | 2,458 | 5,463 |
| United States (c) .. | 683,000 | 728,000 | 539,000 | 1,022,000 | 999,000 | 928,000 |
| Peru | 4,010 | 8,155 | 10,681 | 16,305 | 18,380 | 19,790 |
| Japan | 182,410 | 229,488 | 278,237 | 300,265 | 309,317 | 313,497 |
| WORLD'S TOTAL .. | 1,460,000 | 1,650,000 | 1,670,000 | 2,100,000 | 2,060,000 | 2,040,000 |

Selenium is also produced in Australia.

(a) Contained in copper slimes exported for treatment.

(b) Exports.

(c) Including selenium content of compounds and small quantities of secondary selenium.

EXPORTS OF SELENIUM

Lb. avdp.

| Exporting Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|---------|---------|---------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia and Nyasaland (a) | 24,388 | 33,448 | 50,119 | 38,292 | 40,526 | 62,891 |
| Canada (b) | 250,351 | 325,712 | 404,410 | 345,800 | 325,600 | 445,700 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U. | 48,900 | 124,600 | 72,500 | 51,800 | 29,500 | 54,013 |
| Germany (Federal) .. | 63,300 | 70,300 | 50,500 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Sweden | 117,000 | 161,000 | 165,000 | 157,000 | 110,000 | 194,000 |
| Mexico | 103,562 | — | — | — | — | — |
| Peru | 9,339 | 8,084 | 7,820 | 14,800 | 10,518 | 19,764 |
| Japan | 108,410 | 105,019 | 88,749 | 149,434 | 111,962 | 105,650 |

(a) Contained in copper slimes exported for treatment.

(b) Including salts.

IMPORTS OF SELENIUM

Lb. avdp.

| Importing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-------------|------------|------------|---------|---------|---------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 122,987 | 201,167 | 308,174 | 258,372 | 241,330 | 276,167 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U. | 2,400 | 2,000 | 44,300 | 1,800 | 12,600 | 2,866 |
| France | (b) 50,700 | (b) 50,500 | (b) 58,600 | 57,800 | 66,000 | 70,548 |
| Germany (Federal) .. | 141,800 | 162,500 | 248,200 | 261,200 | 160,300 | 230,383 |
| Italy | 16,676 | 24,700 | 47,000 | 46,500 | 50,706 | 46,738 |
| Sweden | <i>n.a.</i> | 4,000 | 68,000 | 75,000 | 18,000 | 2,200 |
| United States (a) .. | 204,311 | 273,929 | 171,574 | 127,482 | 160,389 | 339,000 |
| Argentina | <i>n.a.</i> | 7,760 | 8,314 | 7,641 | 12,613 | 5,719 |
| Brazil | 4,830 | 4,793 | 7,383 | 9,811 | 9,520 | 9,019 |
| Peru | 44 | 49 | 148 | 214 | 569 | 225 |

(a) Including salts.

(b) Including tellurium.

SILLIMANITE, Etc.

PRODUCTION OF SILLIMANITE, ETC.

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|--------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya— | | | | | | |
| Kyanite | — | 708 | 921 | — | — | — |
| Mullite | 536 | 755 | 344 | — | — | — |
| Southern Rhodesia— | | | | | | |
| Kyanite | — | — | — | — | — | 54 |
| India— | | | | | | |
| Kyanite | 25,615 | 16,238 | 19,838 | 26,726 | 48,834 | 31,165 |
| Sillimanite | 13,845 | 7,574 | 8,349 | 7,985 | 8,125 | 11,107 |
| Australia— | | | | | | |
| Kyanite, sillimanite and andalusite (a) .. | 1,696 | 3,633 | 1,524 | 1,787 | 2,637 | 3,515 |
| OTHER COUNTRIES | | | | | | |
| Cameroun— | | | | | | |
| Kyanite | — | — | — | 5 | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Andalusite | 13,024 | 3,343 | 9,154 | 6,934 | 18,048 | 9,850 |
| Sillimanite | 17,779 | 40,935 | 52,575 | 84,406 | 52,815 | 55,353 |
| South West Africa— | | | | | | |
| Kyanite | 2,665 | 2,896 | 1,284 | 2,679 | 1,488 | — |
| United States— | | | | | | |
| Kyanite (b) | 23,000 | 29,000 | 30,000 | 33,000 | 34,000 | 40,000 |
| Argentina— | | | | | | |
| Sillimanite | 20 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Korea (South)— | | | | | | |
| Andalusite | 1,218 | 2,177 | 241 | 502 | 450 | 657 |

(a) In addition the following amounts of kaolinised sillimanite were produced (long tons): 1958—1,823; 1959—1,969; 1960—2,401; 1961—1,608; 1962—1,681; 1963—3,325.

(b) Estimated. In addition the following amounts of synthetic mullite were produced (long tons): 1958—14,536; 1959—16,266; 1960—19,194; 1961—13,212; 1962—16,983; 1963—26,418.

EXPORTS OF SILLIMANITE, ETC.

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------|----------------|--------|----------------|--------|--------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya— | | | | | | |
| Kyanite and mullite .. | 536 | 1,787 | 1,750 | — | — | — |
| India— | | | | | | |
| Kyanite | 19,158 | 22,335 | 25,439 | 31,226 | 36,364 | 27,886 |
| Sillimanite | 9,458 | <i>r</i> 4,414 | 7,707 | <i>r</i> 5,406 | 4,819 | 5,376 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Kyanite, sillimanite, etc. | | | | | | |
| Crude | — | — | 14 | 22 | 183 | 505 |
| Calcined | 251 | 20 | 21 | 258 | 750 | 311 |

EXPORTS OF SILLIMANITE, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|--------|--------|--------|--------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Germany (Federal)— | | | | | | |
| Kyanite, sillimanite, etc. | | | | | | |
| Crude | <i>n.a.</i> | <i>n.a.</i> | 84 | 155 | 306 | 247 |
| Calcined | <i>n.a.</i> | <i>n.a.</i> | 21 | 3 | 5 | 13 |
| Italy— | | | | | | |
| Kyanite, sillimanite, etc. | | | | | | |
| Crude | — | 246 | 6 | } 54 | 298 | 215 |
| Calcined | — | 53 | 23 | | | |
| Netherlands— | | | | | | |
| Kyanite, sillimanite, etc. | <i>n.a.</i> | <i>n.a.</i> | 2,777 | 8,299 | 7,344 | 1,403 |
| South-West Africa— | | | | | | |
| Kyanite | 2,479 | 1,929 | 142 | 2,714 | 1,944 | — |
| South Africa— | | | | | | |
| Andalusite | 2,944 | 2,215 | 3,636 | 4,787 | 5,974 | 5,041 |
| Sillimanite | 18,318 | 35,484 | 45,595 | 86,849 | 39,552 | 37,571 |
| United States— | | | | | | |
| Kyanite, etc. .. . | 2,226 | 2,441 | 2,906 | 3,571 | 3,186 | 4,509 |

IMPORTS OF SILLIMANITE, ETC.*

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|------------|------------|--------|--------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Kyanite, sillimanite, etc. | (a) 15,900 | (a) 15,100 | 27,966 | 35,763 | 31,123 | 19,503 |
| Canada— | | | | | | |
| Kyanite, etc. .. . | 1,065 | 1,677 | 1,703 | 1,376 | 1,419 | 2,188 |
| Australia— | | | | | | |
| Kyanite | 500 | 15 | 546 | 1,045 | 9 | 870 |
| Sillimanite | 131 | 135 | 259 | 191 | 190 | 37 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Kyanite, sillimanite, etc. | | | | | | |
| Crude | 3,817 | 1,230 | 3,887 | 4,322 | 3,360 | 2,225 |
| Calcined | 778 | 544 | 1,001 | 1,717 | 1,193 | 1,554 |
| Germany— | | | | | | |
| Kyanite, sillimanite, etc. | | | | | | |
| Crude | 9,253 | 10,388 | 12,939 | 18,775 | 20,879 | 20,716 |
| Calcined | 98 | 74 | 59 | 325 | 819 | 400 |
| Italy— | | | | | | |
| Kyanite, sillimanite, etc. | | | | | | |
| Crude | 5,716 | 2,791 | 3,661 | } 6,829 | 11,257 | 11,828 |
| Calcined | 542 | 239 | 270 | | | |
| Netherlands— | | | | | | |
| Kyanite, sillimanite, etc. | <i>n.a.</i> | <i>n.a.</i> | 4,631 | 14,910 | 6,886 | 2,963 |
| United States— | | | | | | |
| Kyanite, sillimanite, etc. | 1,754 | 5,030 | 5,403 | 4,835 | 4,715 | 2,343 |
| Japan— | | | | | | |
| Kyanite, sillimanite, etc. | (a) 7,900 | (a) 25,000 | (a) 23,700 | (a) 38,700 | 18,638 | 18,258 |
| Thailand— | | | | | | |
| Kyanite, sillimanite, etc. | <i>n.a.</i> | <i>n.a.</i> | 597 | 467 | 373 | 550 |

*These minerals are not separately recorded in the trade returns of several countries.

(a) Figures represent exports from certain producing countries only and are not necessarily complete.

SILVER
PRODUCTION OF SILVER
(Metal content)

Fine troy ounces

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 20,553 | 13,355 | 7,098 | 4,744 | 514 | n.a. |
| Bechuanaland Protectorate | 44 | 41 | 25 | 39 | 33 | 21 |
| Ghana (a) | 45,762 | 16,839 | 14,160 | 7,027 | 4,443 | 4,827 |
| Kenya | 44,146 | 46,420 | 35,797 | 40,731 | 50,160 | 52,422 |
| Northern Rhodesia (b) | 558,535 | 937,678 | 920,601 | 738,558 | 697,054 | 883,681 |
| Southern Rhodesia | 264,630 | 328,947 | 392,026 | 106,801 | 83,540 | 83,741 |
| Swaziland | — | — | 58 | 103 | 132 | 120 |
| Tanganyika | (d) 737,578 | (d) 535,366 | (d) 595,357 | (d) 64,001 | 24,463 | 22,249 |
| Uganda (a) | 37 | 54 | 109 | 70 | 38 | 9 |
| Canada | 31,163,470 | 31,923,969 | 34,016,829 | 31,381,977 | 30,422,972 | 30,739,429 |
| India | 109,800 | 124,800 | 132,700 | 191,000 | 138,700 | 128,300 |
| Australia | 16,339,812 | 15,160,631 | 15,215,956 | 13,059,166 | 17,553,691 | 19,580,823 |
| Fiji | 25,342 | 23,652 | 31,319 | 37,712 | 38,936 | 47,000 |
| New Guinea | 25,065 | 36,830 | 33,060 | 30,246 | 24,511 | 23,695 |
| New Zealand | 2,339 | 4,873 | 1,353 | 805 | 416 | 286 |
| TOTAL | 49,338,000 | 49,154,000 | 51,396,000 | 45,663,000 | 49,040,000 | 51,567,000 |
| OTHER COUNTRIES | | | | | | |
| Czechoslovakia (e) | 1,600,000 | 1,600,000 | 1,600,000 | 1,600,000 | 1,600,000 | 1,600,000 |
| Finland | 560,709 | 522,739 | 390,374 | 456,155 | 380,495 | 579,967 |
| France | 770,270 | 944,750 | 1,039,900 | 1,128,800 | 898,970 | 820,000 |
| Germany (Federal) | 2,112,304 | 1,897,700 | 1,842,600 | 1,879,400 | 1,957,600 | 2,067,300 |
| Germany (East) (e) | 4,800,000 | 4,800,000 | 4,800,000 | 4,800,000 | 4,800,000 | 4,800,000 |
| Greece | 99,410 | 150,300 | 105,500 | 113,400 | 140,000 | 160,000 |
| Italy | 1,020,700 | 894,500 | 845,400 | 874,900 | (e) 800,000 | (e) 640,000 |
| Portugal | 45,783 | 54,140 | 52,920 | 48,260 | 52,920 | 48,420 |
| Roumania (e) | 600,000 | 600,000 | 600,000 | 600,000 | 600,000 | 600,000 |
| Spain | 1,774,900 | 2,206,700 | 1,739,700 | 4,526,600 | 5,684,120 | 4,955,200 |
| Sweden | 2,944,300 | 3,098,100 | 2,756,000 | 2,949,800 | 3,367,300 | 3,582,200 |
| Yugoslavia (h) | 3,751,700 | 2,827,300 | 3,024,800 | 3,454,080 | 3,750,930 | 3,791,920 |
| Algeria (g) | 225,000 | 400,000 | 300,000 | 300,000 | 280,000 | 260,000 |
| Congo Republic | 3,794,000 | 4,768,180 | 3,962,840 | 3,457,880 | 1,595,500 | 1,097,200 |
| Morocco | 2,411,000 | 1,234,303 | 1,097,273 | 907,905 | 826,338 | 772,743 |
| Mozambique | — | — | 44 | 22 | 13 | — |
| South Africa | 1,795,384 | 2,020,780 | 2,226,204 | 2,288,279 | 2,549,206 | 2,736,868 |
| South West Africa (c) | 1,395,110 | 1,740,568 | 1,061,033 | 1,061,043 | 1,468,932 | 1,312,670 |
| Tunisia | 135,194 | 43,339 | 34,400 | 69,767 | 24,600 | 9,030 |
| Cuba (i) | 325,278 | 215,000 | 121,415 | — | — | — |
| Guatemala | 320,621 | (f) 88,000 | 663,121 | 515,905 | (f) 32,400 | (f) 64,200 |
| Honduras | 2,762,932 | 3,167,376 | 2,947,021 | 3,544,702 | 2,479,658 | n.a. |
| Mexico | 47,592,360 | 44,075,452 | 44,526,460 | 40,350,000 | 41,220,000 | 42,760,000 |
| Nicaragua | 304,277 | 274,993 | 326,673 | 417,253 | 500,050 | 405,252 |

(a) Exports.

(b) Recovered from copper-refinery slimes.

(c) Accounted for by smelters.

(d) Including silver in lead concentrates exported amounting to 719,250; 512,728; 572,428 and 38,372 fine troy ounces in 1958; 1959; 1960 and 1961 respectively.

(e) "Metallgesellschaft" estimate.

(h) Refined.

(f) United States Bureau of Mines' estimate.

(i) Imports into the United States from Cuba.

(g) Estimated.

PRODUCTION OF SILVER (cont.)

Fine troy ounce

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|--------------------|---------------------|---------------------|---------------------|--------------------|--------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Salvador | 197,629 | 199,080 | 76,809 | — | — | — |
| United States | 34,111,027 | 31,194,006 | 30,766,327 | 34,794,456 | 36,798,000 | 35,243,000 |
| Argentina | 1,543,200 | 1,549,600 | 1,671,838 | 1,430,675 | 1,318,150 | 1,546,160 |
| Bolivia (b) | 6,051,284 | 4,504,126 | 4,887,138 | 3,901,010 | 3,759,129 | 4,869,037 |
| Brazil | 185,313 | 225,152 | 252,930 | 231,900 | 219,558 | <i>n.a.</i> |
| Chile | 1,901,900 | 2,021,800 | 1,741,400 | 1,734,600 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia | 105,162 | 102,678 | 134,331 | 127,943 | 131,599 | 106,280 |
| Ecuador | 46,100 | 162,600 | 126,400 | 101,200 | 127,700 | 121,800 |
| Peru (d) | 25,918,353 | 27,225,216 | 30,755,496 | 34,161,710 | 32,930,780 | 36,447,110 |
| Burma | 1,487,264 | 1,969,954 | 1,984,263 | 1,743,302 | 1,443,605 | <i>n.a.</i> |
| China (a) | 600,000 | 800,000 | 800,000 | 800,000 | 800,000 | 800,000 |
| Formosa | 52,320 | 60,900 | 52,600 | 77,300 | 80,100 | 61,400 |
| Indonesia | <i>n.a.</i> | 333,050 | 310,512 | 324,079 | 248,236 | (c) 200,000 |
| Japan | 6,552,032 | 6,650,930 | 6,912,600 | 7,960,200 | 8,650,000 | 8,810,000 |
| Korea (South) | 247,788 | 241,900 | 329,640 | 460,430 | 412,910 | 444,000 |
| Korea (North) (a) | 400,000 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 |
| Philippine Republic | 497,987 | 504,085 | 1,133,343 | 812,793 | 675,570 | 767,249 |
| TOTAL* | 161,000,000 | r156,000,000 | r159,000,000 | r165,000,000 | 165,000,000 | 170,000,000 |
| WORLD'S TOTAL* | 210,000,000 | r205,000,000 | r210,000,000 | 210,000,000 | 214,000,000 | 221,000,000 |

*Totals exclude estimates for the U.S.S.R. for which no authentic figures are available. (In recent years Russian production has been estimated by the United States Bureau of Mines as 25-27,000,000 troy ounces.) An allowance, however, has been made for those other countries for which information is not yet available.

(a) "Metallgesellschaft" estimate.

(b) Exports.

(c) United States Bureau of Mines' estimate.

(d) Recoverable.

EXPORTS OF SILVER*
(Metal content)

Fine troy ounces

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|------------|------------|------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Bullion | 12,390,683 | 10,177,065 | 6,316,238 | 11,394,246 | 19,794,688 | 15,886,206 |
| Ghana— | | | | | | |
| Bullion | 45,762 | 16,839 | 14,160 | 7,027 | 4,443 | 4,827 |
| Kenya— | | | | | | |
| Refined bullion.. | 44,146 | 46,411 | 33,865 | 37,836 | 46,304 | 44,114 |
| Rhodesia and Nyasaland— | | | | | | |
| Bullion | 75,200 | 311,688 | 76,096 | 132,547 | 83,913 | 85,077 |
| Tanganyika— | | | | | | |
| Concentrates .. | 719,250 | 512,728 | 572,428 | 38,372 | — | — |
| Refined bullion.. | 18,552 | 22,818 | 23,053 | 25,860 | 23,959 | 22,521 |
| Uganda— | | | | | | |
| Bullion | 37 | 54 | 109 | 70 | 38 | 9 |
| Canada— | | | | | | |
| Ore, concentrates, etc. | 5,098,788 | 6,814,865 | 8,897,402 | 10,352,700 | 8,801,332 | 8,286,756 |
| Bullion | 16,026,550 | 15,140,830 | 12,761,063 | 10,783,414 | 9,445,094 | 10,834,629 |
| Hong Kong— | | | | | | |
| Bullion | 677,000 | 434,000 | 489,000 | 442,000 | 683,000 | 1,429,000 |
| Malaya— | | | | | | |
| Bullion | 777,000 | 1,023,000 | 1,087,500 | 703,000 | 2,299,000 | 1,735,000 |
| Australia (a)— | | | | | | |
| Ores and concentrates | 2,794,100 | 2,495,782 | 2,362,204 | 2,723,394 | 2,748,415 | 3,045,752 |
| Silver-lead bullion .. | 3,991,803 | 4,775,248 | 3,941,164 | 4,299,192 | 3,260,286 | 5,233,426 |
| Bullion, refined .. | 3,040,383 | 3,500,045 | 3,404,372 | 1,756,486 | 732,480 | 239,166 |
| do. unrefined .. | 8,790 | — | — | — | — | — |
| Beaten, rolled or drawn | 29,651 | 40,254 | 12,660 | 88,141 | 7,005 | 4,429 |
| Fiji— | | | | | | |
| Bullion | 9,368 | 6,007 | 19,652 | — | 1,840 | 2,560 |
| New Guinea (a)— | | | | | | |
| Bullion | 34,534 | 23,864 | 40,733 | 28,961 | 27,438 | n.a. |
| Irish Republic— | | | | | | |
| Bullion | 14,500 | 10,500 | 7,700 | 9,400 | n.a. | n.a. |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bullion and scrap .. | 4,315,000 | 11,545,000 | 11,358,000 | 6,337,000 | 8,198,000 | 10,510,000 |
| Denmark— | | | | | | |
| Bullion | 48,000 | 50,000 | 55,000 | 54,000 | 40,000 | 15,000 |
| Beaten, rolled or drawn | 2,000 | 2,000 | 16,000 | 2,000 | — | 1,000 |
| France— | | | | | | |
| Bullion and scrap .. | 2,334,000 | 1,454,000 | 1,359,000 | 937,000 | 3,880,000 | 1,751,000 |
| Beaten, rolled or drawn | 358,000 | 456,000 | 799,000 | 693,000 | 557,000 | 1,096,000 |
| Germany (Federal)— | | | | | | |
| Bullion | 13,866,000 | 15,829,000 | 14,872,000 | 18,621,000 | 19,377,000 | 21,873,000 |
| Italy— | | | | | | |
| Bullion and scrap .. | 57,000 | — | 3,000 | n.a. | n.a. | n.a. |
| Netherlands— | | | | | | |
| Bullion and scrap .. | 4,949,000 | 1,680,000 | 631,000 | 646,000 | 2,673,000 | 1,432,000 |
| Beaten, rolled or drawn | 508,000 | 416,000 | 381,000 | 304,000 | 295,000 | 233,000 |
| Spain— | | | | | | |
| Bullion | 780,000 | 2,588,000 | 322,000 | — | — | — |
| Sweden— | | | | | | |
| Bullion | 1,983,000 | 1,213,000 | 997,000 | 1,382,000 | 1,591,000 | 1,222,000 |

*Excluding silver coin, but including silver shipped for minting.

(a) Years ended June 30 of that stated.

EXPORTS OF SILVER (cont.)

Fine troy ounces

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Switzerland— | | | | | | |
| Bullion | 331,000 | 72,000 | 38,000 | 107,000 | 362,000 | 470,000 |
| Yugoslavia— | | | | | | |
| Bullion | 2,032,000 | 1,901,000 | 2,293,000 | 2,572,000 | 2,850,000 | 2,572,000 |
| Congo Republic— | | | | | | |
| Bullion | 39,000 | 30,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Morocco— | | | | | | |
| Bullion | 200 | — | — | 2,000 | — | 5,000 |
| South Africa— | | | | | | |
| Bullion | 1,125,205 | 1,860,220 | 1,570,306 | 1,629,320 | 2,120,592 | <i>n.a.</i> |
| South West Africa— | | | | | | |
| Concentrates (b) .. | 1,719,990 | 1,966,995 | 1,004,920 | 1,833,437 | 1,253,200 | 634,134 |
| Guatemala (a)— | | | | | | |
| Ore and base bullion .. | 189,000 | 2,000 | — | 142,000 | <i>n.a.</i> | <i>n.a.</i> |
| Honduras— | | | | | | |
| Ore and base bullion .. | 2,762,932 | 2,792,165 | 2,584,984 | 3,327,020 | 2,905,530 | 4,556,000 |
| Cuba (a)— | | | | | | |
| Bullion, etc. | 325,000 | 215,000 | 121,000 | — | — | <i>n.a.</i> |
| Mexico— | | | | | | |
| Bullion, etc. | 36,372,000 | 38,889,000 | 34,430,000 | 30,775,000 | 33,545,000 | 46,127,000 |
| Nicaragua— | | | | | | |
| Bullion | 283,000 | 237,000 | 212,000 | 241,000 | 288,134 | 203,514 |
| Salvador— | | | | | | |
| Bullion | 192,000 | 182,000 | 78,000 | — | — | 3,400 |
| United States— | | | | | | |
| Ore and base bullion .. | 1,640,000 | 103,000 | 291,000 | 653,717 | 770,000 | 1,298,000 |
| Refined bullion | 1,093,000 | 9,077,000 | 26,302,000 | 39,173,558 | 12,287,000 | 30,187,000 |
| Argentina— | | | | | | |
| Bullion, etc. | 590,000 | 522,000 | 641,000 | 70,000 | 786,000 | 731,000 |
| Bolivia— | | | | | | |
| Ores, etc. | 6,051,284 | 4,504,126 | 4,887,138 | 3,901,010 | 3,759,129 | 4,869,037 |
| Chile— | | | | | | |
| Ores, etc. | 1,399,052 | 1,568,503 | 1,319,804 | 2,004,068 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Bullion and scrap .. | 391,000 | — | 126,000 | — | — | — |
| Ecuador (a)— | | | | | | |
| Ore and base bullion .. | 63,000 | 107,000 | 94,000 | 62,000 | 70,000 | <i>n.a.</i> |
| Peru— | | | | | | |
| Ores and concentrates | 12,537,472 | 14,502,819 | 15,511,489 | 15,399,592 | 14,387,584 | 14,166,621 |
| Bullion | 11,473,233 | 11,857,528 | 13,875,412 | 17,446,202 | 19,620,308 | 17,000,000 |
| Matte, slag, etc. .. | 376,985 | 501,518 | 400,750 | 437,971 | 380,721 | 500,674 |
| Burma— | | | | | | |
| Bullion | 1,289,738 | 1,822,709 | 1,525,295 | 1,195,970 | 1,400,129 | 1,250,912 |
| Japan— | | | | | | |
| Bullion and scrap .. | 174,000 | 24,000 | 10,000 | 12,000 | (c) 386,000 | (c) 94,000 |
| Philippine Republic (a)— | | | | | | |
| Ore and base bullion .. | 263,000 | 158,000 | 2,195,000 | 602,000 | 359,000 | 403,000 |

(a) Imports into the United States from the country stated.

(b) Contained in lead complex concentrates exported.

(c) Including "beaten, rolled or drawn".

TOTAL IMPORTS OF SILVER*

(Metal content)

Fine troy ounces

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|------------|------------|------------|------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ores | 5,586,000 | 4,249,000 | 4,001,000 | 3,529,000 | 3,730,969 | 4,614,344 |
| Unrefined bullion .. | 1,720,751 | 1,593,867 | 1,546,202 | 957,994 | 2,295,008 | 1,069,413 |
| Refined bullion .. | 11,560,848 | 16,831,670 | 27,279,961 | 64,845,184 | 37,781,500 | 20,353,712 |
| Malta— | | | | | | |
| Bullion | 11,200 | 10,200 | 7,100 | 6,200 | 8,404 | 7,792 |
| Ghana— | | | | | | |
| Bullion | 23,959 | 16,475 | 32,025 | 20,499 | 36 | 6,368 |
| Nigeria— | | | | | | |
| Bullion, etc. .. . | 5,329 | 45,337 | 32,189 | 562 | 13,737 | 19,363 |
| Sierra Leone— | | | | | | |
| Bullion | 160 | — | 2,305 | 4,349 | 3,450 | 6,936 |
| Zanzibar— | | | | | | |
| Bullion | 3 | — | — | — | — | — |
| Canada— | | | | | | |
| Bullion | 2,701 | 2,807,774 | 3,849,115 | 12,278,469 | 15,182,336 | 7,949,829 |
| Jamaica— | | | | | | |
| Bullion | 1,500 | 2,200 | — | 1,800 | 1,500 | 1,000 |
| Trinidad and Tobago— | | | | | | |
| Bullion | 8,481 | 12,564 | 9,306 | 9,480 | 15,062 | <i>n.a.</i> |
| British Guiana— | | | | | | |
| Bullion | 2,400 | 2,000 | 4,100 | 3,700 | 2,656 | <i>n.a.</i> |
| Ceylon— | | | | | | |
| Bullion | 5,000 | 14,500 | 7,600 | — | 19,800 | 18,000 |
| Cyprus— | | | | | | |
| Bullion | 36,300 | 57,000 | 52,000 | 55,000 | 60,500 | 62,400 |
| Hong Kong— | | | | | | |
| Bullion | 18,000 | 60,000 | 24,000 | 26,000 | 26,000 | 86,000 |
| India— | | | | | | |
| Bullion | 2,002 | 4,079 | (b) 37,500 | (b) 70,500 | (b) 44,000 | (b) 33,070 |
| Malaya— | | | | | | |
| Bullion | 1,000 | — | 5,200 | 1,100 | 1,700 | 2,900 |
| Sarawak— | | | | | | |
| Bullion | 650 | 160 | — | — | — | 15 |
| Australia (a)— | | | | | | |
| Matte | — | — | — | 11,609 | 25,203 | 5,635 |
| Bullion | 87,638 | 63,279 | 89,814 | 65,540 | 64,749 | 93,876 |
| Beaten, rolled or drawn | — | — | 197 | 340 | 5,429 | 12,850 |
| New Zealand— | | | | | | |
| Bullion | 58,895 | 62,072 | 70,158 | 19,079 | 71,901 | <i>n.a.</i> |
| Beaten, rolled or drawn | 6,200 | 9,000 | 13,000 | 22,600 | 871,608 | <i>n.a.</i> |
| Irish Republic— | | | | | | |
| Bullion | — | 1,400 | — | — | — | — |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Bullion | 5,255,000 | 3,069,000 | 954,000 | 4,065,000 | 1,893,000 | 6,086,000 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Bullion and scrap .. | 1,477,000 | 1,692,000 | 2,620,000 | 4,511,000 | 6,406,000 | 6,768,000 |
| Denmark— | | | | | | |
| Bullion | 1,473,000 | 1,360,000 | 1,269,000 | 1,045,000 | 1,122,000 | 665,000 |
| Beaten, rolled or drawn | 1,250,000 | 1,662,000 | 1,799,000 | 2,074,000 | 2,201,000 | 2,385,000 |
| Finland— | | | | | | |
| Bullion, etc. .. . | 766,000 | 660,000 | 723,000 | 354,000 | 15,000 | 859,000 |

*Excluding silver coin, but including silver shipped for minting.

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

IMPORTS OF SILVER (cont.)

Fine troy ounces

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|------------|-------------|-------------|--------------|--------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| France— | | | | | | |
| Bullion and scrap .. | 11,380,000 | 19,094,000 | 26,526,000 | 12,856,000 | 18,813,000 | 24,732,000 |
| Beaten, rolled or drawn | 143,000 | 157,000 | 275,000 | 502,000 | 287,000 | 810,000 |
| Germany (Federal)— | | | | | | |
| Bullion | 30,093,000 | 30,455,000 | 35,109,000 | 44,001,000 | 39,554,000 | 40,895,000 |
| Italy— | | | | | | |
| Bullion and scrap .. | 5,055,000 | 7,244,000 | 8,979,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Netherlands— | | | | | | |
| Bullion and scrap .. | 1,234,000 | 2,780,000 | 1,308,000 | 1,847,000 | 4,600,000 | 3,326,000 |
| Beaten, rolled or drawn | 134,000 | 395,000 | 779,000 | 847,000 | 775,000 | 814,000 |
| Norway— | | | | | | |
| Bullion | 691,000 | 864,000 | 988,000 | 919,000 | 830,000 | 629,000 |
| Beaten, rolled or drawn | 1,210,000 | 1,207,000 | 1,290,000 | 1,364,000 | 1,282,000 | 867,000 |
| Portugal— | | | | | | |
| Bullion and scrap .. | 3,272,000 | 2,559,000 | 2,808,000 | 1,360,000 | 1,283,000 | 1,021,000 |
| Beaten, rolled and drawn | 22,000 | 19,000 | 22,000 | 24,000 | 90,000 | 45,000 |
| Sweden— | | | | | | |
| Bullion | 481,000 | 354,000 | 643,000 | 354,000 | 386,000 | 450,000 |
| Switzerland— | | | | | | |
| Bullion | 5,173,000 | 3,041,000 | 3,792,000 | 12,582,000 | 6,122,000 | 10,266,000 |
| Algeria— | | | | | | |
| Bullion and scrap .. | 100,000 | 64,000 | 38,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Beaten, rolled or drawn | 122,000 | 100,000 | 114,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Congo Republic— | | | | | | |
| Bullion | 48,000 | 67,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt— | | | | | | |
| Bullion and scrap .. | 3,000 | 2,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— | | | | | | |
| Bullion | — | 38,000 | — | 52,000 | — | <i>n.a.</i> |
| Guatemala— | | | | | | |
| Bullion | 323,000 | 330,000 | 162,000 | 304,000 | 311,000 | <i>n.a.</i> |
| United States— | | | | | | |
| Ore and base bullion .. | 134,650,000 | 39,759,000 | 43,404,000 | 34,558,974 | 37,168,000 | 41,660,000 |
| Refined bullion | 31,316,000 | 29,329,000 | 17,253,000 | 15,697,216 | 39,191,000 | 17,402,000 |
| Brazil— | | | | | | |
| Bullion | 345,000 | 313,000 | 500,000 | 1,007,000 | 1,076,000 | 1,195,000 |
| Colombia— | | | | | | |
| Bullion and scrap .. | — | 9,000 | 122,000 | 36,000 | 19,000 | 50,000 |
| Japan— | | | | | | |
| Bullion and scrap .. | 100 | 1,426,000 | 6,834,000 | 3,826,000 | (a)3,402,000 | (a)4,704,000 |
| Lebanon— | | | | | | |
| Bullion and scrap .. | 8,500 | 6,500 | 74,000 | 6,400 | 89,200 | <i>n.a.</i> |
| Turkey— | | | | | | |
| Bullion, etc. | — | 5,000 | 36,000 | 10,000 | 64,000 | 6,000 |

(a) Including "beaten, rolled or drawn".

STRONTIUM MINERALS

PRODUCTION OF STRONTIUM MINERALS

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------------|-------------|-------------|--------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Celestite | 5,600 | 6,000 | 6,604 | 8,679 | 6,532 | 9,019 |
| Pakistan (b)— | | | | | | |
| Celestite | <i>r</i> 457 | 664 | 1,332 | <i>r</i> 414 | 288 | 379 |
| OTHER COUNTRIES | | | | | | |
| Italy— | | | | | | |
| Celestite | 628 | 315 | 817 | 1,053 | 589 | <i>n.a.</i> |
| Morocco— | | | | | | |
| Strontium minerals .. | 1,004 | 389 | — | — | — | — |
| Mexico (a)— | | | | | | |
| Celestite | 2,135 | 2,269 | 2,650 | 2,488 | 4,202 | 6,092 |
| Argentina— | | | | | | |
| Celestite | 214 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

Strontium minerals are also known to have been produced in Germany and the United States.

(a) Exports.

(b) West Pakistan.

EXPORTS OF STRONTIUM MINERALS, ETC.

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------|-------|-------|-------|-------|-------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Celestite | 4,345 | 4,879 | 4,935 | 5,943 | 3,523 | 9,437 |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Oxide | — | 5 | 1 | 2 | 2 | 2 |
| Italy— | | | | | | |
| Strontianite and celestite | — | 20 | 242 | 285 | 90 | 89 |
| Mexico— | | | | | | |
| Celestite | 2,135 | 2,269 | 2,650 | 2,488 | 4,202 | 6,092 |

IMPORTS OF STRONTIUM MINERALS, ETC.

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------|-------|-------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| Germany (Federal)— | | | | | | |
| Strontianite and celestite | 317 | 446 | 280 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| United States— | | | | | | |
| Strontianite and celestite | 5,970 | 7,267 | 5,523 | 8,867 | 6,687 | 14,493 |
| Strontium compounds .. | 5 | 1 | — | — | — | 4 |

SULPHUR

(see also Pyrites)

PRODUCTION OF SULPHUR

Long tons

| Producing Country and Description | Estimated Sulphur Content | | | | | | 1963 |
|---|---------------------------|-----------|-----------|-----------|-----------|-----------|---------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | |
| COMMONWEALTH COUNTRIES | | | | | | | |
| United Kingdom— | | | | | | | |
| Sulphur content of zinc concentrates .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Spent oxide .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Anhydrite (a) .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Other (b) .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Canada— | | | | | | | |
| Smelter gas .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Hydrogen sulphide (†) (g) | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Trinidad (f) .. | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 7,000 | 7,000 |
| Australia— | | | | | | | |
| Sulphur contents of: zinc concentrates .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| lead concentrates .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Spent oxide .. | 12,857 | 10,495 | 10,309 | 7,334 | 6,838 | 397 | n.a. |
| OTHER COUNTRIES | | | | | | | |
| Bulgaria (c) .. | 2,800 | 4,000 | 5,000 | 5,000 | 6,000 | (h) 6,000 | 6,000 |
| France— | | | | | | | |
| Sulphur (d) .. | 126,670 | 428,024 | 779,000 | 1,088,000 | 1,326,000 | 1,396,000 | 50,000 |
| Finland (c) .. | — | — | — | — | — | — | — |
| Germany (Federal)— | | | | | | | |
| Refined sulphur .. | 75,565 | 78,474 | 82,807 | 82,860 | 89,234 | 84,949 | 84,949 |
| Germany (East)— | | | | | | | |
| Sulphur .. | 104,679 | 106,153 | 110,130 | 115,451 | 118,559 | 117,980 | 117,980 |
| Italy— | | | | | | | |
| Sulphur rock .. | 1,488,904 | 1,408,842 | 1,256,193 | 1,200,404 | 1,049,354 | n.a. | n.a. |
| Fused (e) .. | 161,320 | 116,252 | 78,318 | 68,668 | 53,067 | 41,128 | 41,128 |
| Ground sulphur rock (e) | 18,619 | 21,139 | 25,361 | 17,567 | 23,216 | 28,059 | 8,000 |

(a) For sulphuric acid manufacture only.

(b) Including sulphur recovered from petroleum refineries.

(c) Sulphur recovered from pyrites or other sulphide ores.

(d) Recovered from natural gas.

(e) Derived from sulphur rock above.

(f) Recovered from petroleum refineries. Estimated.

(g) Sales.

(h) United States Bureau of Mines' estimate.

(i) Recovered from natural gas and nickel sulphide.

PRODUCTION OF SULPHUR (cont.)

Long tons

| Producing Country and Description | Estimated Sulphur Content | | | | | | | | | | | |
|--|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|-----------|-----------|-----------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | |
| Netherlands (i) | 20,800 | 30,700 | 30,000 | 38,000 | 28,000 | 33,000 | 20,800 | 30,700 | 30,000 | 38,000 | 28,000 | 33,000 |
| Norway (i) | 89,126 | 77,111 | 71,256 | 61,157 | 45,204 | — | 89,027 | 77,034 | 71,178 | 61,090 | 45,158 | — |
| Poland— | | | | | | | | | | | | |
| Native sulphur | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 9,200 | 10,500 | 25,000 | r 227,000 | 337,000 | 303,300 |
| Portugal (i) | 17,373 | 15,888 | 10,915 | 8,813 | 6,677 | 3,000 | 17,147 | 15,682 | 10,773 | 8,698 | 6,590 | 3,000 |
| Spain— | | | | | | | | | | | | |
| Native sulphur | 27,435 | 25,922 | 16,691 | — | — | — | 3,055 | 2,851 | 1,336 | — | — | — |
| Refined sulphur (h) | 25,251 | 25,719 | 40,194 | 48,323 | 41,836 | 68,036 | 25,251 | 25,719 | 40,194 | 48,323 | 41,836 | 68,036 |
| Sweden— | | | | | | | | | | | | |
| Sulphur (d) | 33,465 | 34,900 | 38,300 | 30,491 | 29,900 | n.a. | 33,465 | 34,900 | 38,300 | 30,491 | 29,900 | n.a. |
| U.S.S.R. (d) | | | | | | | | | | | | |
| Native sulphur | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 400,000 | 600,000 | 800,000 | 900,000 | 950,000 | 950,000 |
| By-product sulphur | n.a. | 180,000 | 210,000 | 275,000 | 370,000 | 400,000 | n.a. | 180,000 | 210,000 | 275,000 | 370,000 | 400,000 |
| Egypt— | | | | | | | | | | | | |
| Native sulphur | 7,127 | 6,013 | 18,000 | 44,692 | 21,623 | n.a. | 900 | 800 | 2,300 | 5,000 | 2,000 | n.a. |
| By-product sulphur (a) | 2,901 | 2,600 | 2,369 | 2,546 | 2,072 | 2,355 | 2,901 | 2,600 | 2,369 | 2,546 | 2,072 | 2,355 |
| South Africa— | | | | | | | | | | | | |
| By-product sulphur (a) | — | — | — | 2,163 | 1,913 | 1,981 | — | — | — | 2,163 | 1,913 | 1,981 |
| Mexico— | | | | | | | | | | | | |
| Crude sulphur (f) | 1,223,055 | 1,293,187 | 1,261,570 | 1,148,494 | 1,350,375 | 1,456,656 | 1,223,055 | 1,293,187 | 1,261,570 | 1,148,494 | 1,350,375 | 1,456,656 |
| Sulphur ore (g) | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 35,446 | (d) 17,700 | (d) 17,700 | 25,116 | 26,751 | 28,968 |
| Refined sulphur (e) | 27,837 | 47,454 | r 45,025 | r 51,086 | 46,545 | 43,308 | 27,837 | 47,454 | 45,025 | 51,086 | 46,545 | 43,308 |
| United States— | | | | | | | | | | | | |
| Crude sulphur (f) | 4,643,243 | 4,553,634 | 4,942,935 | 5,385,468 | 4,984,578 | 4,881,512 | 4,643,243 | 4,553,634 | 4,942,935 | 5,385,468 | 4,984,578 | 4,881,512 |
| Sulphur ore (g) | 6,292 | 331,237 | 379,067 | 400,015 | 162,186 | 1,371 | 2,334 | 86,182 | 94,357 | 92,025 | 40,840 | 415 |
| Smelter gas (b) | — | — | — | — | — | — | — | — | — | — | — | — |
| Smelter gas (b) | 1,101,754 | 969,678 | 1,056,890 | 1,016,731 | 1,088,397 | 1,089,523 | 359,723 | 316,600 | 345,075 | 331,963 | 355,362 | 355,730 |
| By-product sulphur (c) | 641,890 | 688,487 | 769,319 | 861,413 | 902,124 | 949,567 | 640,096 | 688,407 | 766,566 | 858,109 | 899,598 | 946,753 |
| Hydrogen sulphide and liquid sulphur dioxide (c) | 106,527 | 104,887 | 114,359 | 126,923 | 115,670 | 136,509 | 92,400 | 88,046 | 95,395 | 106,335 | 97,787 | 115,826 |

(a) Recovered from petroleum refineries.

(b) Estimated sulphur content of gas driven off in the smelting of lead, zinc and copper concentrates, recovered as sulphuric acid.

(c) Produced in treatment of industrial gases.

(d) United States Bureau of Mines' estimate.

(e) Recovered from natural gas.

(f) Frasch-process mines.

(g) Other mines.

(h) Derived partly from sulphur rock above but in the main recovered from pyrites.

(i) Sulphur recovered from pyrites or other sulphide ores.

PRODUCTION OF SULPHUR (cont.)

Long tons

| Producing Country and Description | Estimated Sulphur Content | | | | | | |
|-----------------------------------|---------------------------|---------|---------|---------|---------|---------|---------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1963 |
| OTHER COUNTRIES (cont.) | | | | | | | |
| Argentina— | | | | | | | |
| Refined sulphur .. | 25,221 | 25,207 | 39,261 | 22,445 | 26,376 | 22,141 | 22,141 |
| Bolivia (f)— | | | | | | | |
| Refined sulphur .. | 392 | — | 1,175 | 4,897 | 7,247 | 9,793 | 9,793 |
| Chile— | | | | | | | |
| Smelter gases, etc. (g) .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 7,700 |
| Refined sulphur .. | n.a. | 14,069 | 30,901 | 43,994 | 63,226 | 40,271 | 40,100 |
| Colombia— | | | | | | | |
| Refined sulphur .. | 6,690 | 9,000 | 9,000 | 9,900 | 10,046 | 13,000 | 13,000 |
| China (c)— | | | | | | | |
| Native sulphur .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 120,000 |
| Recovered sulphur (d) .. | 100,000 | 100,000 | 120,000 | 120,000 | 120,000 | 120,000 | 120,000 |
| Formosa— | | | | | | | |
| Refined sulphur .. | 6,178 | 5,533 | 5,725 | 5,472 | 7,462 | 7,945 | 7,945 |
| Iran— | | | | | | | |
| Native sulphur .. | 10,354 | 10,300 | n.a. | n.a. | n.a. | n.a. | n.a. |
| By-product sulphur (a)(c) .. | 12,800 | 20,000 | 20,000 | 20,000 | 15,000 | 20,000 | 20,000 |
| Japan— | | | | | | | |
| Refined sulphur (e) .. | 178,052 | 215,668 | 243,683 | 238,562 | 219,000 | 218,000 | 218,000 |
| By-product sulphur (a) .. | 7,889 | 7,829 | 8,326 | 8,163 | 8,549 | 11,429 | 11,429 |
| Philippine Republic (b) .. | n.a. | — | n.a. | n.a. | n.a. | n.a. | n.a. |
| Turkey— | | | | | | | |
| Refined sulphur .. | 12,622 | 13,174 | 16,830 | 15,506 | 18,246 | 19,123 | 19,104 |

Sulphur is also produced in the Netherlands Antilles and Iraq.

(d) Probably recovered from pyrites.

(a) Recovered from petroleum refineries.

(e) From sulphur rock and sulphide ores.

(b) Including sulphur recovered from gold and silver mines.

(f) Exports.

(c) United States Bureau of Mines' estimate.

(g) Sulphur contained in sulphuric acid.

EXPORTS OF SULPHUR

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 1,511 | 3,145 | 4,148 | 3,978 | 1,738 | 2,045 |
| Canada | 6,792 | 23,684 | 127,715 | 194,523 | 357,166 | 732,972 |
| Hong Kong | 197 | 148 | 122 | 138 | 163 | 170 |
| Malaya | 1 | 25 | 43 | 36 | 3 | 26 |
| Australia— | | | | | | |
| Zinc concentrates | | | | | | |
| <i>(S content) (a)</i> | 67,100 | 49,500 | 82,500 | 70,000 | 65,000 | n.a. |
| New Zealand | — | 17 | 8 | 10 | — | 1 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | 3 | 1,014 | 875 | 1,546 | 3,752 | 422 |
| Refined | 712 | 2,758 | 2,457 | 3,245 | 5,529 | 7,674 |
| France— | | | | | | |
| Crude | 56,011 | 220,358 | 412,821 | 561,958 | 534,930 | 993,977 |
| Unrefined ground | 2,426 | 3,077 | 4,542 | 2,775 | 2,707 | 2,413 |
| Refined lump | 905 | 791 | 770 | 1,161 | 767 | 492 |
| Flowers of sulphur | 5,563 | 5,022 | 4,920 | 5,411 | 5,346 | 6,527 |
| Precipitated sulphur | 20 | — | 2 | 1 | 21 | 38 |
| Germany (Federal) | 26,251 | 25,582 | 19,956 | 16,354 | 21,839 | 24,751 |
| Germany (East) | 15,800 | 14,306 | 23,554 | 33,022 | 41,060 | 20,316 |
| Italy— | | | | | | |
| Crude | 30,116 | 28,737 | 25,824 | 17,550 | 3,103 | 75 |
| Refined | 5,378 | 8,715 | 22,980 | 22,920 | 8,746 | 7,461 |
| Flowers of sulphur | 746 | 440 | 517 | 365 | 297 | 436 |
| Precipitated sulphur | 3 | 29 | 1 | 12 | 30 | 21 |
| Netherlands— | | | | | | |
| Crude | 5,972 | 8,449 | 5,236 | 5,005 | 5,042 | 6,833 |
| Refined | 26 | 30 | 29 | 14 | 38 | 6 |
| Norway | 54,298 | 64,424 | 56,389 | 34,271 | 32,251 | 7,287 |
| Portugal | 645 | 405 | 442 | 455 | 317 | 28 |
| Spain— | | | | | | |
| Refined | 10 | — | — | — | — | 487 |
| Sweden | 368 | 411 | 432 | 286 | 330 | 187 |
| U.S.S.R. | 41,200 | 51,000 | 112,000 | 214,700 | 106,400 | 102,062 |
| South Africa | 67 | 109 | 65 | 151 | — | n.a. |
| Mexico | 1,005,498 | 1,064,780 | 1,233,691 | 1,136,452 | 1,309,975 | 1,482,983 |
| United States— | | | | | | |
| Crude | 1,577,919 | 1,612,158 | 1,775,526 | 1,585,531 | 1,537,419 | 1,603,438 |
| Refined and flowers of sulphur | 24,207 | 23,449 | 11,017 | 10,512 | 16,567 | 9,199 |
| Bolivia | 392 | — | 1,175 | 4,897 | 7,247 | 9,793 |
| Chile | 346 | 946 | 800 | 714 | 631 | n.a. |
| Japan | 9,026 | 119 | 217 | 284 | 301 | 133 |

(a) Estimated amount recoverable.

IMPORTS OF SULPHUR

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Sulphur | 326,946 | 377,439 | 486,899 | 496,193 | 495,776 | 543,047 |
| Wastes and residues | 8,929 | 14,765 | 13,531 | 20,079 | 16,986 | 12,751 |
| Malta— | | | | | | |
| Crude | 126 | 27 | 30 | — | — | — |
| Flowers of sulphur | (£4,503) | (£8,225) | (£8,522) | (£9,109) | (£11,539) | (£12,347) |
| Kenya | 236 | 225 | 162 | 150 | 287 | 365 |
| Mauritius | 2 | 37 | 80 | 74 | 36 | 39 |
| Rhodesia and Nyasaland | 46 | 78 | 8 | 110 | 220 | 118 |
| Tanganyika | 230 | 235 | 269 | 460 | 328 | 272 |
| Uganda | 495 | 215 | 1,050 | 402 | 2,676 | 1,699 |
| Canada | 335,116 | 296,812 | 293,540 | 291,844 | 174,125 | 134,497 |
| Jamaica | 5 | 5 | 16 | 4 | 16 | 1,103 |
| Trinidad and Tobago | 24 | 6 | 8,151 | 27,277 | 9,753 | n.a. |
| British Guiana | 1 | — | 1 | — | 1 | n.a. |
| Ceylon | 2,189 | 2,794 | 2,803 | 3,467 | 958 | 4,055 |
| Cyprus | 1,286 | 1,439 | 1,256 | 1,583 | 1,707 | 1,828 |
| Hong Kong | 544 | 1,609 | 1,382 | 1,288 | 1,431 | 1,681 |
| India | r 107,083 | r 134,783 | 176,078 | 188,410 | 244,114 | 256,896 |
| Malaya | 218 | 1,135 | 1,107 | 1,517 | 2,077 | 3,516 |
| Pakistan | 3,091 | 1,334 | 3,782 | 5,634 | 5,179 | 4,766 |
| Australia | r 202,421 | r 170,770 | r 221,778 | r 182,052 | 229,195 | 222,527 |
| New Zealand | 65,195 | 88,180 | 133,246 | 144,475 | 104,902 | 146,956 |
| Irish Republic | 6,649 | 7,279 | r 18,472 | 35,193 | 46,070 | 46,847 |
| OTHER COUNTRIES | | | | | | |
| Austria | 44,480 | 52,853 | 55,982 | 60,106 | 73,165 | 84,906 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Crude | 95,632 | 133,578 | 180,462 | 163,476 | 167,455 | 176,660 |
| Refined | 414 | 568 | 387 | 280 | 226 | 330 |
| Czechoslovakia | 37,000 | 58,000 | 74,000 | 107,000 | 131,000 | n.a. |
| Denmark | 1,445 | 3,485 | 6,751 | 4,399 | 9,744 | 12,337 |
| Finland | 62,504 | 69,997 | 98,722 | 84,749 | 82,571 | 58,589 |
| France— | | | | | | |
| Crude | 302,612 | 190,829 | 144,224 | 140,868 | 144,801 | 112,824 |
| Unrefined ground | 110 | — | 69 | 33 | 225 | 118 |
| Refined lump | 2 | 44 | 33 | 44 | 153 | 264 |
| Precipitated | 6 | 12 | 16 | 48 | 50 | 38 |
| Germany (Federal) | 63,415 | 100,251 | 174,622 | 158,316 | 216,554 | 288,081 |
| Greece | 8,222 | 13,188 | 14,272 | 12,509 | 8,396 | 20,431 |
| Hungary | 17,951 | 18,829 | 30,290 | 27,165 | 31,053 | 124,693 |
| Netherlands— | | | | | | |
| Crude | 63,865 | 57,486 | 95,330 | 125,167 | 120,697 | 133,317 |
| Refined | 913 | 1,365 | 1,251 | 1,195 | 1,271 | 1,446 |
| Norway | 3,363 | 1,382 | 7,275 | 9,854 | 14,085 | 35,009 |
| Poland | 23,500 | 34,200 | 45,300 | 10,900 | n.a. | 26,672 |
| Portugal | 1,825 | 2,710 | 8,039 | 11,953 | 20,614 | 31,597 |
| Spain— | | | | | | |
| Crude | 2,953 | 14,776 | 6,651 | 5,800 | 6,518 | 19,536 |
| Refined, etc. | 38 | 15 | | | | |
| Sweden | 64,645 | 67,667 | 77,163 | 95,916 | 81,370 | 84,615 |
| Switzerland— | | | | | | |
| Crude and ground | 42,531 | 34,832 | 69,482 | 54,038 | 61,497 | 63,600 |
| Flowers of sulphur | 170 | 304 | 322 | 121 | 212 | 187 |
| U.S.S.R. | 65,200 | 63,000 | 49,500 | 43,800 | 31,600 | 81,788 |
| Yugoslavia | 6,843 | 7,957 | 13,291 | 18,633 | 11,426 | 12,473 |

IMPORTS OF SULPHUR (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Algeria— | | | | | | |
| Crude | 24,522 | 25,307 | 33,468 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Unrefined, ground | 1,611 | 1,843 | 1,953 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Refined | 487 | 202 | 369 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Flowers of sulphur | 82 | 306 | 104 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Precipitated | 23 | — | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Angola | 220 | 197 | 162 | 578 | 364 | 236 |
| Canary Islands— | | | | | | |
| Crude | 1,968 | — | 4,823 | 6,769 | 6,498 | <i>n.a.</i> |
| Refined, etc. | 4,921 | 4,892 | | | | |
| Congo Republic | 408 | 135 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt | 7,830 | 13,213 | 14,117 | 8,757 | 8,444 | <i>n.a.</i> |
| Malagasy Republic | 36 | 18 | 15 | 7 | 3 | 12 |
| Morocco— | | | | | | |
| Crude | 6,493 | 9,198 | 9,194 | 3,386 | 7,752 | 2,894 |
| Unrefined, ground | 239 | 434 | 487 | 1,246 | 1,153 | 984 |
| Refined | 196 | 249 | 558 | 325 | 75 | 156 |
| Flowers of sulphur | 3,147 | 2,913 | 2,530 | 2,535 | 2,540 | 2,872 |
| Precipitated | 23 | 13 | 203 | 8 | 12 | 24 |
| Mozambique | 671 | 411 | 649 | 659 | <i>n.a.</i> | <i>n.a.</i> |
| South Africa | 126,821 | 114,028 | 114,595 | 111,326 | 116,393 | 122,424 |
| Tunisia— | | | | | | |
| Crude and unrefined | 7,392 | 2,137 | 6,592 | 8,593 | 4,962 | 9,637 |
| Refined and flowers of sulphur | 1,616 | 1,091 | 657 | 823 | 1,623 | 1,085 |
| Costa Rica | 12 | 163 | 126 | 147 | 10 | 132 |
| Cuba | 10,813 | 81,899 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Guatemala | 293 | 173 | 74 | 95 | 104 | <i>n.a.</i> |
| Mexico | 441 | 238 | 173 | 146 | 145 | 151 |
| Netherlands Antilles | 5,002 | 4,987 | 1,501 | 4,002 | — | 3,407 |
| Nicaragua | 105 | 904 | 4,143 | 5,583 | 8,221 | 6,724 |
| Salvador | 76 | 15 | 27 | 42 | 16 | 3,420 |
| United States | 590,687 | 642,488 | 741,370 | 831,517 | 1,049,433 | 1,813,338 |
| Argentina— | | | | | | |
| Crude | 38,558 | 25,809 | 29,720 | 20,188 | 23,856 | 13,674 |
| Refined and flowers of sulphur | 80 | 34 | 24 | 104 | 71 | 80 |
| Bolivia | <i>n.a.</i> | <i>n.a.</i> | 18 | 32 | 11 | 58 |
| Brazil— | | | | | | |
| Crude | 93,970 | 103,782 | 137,844 | 128,018 | 150,351 | 173,814 |
| Refined | 242 | 327 | 242 | 161 | 182 | — |
| Flowers of sulphur | — | — | — | — | — | — |
| Precipitated | 47 | 44 | 47 | 12 | 13 | 35 |
| Colombia | 288 | 61 | 68 | 95 | 4,773 | 3,346 |
| Ecuador | 36 | 21 | <i>n.a.</i> | 96 | 22 | 77 |
| Peru | 4,579 | 7,954 | 12,189 | 9,825 | 15,515 | 12,745 |
| Uruguay | 7,084 | 3,275 | 6,443 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela | 2,332 | 3,866 | 2,553 | 8,839 | 10,390 | 10,284 |
| Burma | 493 | 535 | 691 | 1,688 | 1,468 | 402 |
| Formosa | 8,963 | 4,529 | 10,683 | 11,915 | 15,252 | 39,775 |
| Indonesia | 7,880 | 11,254 | 8,447 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Iraq | 268 | 378 | 1,004 | 869 | 1,370 | <i>n.a.</i> |
| Israel | 44,938 | 51,231 | 59,965 | 43,079 | 67,816 | 49,449 |
| Japan | 151 | 121 | 93 | 101 | 35 | 13,588 |
| Jordan | 773 | 1,189 | 825 | 1,455 | 1,556 | 2,787 |
| Korea (South) | 2,311 | 4,263 | 4,433 | 7,526 | 214 | 1,453 |
| Lebanon | 3,863 | 5,751 | 3,504 | 3,692 | 3,501 | <i>n.a.</i> |
| Philippine Republic | 2,480 | 1,374 | 1,815 | 535 | 2,744 | 3,905 |
| Syria | 580 | 853 | 1,151 | 904 | 1,032 | <i>n.a.</i> |
| Thailand | 643 | 591 | 3,216 | 2,268 | 3,746 | 6,644 |
| Turkey— | | | | | | |
| Refined and flowers of sulphur | 6 | 48 | 227 | 64 | 9 | 245 |

TALC
PRODUCTION OF TALC
(Including Steatite and Pyrophyllite)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|--------------------|--------------------|--------------------|--------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Great Britain | 4,147 | 5,683 | 6,468 | 6,930 | 7,357 | 7,976 |
| Swaziland— | | | | | | |
| Pyrophyllite | 139 | 900 | 1,530 | 2,638 | 3,484 | 2,725 |
| Southern Rhodesia | — | — | — | — | 20 | 19 |
| Canada (c) | 31,612 | 34,979 | 37,175 | 42,961 | 41,215 | 48,437 |
| India | 45,452 | 63,467 | 91,917 | r 96,264 | 108,705 | 116,111 |
| Pakistan | 1,586 | 2,340 | 3,370 | r 1,473 | 1,102 | 1,840 |
| Australia— | | | | | | |
| Talc | 15,393 | 16,376 | 15,670 | 13,545 | 14,060 | 12,776 |
| Pyrophyllite | 267 | 347 | 501 | 1,288 | 931 | 1,157 |
| OTHER COUNTRIES | | | | | | |
| Austria | 69,709 | 50,424 | 80,978 | 83,606 | 74,574 | 64,607 |
| Finland | 5,823 | r 7,376 | 9,829 | 6,221 | 6,329 | 4,911 |
| France | 165,753 | 172,793 | 184,819 | 219,132 | 184,000 | 191,000 |
| Germany (Federal) | r 27,067 | r 27,111 | r 28,819 | r 29,193 | 27,152 | 24,069 |
| Greece | 1,752 | 292 | 1,793 | 1,825 | (a) 2,000 | (a) 2,500 |
| Italy | 107,772 | 107,532 | 122,426 | 141,358 | 125,153 | 133,380 |
| Norway | 66,244 | 68,774 | 70,000 | 64,000 | 88,000 | 89,000 |
| Portugal | — | 217 | 669 | 709 | 321 | 531 |
| Spain | 29,786 | 27,376 | 27,547 | 27,230 | 27,287 | 27,069 |
| Sweden | 12,218 | 14,205 | 15,595 | 15,420 | 17,144 | n.a. |
| U.S.S.R. | 196,841 | (a)245,000 | (a)250,000 | (a)290,000 | (a)300,000 | (a)345,000 |
| Egypt | 6,476 | 5,989 | 5,905 | 5,862 | 6,029 | 4,714 |
| Morocco | 4,833 | 3,496 | n.a. | n.a. | n.a. | n.a. |
| South Africa (b) | 683 | 1,341 | 1,767 | 2,928 | 12,429 | 6,755 |
| Mexico | n.a. | 3,625 | 4,303 | 4,121 | (a) 3,900 | (a) 3,900 |
| United States— | | | | | | |
| Talc | 502,401 | 571,771 | 544,502 | 540,142 | 577,215 | 602,982 |
| Pyrophyllite | 138,818 | 134,978 | 111,278 | 140,554 | 111,828 | 115,195 |
| Argentina | 26,839 | 26,730 | (a)r 22,000 | (a)r 22,000 | (a) 19,000 | (a) 19,000 |
| Brazil | 28,074 | 20,865 | 19,603 | r 23,400 | 37,695 | 34,364 |
| Colombia | — | — | 350 | 550 | 650 | 650 |
| Paraguay (a) | 100 | 100 | 100 | 100 | 100 | 100 |
| Peru— | | | | | | |
| Talc | 152 | 1,512 | 240 | 329 | 281 | 3,232 |
| Pyrophyllite | 1,700 | 1,306 | 2,561 | 1,411 | 1,688 | 1,688 |
| Uruguay | 1,776 | 2,085 | 2,944 | 1,658 | 1,688 | 1,688 |
| Afghanistan (d) | 700 | 700 | 700 | 700 | n.a. | n.a. |
| Burma | — | n.a. | n.a. | 1,377 | n.a. | n.a. |
| China (a) | n.a. | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 |
| Formosa | 3,283 | 6,321 | 10,390 | 12,219 | 13,197 | 14,553 |
| Iran (e) | 200 | 300 | 300 | 300 | n.a. | n.a. |
| Japan— | | | | | | |
| Talc | 39,250 | 39,529 | 49,927 | 54,971 | 56,333 | 66,976 |
| Pyrophyllite | 298,245 | 438,275 | 533,068 | 569,593 | 523,713 | 776,373 |
| Korea (South)— | | | | | | |
| Talc | 9,946 | 16,380 | 15,727 | 21,332 | 27,920 | 31,880 |
| Pyrophyllite | 5,751 | r 827 | 6,497 | 23,606 | 17,826 | 31,309 |
| Korea (North) (a) | n.a. | 2,000 | 3,900 | 14,500 | 20,000 | 20,000 |
| Philippine Republic | — | — | 5 | 187 | 116 | 93 |
| TOTAL* | r 2,000,000 | r 2,270,000 | r 2,440,000 | r 2,640,000 | 2,610,000 | 2,980,000 |

*Excluding talc known to have been produced in Roumania.

(a) United States Bureau of Mines' estimate.

(b) In addition the following amounts of wonderstone were produced (long tons): 1958—1,121; 1959—350; 1960—624; 1961—913; 1962—1,650; 1963—1,826.

(c) Shipments.

(e) Years ended 20 March of year following that stated.

(d) Estimated.

EXPORTS OF TALC

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------|--------|--------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada | 1,724 | 1,833 | 1,482 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| India | 7,101 | 7,387 | 7,108 | 9,484 | 15,418 | 14,015 |
| Malaya | 200 | 574 | 361 | 552 | 350 | 390 |
| Australia | 3,256 | 2,620 | 3,905 | 4,191 | 4,988 | 4,025 |
| OTHER COUNTRIES | | | | | | |
| Austria | 50,772 | 34,002 | 62,452 | 61,397 | 55,008 | 50,803 |
| Belgium-Luxemburg | | | | | | |
| E.U. | 37 | 33 | 40 | 8 | 8 | 37 |
| France | 29,895 | 31,618 | 42,497 | 43,558 | 44,113 | 48,840 |
| Germany (Federal) | 639 | 1,160 | 920 | 1,137 | 1,041 | 1,187 |
| Italy | 44,300 | 41,117 | 49,405 | 49,381 | 50,787 | 46,428 |
| Netherlands | 55 | 72 | 120 | 144 | 193 | 159 |
| Norway | 52,133 | 53,782 | 62,020 | 60,878 | 63,162 | 65,508 |
| Sweden | 1,764 | 2,836 | 1,838 | 1,352 | 1,968 | 1,435 |
| Egypt | 1,409 | 701 | 1,273 | 2,012 | <i>n.a.</i> | <i>n.a.</i> |
| Mexico | 182 | 366 | 355 | 1 | — | 2 |
| United States | 52,363 | 52,456 | 53,087 | 42,779 | 41,910 | 50,431 |
| Japan | 716 | 810 | 1,000 | 1,178 | 1,687 | 2,975 |
| Korea (South)— | | | | | | |
| Talc | 11,783 | 14,198 | 6,964 | 14,279 | 249 | 17,293 |
| Pyrophyllite | 4,888 | 8,187 | 8,208 | 12,360 | <i>n.a.</i> | <i>n.a.</i> |

IMPORTS OF TALC

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------|--------|--------|--------|--------|----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unground | 262 | 229 | 848 | 994 | 624 | } 44,131 |
| Ground | 38,000 | 39,239 | 41,595 | 38,881 | 42,515 | |
| Canada | 14,798 | 16,507 | 17,101 | 18,040 | 21,561 | 24,589 |
| Ceylon | 1,969 | 1,812 | 1,855 | 1,530 | 2,191 | 1,885 |
| Malaya | 2,792 | 3,953 | 5,803 | 7,154 | 3,436 | 5,498 |
| Australia (a) | 263 | 253 | 539 | 958 | 1,468 | 3,155 |
| OTHER COUNTRIES | | | | | | |
| Austria | 400 | 205 | 281 | 1,373 | 1,759 | 1,100 |
| Belgium-Luxemburg E. U. | 11,080 | 11,576 | 13,148 | 13,417 | 14,846 | 15,829 |
| Denmark | 8,278 | 7,880 | 10,750 | 11,376 | 11,606 | 10,904 |
| Finland | 1,821 | 2,785 | 4,042 | 2,774 | 2,799 | 2,542 |
| France | 5,334 | 4,018 | 4,831 | 6,622 | 6,899 | 8,543 |
| Germany (Federal) | 35,449 | 39,223 | 47,681 | 48,391 | 50,038 | 49,264 |
| Greece | 15 | 34 | 25 | 54 | 83 | 61 |
| Italy | 1,685 | 1,959 | 3,916 | 6,607 | 8,664 | 12,971 |
| Netherlands | 8,506 | 10,511 | 11,241 | 10,946 | 11,822 | 13,430 |
| Norway | n.a. | 1,258 | 1,405 | 1,570 | 2,718 | 3,621 |
| Poland | 24,800 | 9,200 | 38,400 | 30,900 | n.a. | 8,640 |
| Portugal | 707 | 865 | 914 | 990 | 1,180 | 1,358 |
| Sweden | 8,239 | 10,187 | 9,088 | 11,614 | 10,428 | 12,867 |
| Switzerland | n.a. | n.a. | 14,390 | 15,460 | 15,725 | 15,186 |
| U.S.S.R. | 70,000 | 80,200 | 81,800 | 49,600 | 73,600 | 58,954 |
| Yugoslavia | 195 | 354 | 335 | 400 | 348 | 670 |
| Algeria | 3,112 | 2,651 | 4,317 | n.a. | n.a. | n.a. |
| Congo Republic | 253 | 348 | n.a. | n.a. | n.a. | n.a. |
| Egypt | — | — | 2 | 15 | 6 | n.a. |
| Malagasy Republic | 8 | 8 | 5 | 16 | 9 | 3 |
| Morocco | 837 | 809 | 874 | 1,412 | 1,644 | 1,865 |
| Tunisia | 544 | 438 | 654 | 498 | 655 | 688 |
| Costa Rica | 58 | 62 | 80 | 85 | 83 | 133 |
| Guatemala | 69 | 70 | 71 | 93 | 121 | n.a. |
| Honduras | 36 | 28 | 36 | 17 | 15 | 25 |
| Mexico— | | | | | | |
| Talc | 28,068 | 19,328 | 22,476 | 28,810 | 23,501 | 31,122 |
| Pyrophyllite | 896 | 542 | 1,485 | 271 | 95 | 60 |
| Salvador | 46 | 26 | 41 | 74 | 66 | 53 |
| United States | 20,438 | 22,635 | 21,407 | 24,424 | 23,014 | 22,929 |
| Argentina | 1 | 3 | 52 | 128 | 74 | 70 |
| Brazil | — | 10 | 5 | 1 | — | — |
| Chile | 41 | 42 | 34 | 67 | 53 | n.a. |
| Colombia | 903 | 1,129 | 1,126 | 976 | 1,111 | 991 |
| Ecuador | 309 | 104 | n.a. | 159 | 86 | n.a. |
| Peru | 433 | 465 | 398 | 654 | 493 | 602 |
| Venezuela | 1,367 | 1,533 | 1,212 | 1,446 | 1,741 | 1,914 |
| Iraq | 350 | 366 | 348 | 389 | 282 | n.a. |
| Japan | 24,461 | 33,296 | 27,809 | 40,029 | 40,816 | 15,604 |
| Lebanon | 196 | 220 | 474 | 301 | 148 | n.a. |
| Philippine Republic | 1,544 | 1,806 | 2,532 | 1,800 | 1,710 | 2,684 |
| Syria | 320 | 268 | n.a. | n.a. | 491 | n.a. |
| Thailand | 708 | 931 | 863 | 1,276 | 1,371 | 1,161 |
| Turkey | 153 | 168 | 274 | 324 | 179 | 279 |

(a) Years ended June 30 of that stated.

TANTALUM AND NIOBIUM MINERALS
PRODUCTION OF TANTALUM AND NIOBIUM MINERALS

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|--------|---------|-----------|---------|-----------|-------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya— | | | | | | |
| Columbite | 1 | 1 | (385 lb.) | — | (375 lb.) | — |
| Nigeria— | | | | | | |
| Tantalite | 20 | 12 | 11 | 13 | 17 | 13 |
| Columbite | 806 | 1,588 | 2,047 | 2,345 | 2,264 | 2,011 |
| Southern Rhodesia— | | | | | | |
| Tantalum concentrates | 43 | 52 | 48 | 62 | 72 | 67 |
| Tanganyika— | | | | | | |
| Niobium concentrates (d) | (h) 40 | (h) 100 | (h) 150 | (h) 120 | — | — |
| Uganda— | | | | | | |
| Tantalite and columbite | 3 | 2 | 2 | 7 | 12 | 9 |
| Canada— | | | | | | |
| Niobium concentrates (Nb ₂ O ₅ content) .. | — | — | — | 28 | 454 | 622 |
| Malaya— | | | | | | |
| Columbite | 159 | 120 | 93 | 95 | 110 | 88 |
| Australia— | | | | | | |
| Tantalite and columbite | 6 | 8 | 11 | 14 | 19 | 14 |
| OTHER COUNTRIES | | | | | | |
| Norway— | | | | | | |
| Niobium concentrates(b) | 281 | 285 | 341 | 316 | 344 | 377 |
| Portugal— | | | | | | |
| Tantalite and columbite | 24 | 18 | 25 | 19 | 15 | 10 |
| Congo Republic— | | | | | | |
| Tantalite and columbite concentrates | 179 | 177 | (g) 232 | (g) 66 | (g) 145 | n.a. |
| Tin-tantalite-columbite c | 1,421 | 1,223 | (f) 670 | n.a. | n.a. | n.a. |
| Ivory Coast— | | | | | | |
| Tantalite and columbite | 1 | 1 | 3 | 4 | 3 | 1 |
| Malagasy Republic— | | | | | | |
| Columbite | 13 | 10 | 10 | 21 | (d) 7 | 17 |
| Mozambique— | | | | | | |
| Tantalite and columbite | 168 | 143 | 142 | 133 | 101 | 79 |
| Rwanda and Burundi— | | | | | | |
| Tantalite and columbite concentrates | 64 | 56 | (g) 47 | (g) 45 | (g) 38 | n.a. |
| Tin-tantalite-columbite e | 6 | 15 | n.a. | n.a. | n.a. | n.a. |
| South Africa— | | | | | | |
| Tantalite | 17 | 5 | 6 | 9 | 4 | 29 |
| South West Africa— | | | | | | |
| Tantalum and niobium concentrates | 5 | 2 | 5 | 3 | 5 | 2 |
| United States— | | | | | | |
| Tantalum and niobium concentrates (a) .. | 191 | 84 | — | — | — | — |

- (a) Shipments from mine. Principally niobium-tantalum oxide content of euxenite concentrates.
 (b) 50% Nb₂O₅ in 1958; 50% Nb₂O₅ in 1959; 55% Nb₂O₅ in 1960; 55.3% Nb₂O₅ in 1961; 57.9% Nb₂O₅ in 1962; 56.2% Nb₂O₅ in 1963.
 (c) Estimated to contain 105 and 79 tons of tantalite-columbite in 1958 and 1959 respectively.
 (d) Exports.
 (e) Estimated to contain 3 and 6 tons of tantalite-columbite in 1958 and 1959 respectively.
 (f) United States Bureau of Mines' estimate.
 (g) Including tantalite-columbite content of tin-tantalite-columbite.
 (h) 25% Nb₂O₅.

PRODUCTION OF TANTALUM AND NIOBIUM MINERALS (cont.)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------|-------|-------|-------|---------|---------|-------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Argentina— | | | | | | |
| Tantalite | (a) 5 | (a) 1 | — | (a) 2 | (a) 2 | (a) 2 |
| Columbite | (a) 1 | (a) 2 | — | — | (a) — | — |
| Brazil— | | | | | | |
| Tantalite and columbite | 335 | 127 | 210 | 106 | 137 | 137 |
| Pyrochlore concentrates | — | — | — | (c) 787 | (c) 787 | n.a. |
| French Guiana— | | | | | | |
| Tantalite and columbite | — | — | — | — | — | 2 |
| TOTAL (b) .. | 2,470 | 2,880 | 3,380 | r 4,220 | 4,940 | 4,300 |

Small quantities of tantalite and columbite have been produced in Northern Rhodesia, India and the Somali Republic.

(a) Imports into the United States.

(b) Total of tantalum and niobium concentrates produced in the countries listed above.

(c) Estimated. Production was 1,575 tons during the period 1961-1962.

EXPORTS OF TANTALUM AND NIOBIUM MINERALS, ETC.

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ferro-niobium and ferro-niobium-tantalum .. | 37 | 71 | 97 | 83 | 68 | 173 |
| Nigeria— | | | | | | |
| Tantalite | 24 | 16 | r 11 | 11 | 13 | 20 |
| Columbite | 737 | 1,882 | 3,334 | 1,839 | 2,266 | 1,599 |
| Rhodesia and Nyasaland— | | | | | | |
| Tantalum concentrates | 55 | 32 | 46 | 38 | 74 | 87 |
| Tanganyika— | | | | | | |
| Niobium concentrates .. | 40 | 100 | 150 | 120 | — | — |
| Uganda— | | | | | | |
| Tantalite and columbite | 4 | 1 | 3 | 3 | 9 | 6 |
| Malaya— | | | | | | |
| Columbite | 311 | 47 | 99 | 138 | 98 | 65 |
| Australia (a)— | | | | | | |
| Tantalite and columbite | 5 | 9 | 15 | 13 | 16 | 12 |
| OTHER COUNTRIES | | | | | | |
| Germany (Federal)— | | | | | | |
| Tantalum metal, etc. .. | (6,200lb.) | (5,700lb.) | (28,400lb.) | (22,000lb.) | (24,900lb.) | (13,200lb.) |
| Niobium metal, etc. .. | (2,000lb.) | (1,100lb.) | (3,300lb.) | (2,900lb.) | (4,200lb.) | (1,000lb.) |
| Portugal— | | | | | | |
| Tantalite and columbite | 49 | 33 | 47 | 40 | 42 | 31 |
| Norway— | | | | | | |
| Niobium concentrates .. | n.a. | 331 | 270 | 192 | 264 | 281 |
| Congo Republic (c)— | | | | | | |
| Tantalite and columbite | 476 | 355 | (b) 200 | (b) 120 | (b) 130 | (b) 140 |
| Tantaliferous slag .. | 1,126 | 151 | 806 | n.a. | n.a. | n.a. |
| Malagasy Republic— | | | | | | |
| Columbite | 6 | 7 | 24 | 14 | 7 | 26 |
| Mozambique— | | | | | | |
| Columbite | 199 | 135 | n.a. | 40 | 101 | 79 |
| South Africa— | | | | | | |
| Tantalite | 7 | — | 1 | 1 | 10 | 21 |
| South West Africa— | | | | | | |
| Tantalite | 10 | — | 1 | 2 | 4 | 1 |
| United States— | | | | | | |
| Tantalum concentrates | 3 | 5 | 14 | 97 | 62 | 25 |
| Niobium concentrates | 24 | 7 | 69 | 25 | 10 | 21 |
| Tantalum metal, etc. .. | (13,476lb.) | (6,141lb.) | (17,559lb.) | (15,554lb.) | (18,078lb.) | (44,390lb.) |
| Niobium metal, etc. .. | (87lb.) | (354lb.) | (3,910lb.) | (13,376lb.) | (16,827lb.) | (14,276lb.) |
| Tantalum powder .. | (5,773lb.) | (1,988lb.) | (1,174lb.) | (5,585lb.) | (14,292lb.) | (14,146lb.) |
| Brazil— | | | | | | |
| Tantalite | 95 | 93 | 115 | 118 | 144 | 103 |
| Columbite | 71 | 15 | 12 | 17 | 17 | 19 |
| Pyrochlore concentrates | — | — | — | — | — | 753 |
| French Guiana— | | | | | | |
| Tantalite and columbite | — | — | — | — | — | — |

(a) Years ended June 30 of that stated.

(b) Estimated.

(c) Including Rwanda and Burundi.

IMPORTS OF TANTALUM AND NIOBIUM MINERALS, ETC.

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------------|------------|------------|-------------|-------------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Tantalum and niobium ores and concentrates | 386 | 369 | 618 | 576 | 485 | 745 |
| Tantalum metal .. | (3,680lb.) | (1,119lb.) | (3,283lb.) | (5,444lb.) | (5,599lb.) | (8,394lb.) |
| OTHER COUNTRIES | | | | | | |
| France— | | | | | | |
| Tantalum and niobium minerals .. | 43 | 127 | 155 | 145 | 88 | 71 |
| Germany (Federal)— | | | | | | |
| Tantalum and niobium minerals .. | 160 | 499 | 1,209 | (b) 650 | (b) 350 | (b) 650 |
| Tantalum metal, etc. .. | (15,000lb.) | (4,000lb.) | (4,900lb.) | (11,700lb.) | (13,700lb.) | (6,600lb.) |
| United States— | | | | | | |
| Tantalum concentrates | 462 | 291 | 310 | 361 | 541 | 422 |
| Niobium concentrates .. | 1,141 | 1,516 | 2,262 | 1,328 | 2,255 | 2,628 |
| Tantalum metal .. | (239lb.) | (405lb.) | (1,960lb.) | (2,887lb.) | (1,788lb.) | (1,597lb.) |
| Niobium metal (a) .. | (5,458lb.) | (1,160lb.) | (3,133lb.) | (2,139lb.) | (9,489lb.) | (1,427lb.) |
| Japan— | | | | | | |
| Niobium minerals .. | 6 | 3 | 86 | 55 | 11 | 76 |

(a) As recorded in official trade returns. According to U.S. Bureau of Mines includes ferro-alloy.

(b) Estimated.

TIN
PRODUCTION OF TIN ORE
(Metal content)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|----------------|----------------|----------------|-----------------|----------------|----------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 1,117 | 1,189 | 1,180 | 1,188 | 1,173 | 1,198 |
| Nigeria | 6,154 | 5,491 | 7,677 | 7,778 | 8,211 | 8,725 |
| Northern Rhodesia | — | 1 | — | 1 | 5 | 1 |
| Southern Rhodesia | 532 | 605 | 642 | r 715 | 706 | 525 |
| Swaziland | 15 | 5 | 6 | 5 | 5 | 4 |
| Tanganyika | 18 | 65 | 138 | r 169 | 214 | 242 |
| Uganda | 37 | 36 | 32 | 33 | 69 | 165 |
| Canada (b) | 355 | 334 | 278 | 500 | 291 | 474 |
| Malaya | 38,458 | 37,521 | 51,979 | 56,028 | 58,603 | 59,948 |
| Australia | 2,237 | 2,351 | 2,202 | 2,745 | 2,715 | 2,852 |
| TOTAL | 48,923 | 47,598 | 64,134 | r 69,162 | 71,992 | 74,134 |
| OTHER COUNTRIES | | | | | | |
| France | — | — | 21 | 153 | 314 | 276 |
| Germany (Eastern) (a) | 720 | 720 | 720 | 720 | 720 | 720 |
| Italy | — | 17 | — | n.a. | n.a. | n.a. |
| Portugal | 1,249 | 1,129 | 772 | 729 | 679 | 718 |
| Spain | 467 | 326 | 196 | 230 | 231 | 160 |
| Cameroun | 75 | 62 | 64 | 65 | 20 | 25 |
| Congo Republic | 9,714 | 9,193 | 8,636 | 6,314 | 6,875 | 6,488 |
| Congo (Republic of) | 23 | 32 | 35 | 47 | 46 | 43 |
| Morocco | 6 | 10 | 10 | 11 | 11 | (a) 10 |
| Niger | 62 | 57 | 53 | 47 | 42 | 55 |
| Rwanda and Burundi | 1,500 | 1,127 | 1,277 | 1,474 | (a) 1,400 | 1,271 |
| South Africa | 1,416 | 1,272 | 1,276 | 1,430 | 1,421 | 1,530 |
| South West Africa | 155 | 5 | 261 | 302 | 369 | 443 |
| Mexico | 544 | 377 | 365 | 530 | 576 | 1,055 |
| United States | — | 50 | 10 | n.a. | n.a. | n.a. |
| Argentina | 205 | 225 | 238 | 515 | 571 | 529 |
| Bolivia (c) | 17,705 | 23,774 | 18,938 | 20,318 | 20,366 | 22,499 |
| Brazil | 409 | 461 | 1,556 | 581 | 731 | (a) 750 |
| Peru | 30 | (e) 42 | (e) 6 | (e) 14 | (e) 11 | (e) 12 |
| Burma | 896 | 800 | 950 | 951 | 1,041 | (a) 1,000 |
| China (a) (d) | 18,000 | 21,000 | 24,000 | 24,000 | 24,000 | 24,000 |
| Indonesia | 23,200 | 21,613 | 22,594 | 18,573 | 17,310 | 12,947 |
| Japan | 1,108 | 998 | 842 | 853 | 859 | 858 |
| Laos | 301 | 294 | 383 | 332 | 367 | (a) 400 |
| Thailand | 7,718 | 9,684 | 12,080 | 13,270 | 14,679 | 15,585 |
| TOTAL* | 85,000 | 93,000 | 95,000 | 91,000 | 93,000 | 91,000 |
| WORLD'S TOTAL* | 134,000 | 141,000 | 159,000 | 160,000 | 165,000 | 165,000 |

*Excluding tin ore known to have been produced in Czechoslovakia, the U.S.S.R. and Vietnam.

- (a) Estimated by International Tin Council.
- (b) Tin in concentrates exported and in tin-lead alloy.
- (c) Content of ore plus metal exported.
- (d) Smelter.
- (e) Recoverable.

SMELTER PRODUCTION OF TIN

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|----------------|----------------|------------------|------------------|----------------|----------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 31,326 | 26,614 | r 26,374 | 24,449 | 18,749 | 17,444 |
| Nigeria | — | — | — | 622 | 8,034 | 9,050 |
| Southern Rhodesia .. | 503 | 572 | r 609 | r 672 | 677 | 499 |
| Malaya | 45,336 | 45,729 | r 76,366 | 79,114 | 82,073 | 84,001 |
| Australia | 2,121 | 2,226 | 2,254 | 2,546 | 2,704 | 2,626 |
| TOTAL | 79,286 | 75,141 | r 105,603 | r 107,403 | 112,237 | 113,620 |
| OTHER COUNTRIES | | | | | | |
| Belgium | 9,304 | 6,608 | 8,515 | 6,372 | 9,507 | 8,280 |
| Germany— | | | | | | |
| Federal Republic .. | 646 | 1,010 | r 782 | 947 | 1,309 | 1,052 |
| Eastern (b) | 600 | 600 | 600 | 600 | 600 | 600 |
| Netherlands | 17,098 | 9,592 | 6,393 | 2,729 | 4,282 | 5,762 |
| Portugal | 1,260 | 1,174 | 601 | 784 | 766 | 663 |
| Spain | 449 | 346 | 464 | 731 | 905 | 1,614 |
| Congo Republic .. | 2,642 | 3,291 | 2,532 | 275 | 945 | 1,464 |
| Morocco (b) | 10 | 10 | 10 | 10 | 10 | 10 |
| South Africa | 901 | 726 | 622 | 870 | 821 | 937 |
| Mexico | 460 | 377 | 365 | 559 | 520 | 1,055 |
| United States (b) .. | 5,250 | 10,700 | 13,500 | 8,500 | 5,500 | 1,500 |
| Argentina (b) | 120 | 120 | 120 | 120 | 120 | 120 |
| Bolivia (a) | 682 | 917 | 1,020 | 1,840 | 1,882 | 2,209 |
| Brazil | 629 | 1,227 | 1,311 | 1,525 | 2,317 | (b) 2,500 |
| China (b) | 18,000 | 21,000 | 24,000 | 24,000 | 24,000 | 24,000 |
| Indonesia | 1,569 | 1,971 | 1,977 | (b) 2,000 | (b) 2,000 | (b) 2,000 |
| Japan | 1,260 | 1,271 | 1,215 | 1,555 | 1,903 | 1,976 |
| TOTAL* | 61,000 | 61,000 | 64,000 | 53,000 | 57,000 | 56,000 |
| WORLD'S TOTAL* .. | 140,000 | 136,000 | r 170,000 | 160,000 | 169,000 | 169,000 |

*Excluding tin metal known to have been produced in Czechoslovakia and the U.S.S.R.

In addition secondary tin recovered in the United States (as metal, in alloys, and in chemical compounds) was as follows:

| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|--------|--------|--------|--------|--------|--------|
| | | | | | | |
| | 22,810 | 23,700 | 22,050 | 21,690 | 21,040 | 22,332 |

(a) Exports.

(b) Estimated by International Tin Council.

EXPORTS OF TIN, ETC.*

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------|--------|--------|---------|--------|--------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Unwrought | 9,240 | 29,245 | 7,777 | 9,799 | 7,156 | 8,450 |
| do. alloys | 2,910 | 2,434 | 1,529 | 1,839 | 2,333 | 2,656 |
| Semi-manufactures (a) | 190 | 292 | 301 | 301 | 468 | 334 |
| Nigeria— | | | | | | |
| Ore and concentrates .. | 7,626 | 7,536 | 10,658 | 10,410 | 347 | 160 |
| Unwrought | — | — | — | 600 | 7,542 | 9,673 |
| Rhodesia and Nyasaland— | | | | | | |
| Ore and concentrates .. | 191 | 108 | 15 | 254 | 31 | — |
| Unwrought | 383 | 324 | 483 | 486 | 549 | 463 |
| Tanganyika— | | | | | | |
| Ore and concentrates .. | 28 | 88 | 192 | 226 | 295 | 341 |
| Uganda— | | | | | | |
| Ore and concentrates .. | 59 | 55 | 46 | 42 | 87 | 230 |
| Canada— | | | | | | |
| Concentrates (Sn content) | 355 | 400 | n.a. | 480 | 287 | 800 |
| Hong Kong— | | | | | | |
| Unwrought (a) | 811 | 189 | 169 | 152 | 37 | 109 |
| Scrap | — | — | — | 2 | 65 | 10 |
| Semi-manufactures | 6 | 3 | 2 | 2 | 5 | 12 |
| India— | | | | | | |
| Scrap | 29 | 40 | (b) 65 | (b) 123 | (b) 34 | (b) 3 |
| Malaya— | | | | | | |
| Unwrought | 45,814 | 44,671 | 76,366 | 78,025 | 81,392 | 86,094 |
| do. alloys | 11 | 24 | 40 | 66 | 26 | 40 |
| Semi-manufactures (a) | 2 | — | 2 | 2 | 2 | 1 |
| Australia— | | | | | | |
| Ore and concentrates .. | | | | | | |
| (Sn content) | 29 | 43 | 2 | 178 | 27 | 139 |
| Unwrought | 11 | 9 | 14 | 1 | — | 7 |
| do. alloys | n.a. | 21 | 24 | 1 | 2 | 39 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unwrought (a) | 29 | 82 | 120 | 92 | 1 | 38 |
| Belgium—Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Unwrought | 8,916 | 6,212 | 7,981 | 4,405 | 6,803 | 6,319 |
| do. alloys | 130 | 135 | 124 | 124 | 93 | 60 |
| Scrap | 102 | 140 | 120 | 301 | 166 | 342 |
| Semi-manufactures (a) | 107 | 117 | 104 | 195 | 296 | 359 |
| Denmark— | | | | | | |
| Unwrought | 18 | 151 | 130 | 111 | 18 | 53 |
| do. alloys | 4,721 | 8,580 | 2,780 | 3,873 | 632 | 653 |
| Scrap | — | — | 2 | — | — | 4 |
| Semi-manufactures (a) | 21 | 25 | 35 | 24 | 19 | 29 |
| France— | | | | | | |
| Ore | 41 | 32 | 44 | 257 | 465 | 371 |
| Unwrought | 26 | 24 | 35 | 32 | 18 | 35 |
| do. alloys | 112 | 91 | 136 | 143 | 137 | 53 |
| Semi-manufactures (a) | 293 | 284 | 184 | 182 | 130 | 103 |
| Germany (Federal)— | | | | | | |
| Ore | n.a. | n.a. | n.a. | n.a. | 84 | 81 |
| Unwrought (a) | 3,844 | 10,294 | 18,299 | 18,557 | 1,651 | 1,365 |
| Scrap | n.a. | n.a. | n.a. | n.a. | 3 | 111 |
| Semi-manufactures (a) | 125 | 63 | 105 | 160 | 82 | 129 |

*In these tables the description "unwrought" tin corresponds to item 687.1 in the Standard International Trade Classification (Revised) and comprises ingots, pigs, unwrought bars, sticks, etc. "Semi-manufactures" corresponds to S.I.T.C. (R) 687.2 and includes foil and powder as well as sheets, strip, wire, pipes, tubes, etc.

(a) Including alloys.

(b) Years ended March 31 following that stated.

EXPORTS OF TIN, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------|--------|------------|------------|------------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Italy— | | | | | | |
| Unwrought (a) .. | 16 | 5 | 131 | 27 | 213 | 23 |
| Semi-manufactures (a) | 7 | 32 | 18 | 19 | 28 | 9 |
| Netherlands— | | | | | | |
| Unwrought | 24,779 | 19,721 | 12,234 | 8,583 | 4,157 | 4,187 |
| do. alloys | 549 | 2,192 | 5,164 | 3,989 | 504 | 666 |
| Scrap (a) | 61 | 226 | 156 | 311 | 281 | 555 |
| Semi-manufactures (a) | 295 | 282 | 184 | 233 | 322 | 260 |
| Norway— | | | | | | |
| Unwrought (a) .. | 25 | 386 | 389 | 405 | 271 | 210 |
| Semi-manufactures (a) | 223 | 2 | — | — | 2 | — |
| Portugal— | | | | | | |
| Ore | 44 | 78 | 145 | 65 | — | 116 |
| Unwrought | 86 | 79 | 314 | 806 | 486 | 203 |
| Spain— | | | | | | |
| Unwrought | — | 251 | — | 10 | — | — |
| Sweden— | | | | | | |
| Unwrought | 168 | 64 | 21 | 16 | 24 | 3 |
| do. alloys | n.a. | 371 | 267 | 128 | 213 | 121 |
| Switzerland— | | | | | | |
| Unwrought | 37 | 12 | 19 | 14 | 10 | 18 |
| Scrap | 213 | 180 | 166 | 254 | 195 | 164 |
| Semi-manufactures (a) | 19 | 26 | 17 | 33 | 37 | 35 |
| U.S.S.R.— | | | | | | |
| Unwrought | 21,900 | 17,800 | 11,300 | 5,600 | 500 | 700 |
| Algeria— | | | | | | |
| Scrap | 6 | 6 | 11 | n.a. | n.a. | n.a. |
| Cameroun— | | | | | | |
| Ore | 118 | 118 | 103 | 89 | 120 | 36 |
| Congo Republic (c)— | | | | | | |
| Ore | 9,829 | 9,638 | (b) 10,000 | (b) 10,000 | (b) 10,000 | (b) 9,000 |
| Unwrought | 2,539 | 2,820 | 2,421 | (b) 300 | (b) 900 | (b) 1,400 |
| Congo (Republic of)— | | | | | | |
| Ore | 21 | 35 | 20 | 55 | 70 | 39 |
| Niger— | | | | | | |
| Ore | 84 | 86 | 75 | 50 | 6 | 60 |
| South Africa— | | | | | | |
| Concentrates | 1,239 | 1,273 | 1,499 | 1,394 | 1,422 | 1,155 |
| South West Africa— | | | | | | |
| Ore and concentrates .. | 271 | — | 138 | 176 | 153 | 293 |
| United States— | | | | | | |
| Unwrought (a) | 917 | 943 | 608 | 543 | 335 | 1,544 |
| Scrap (a) | 2,119 | 7,619 | 4,199 | 6,110 | 4,342 | 4,975 |
| Semi-manufactures (a) | 172 | 94 | 198 | 4,396 | 646 | 887 |
| Argentina— | | | | | | |
| Ore | — | 202 | 109 | 183 | 137 | 47 |
| Tin-silver ore | 653 | 1,003 | 723 | 1,160 | 1,374 | 1,384 |
| Bolivia— | | | | | | |
| Ores, concentrates, etc. | | | | | | |
| (<i>Sn content</i>) | 17,023 | 22,857 | 17,918 | 18,478 | 18,484 | 20,290 |
| Unwrought | 682 | 917 | 1,020 | 1,840 | 1,882 | 2,209 |
| Peru— | | | | | | |
| Concentrates | | | | | | |
| (<i>Sn content</i>) | 12 | 46 | 30 | 16 | 23 | 21 |
| Unwrought | | | | | | |
| (<i>Sn content</i>) | 3 | 11 | — | 29 | 7 | 6 |
| Burma— | | | | | | |
| Ore and concentrates | | | | | | |
| (<i>Sn content</i>) | 1,328 | 1,377 | 1,395 | 1,325 | 1,481 | 1,953 |
| China— | | | | | | |
| Unwrought (b) | 24,000 | 25,000 | 22,000 | 18,000 | 15,000 | 12,000 |

(a) Including alloys.

(b) Estimated.

(c) Including Rwanda and Burundi.

EXPORTS OF TIN, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------|--------|--------|--------|-------------|---------------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Indonesia— | | | | | | |
| Ore | 25,207 | 24,856 | 34,227 | 23,127 | 27,386 | <i>n.a.</i> |
| <i>Sn content</i> | 18,184 | 18,426 | 24,867 | 16,788 | 16,710 | (<i>b</i>) 12,000 |
| Unwrought | 215 | 285 | 1,765 | 1,796 | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Semi-manufactures (<i>a</i>) | 13 | 75 | 13 | 103 | 351 | 1,026 |
| Laos— | | | | | | |
| Ore (<i>Sn content</i>) | 455 | 386 | 445 | 550 | 514 | 402 |
| Thailand— | | | | | | |
| Ore (<i>Sn content</i>) | 6,545 | 10,100 | 12,618 | 13,122 | 19,527 | 21,656 |

(*a*) Including alloys.

(*b*) Estimated.

IMPORTS OF TIN, ETC.*

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------------|-------------|--------|---------|--------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates .. | 64,895 | 61,494 | 58,268 | 51,364 | 50,058 | 44,883 |
| Unwrought (a) .. | 12,068 | (b) 2,775 | 2,208 | (b) 582 | 8,361 | 7,742 |
| Ghana— | | | | | | |
| Unwrought (a) .. | } 30 | 68 | 17 | { 10 | 7 | 6 |
| Semi-manufactures (a) .. |  |  |  |  |  |  | 112 | 521 | 138 |
| Kenya— | | | | | | |
| Unwrought (a) .. | 94 | 112 | 115 | 99 | 121 | 203 |
| Mauritius— | | | | | | |
| Unwrought (a) .. | 6 | 10 | 16 | 5 | 4 | 5 |
| Semi-manufactures (a) .. | 5 | 8 | 7 | 11 | — | 8 |
| Nigeria— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 29 | 35 | 23 | 18 | 74 | 4 |
| Rhodesia and Nyasaland— | | | | | | |
| Unwrought and semi-manufactures (a) .. | <i>n.a.</i> | <i>n.a.</i> | 74 | 77 | 48 | 132 |
| Tanganyika— | | | | | | |
| Unwrought (a) .. | 69 | 71 | 79 | 67 | 47 | 58 |
| Uganda— | | | | | | |
| Unwrought (a) .. | 42 | 28 | 39 | 41 | 36 | 39 |
| Zanzibar— | | | | | | |
| Semi-manufactures (a) .. | 10 | (b) 8 | 11 | 1 | 10 | 2 |
| Canada— | | | | | | |
| Unwrought .. | 3,461 | 4,184 | 3,768 | 3,525 | 2,274 | 4,193 |
| Semi-manufactures .. | 9 | 8 | 9 | 12 | 6 | 6 |
| Barbados— | | | | | | |
| Unwrought (a) .. | 4 | 5 | 6 | 3 | 5 | 3 |
| Semi-manufactures (a) .. | 138 | 51 | 45 | 85 | 169 | 195 |
| Jamaica— | | | | | | |
| Unwrought (a) .. | 42 | 33 | 28 | 21 | 36 | 28 |
| Semi-manufactures (a) .. | 17 | — | 154 | 945 | 428 | 479 |
| Trinidad and Tobago— | | | | | | |
| Unwrought (a) .. | 66 | 91 | 274 | 72 | 60 | <i>n.a.</i> |
| Semi-manufactures (a) .. | 489 | 366 | 673 | 212 | 495 | <i>n.a.</i> |
| British Guiana— | | | | | | |
| Unwrought (a) .. | 19 | 51 | 15 | 12 | 12 | <i>n.a.</i> |
| Semi-manufactures (a) .. | 5 | 12 | 8 | 9 | 3 | <i>n.a.</i> |
| Aden— | | | | | | |
| Semi-manufactures (a) .. | 408 | 1,324 | 1,573 | 1,296 | 1,220 | <i>n.a.</i> |
| Ceylon— | | | | | | |
| Unwrought .. | 9 | 11 | 17 | 17 | 11 | 40 |
| do. alloys .. | 37 | 57 | 38 | 23 | 33 | 22 |
| Semi-manufactures (a) .. | 1,012 | 1,906 | 2,114 | 1,704 | 2,480 | 3,900 |
| Cyprus— | | | | | | |
| Unwrought (a) .. | 9 | 19 | 14 | 12 | 14 | 9 |
| Hong Kong— | | | | | | |
| Unwrought (a) .. | 1,242 | 189 | 169 | 222 | 203 | 213 |
| Scrap .. | <i>n.a.</i> | 16 | 13 | 20 | 44 | 8 |
| Semi-manufactures (a) .. | 28 | 11 | 21 | 3 | 7 | 4 |
| India— | | | | | | |
| Unwrought .. | 4,659 | 4,295 | 3,921 | 4,566 | 4,672 | 4,403 |
| Semi-manufactures (a) .. | 426 | 68 | (c) 14 | (c) 43 | (c) 20 | (c) 172 |
| Malaya— | | | | | | |
| Ore .. | 11,213 | 11,853 | 29,704 | 26,356 | 33,313 | 27,964 |
| Unwrought (a) .. | 90 | 149 | 139 | 192 | 233 | 176 |
| Semi-manufactures (a) .. | 2 | 4 | 100 | 22 | 42 | 68 |

*See footnote on page 369 concerning the descriptions "unwrought" tin and "semi-manufactures" used in these tables.

(a) Including alloys.

(b) Excess of re-exports.

(c) Years ended March 31 following that stated.

IMPORTS OF TIN, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|--------|--------|--------|--------|--------|--------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Pakistan— | | | | | | |
| Unwrought (a) .. | 142 | 130 | 457 | 489 | 461 | 380 |
| Sabah— | | | | | | |
| Unwrought | 1 | 9 | 4 | 174 | 182 | n.a. |
| Semi-manufactures .. | — | 91 | 155 | 130 | 205 | n.a. |
| Australia— | | | | | | |
| Unwrought | 1,070 | 1,294 | 1,708 | 778 | 1,778 | 1,751 |
| Semi-manufactures(b) .. | 13 | 15 | 12 | 23 | 6 | 17 |
| Fiji— | | | | | | |
| Semi-manufactures (a) | 76 | 3 | 79 | 140 | 153 | 192 |
| Sarawak— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 1 | 2 | 16 | 7 | 3 | 33 |
| New Zealand— | | | | | | |
| Unwrought (a) .. | 380 | 352 | 362 | 291 | 380 | } 397 |
| Semi-manufactures (a) | 23 | 26 | 19 | 30 | 59 | |
| Irish Republic— | | | | | | |
| Unwrought (a) .. | 64 | 69 | 67 | 56 | 44 | 49 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Unwrought (a) .. | 514 | 651 | 848 | 788 | 722 | 782 |
| Semi-manufactures (a) | 9 | 5 | 17 | 26 | 24 | 36 |
| Belgium-Luxemburg E.U.— | | | | | | |
| Ore | 10,222 | 8,740 | 9,955 | 10,107 | 9,976 | 8,630 |
| Unwrought | 2,451 | 2,026 | 3,404 | 764 | 1,575 | 2,417 |
| do. alloys | 109 | 122 | 117 | 164 | 130 | 1,556 |
| Scrap | 8 | 3 | 10 | 20 | 3 | 45 |
| Semi-manufactures (a) | 120 | 131 | 136 | 159 | 125 | 117 |
| Denmark— | | | | | | |
| Unwrought | 3,269 | 7,198 | 2,663 | 3,653 | 508 | 576 |
| do. alloys | 1,122 | 521 | 365 | 72 | 102 | 185 |
| Scrap | 531 | 1,105 | 282 | 451 | 558 | 266 |
| Semi-manufactures (a) | 155 | 112 | 118 | 109 | 122 | 111 |
| Finland— | | | | | | |
| Unwrought (a) .. | 266 | 606 | 609 | 645 | 512 | 330 |
| France— | | | | | | |
| Unwrought | 12,794 | 10,927 | 11,676 | 10,043 | 11,209 | 10,998 |
| do. alloys | 26 | 93 | 206 | 598 | 63 | 51 |
| Scrap | 44 | 42 | 47 | 68 | 59 | 87 |
| Semi-manufactures (a) | 8 | 17 | 18 | 28 | 26 | 26 |
| Germany (Federal)— | | | | | | |
| Ore | 5,514 | 4,944 | 3,993 | 6,285 | 7,977 | 8,365 |
| Unwrought (a) .. | 11,213 | 20,435 | 29,420 | 27,913 | 12,084 | 11,597 |
| Scrap (a) | 522 | 111 | 115 | 403 | 225 | 358 |
| Semi-manufactures (a) | 13 | 16 | 37 | 11 | 28 | 21 |
| Greece— | | | | | | |
| Unwrought | 230 | 198 | 259 | 273 | 260 | 241 |
| Hungary— | | | | | | |
| Unwrought | 762 | 1,152 | 940 | 1,053 | 962 | 1,162 |
| Iceland— | | | | | | |
| Semi-manufactures (a) | 39 | 55 | 50 | 35 | 50 | 14 |
| Italy— | | | | | | |
| Unwrought | 3,400 | 3,987 | 4,672 | 4,874 | 4,711 | 5,168 |
| do. alloys | 216 | 195 | 440 | 436 | 934 | 718 |
| Scrap | 5 | 16 | — | 12 | 9 | 9 |
| Semi-manufactures (a) | 20 | 39 | 66 | 61 | 78 | 120 |

(a) Including alloys.

(b) Years ended June 30 of that stated.

IMPORTS OF TIN, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------|--------|--------|--------|--------|--------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Netherlands— | | | | | | |
| Ore | 20,214 | 13,291 | 8,351 | 4,154 | 7,527 | 7,804 |
| Unwrought | 9,155 | 9,261 | 2,171 | 2,148 | 2,515 | 2,954 |
| do. alloys | 421 | 4,912 | 10,885 | 11,966 | 195 | 129 |
| Scrap (a) | 27 | 62 | 98 | 59 | 60 | 143 |
| Semi-manufactures (a) | 173 | 236 | 57 | 38 | 81 | 66 |
| Norway— | | | | | | |
| Unwrought | 333 | 337 | 208 | 196 | 318 | 308 |
| do. alloys | 126 | 198 | 283 | 338 | 146 | 114 |
| Semi-manufactures (a) | 220 | 160 | 173 | 177 | 213 | 220 |
| Poland— | | | | | | |
| Unwrought | 2,299 | 3,218 | 1,270 | 3,098 | 2,169 | 2,429 |
| Portugal— | | | | | | |
| Unwrought (a) | 1 | 220 | 4 | 4 | 6 | 6 |
| Semi-manufactures (a) | | | 14 | 14 | 10 | 17 |
| Spain— | | | | | | |
| Ore | — | 20 | 559 | 2,269 | 1,041 | 2,779 |
| Unwrought | 41 | 295 | 513 | 206 | 25 | 74 |
| Sweden— | | | | | | |
| Unwrought | 1,280 | 965 | 817 | 727 | 800 | 612 |
| do. alloys | n.a. | 256 | 280 | 133 | 107 | 172 |
| Semi-manufactures (a) | n.a. | 131 | 118 | 113 | 101 | 114 |
| Switzerland— | | | | | | |
| Unwrought | 919 | 643 | 849 | 1,167 | 1,091 | 1,002 |
| Semi-manufactures (a) | 4 | 3 | 185 | 111 | 87 | 88 |
| U.S.S.R.— | | | | | | |
| Unwrought | 19,100 | 20,500 | 17,500 | 11,000 | 9,700 | 689 |
| Yugoslavia— | | | | | | |
| Unwrought | 777 | 1,010 | 1,156 | 1,375 | 897 | 2,151 |
| Semi-manufactures (a) | — | 3 | 7 | 10 | 21 | 23 |
| Algeria— | | | | | | |
| Unwrought (a) | 112 | 46 | 74 | n.a. | n.a. | n.a. |
| Semi-manufactures (a) | 149 | 132 | 78 | n.a. | n.a. | n.a. |
| Egypt— | | | | | | |
| Unwrought and scrap .. | 1,062 | 646 | 332 | 713 | 544 | n.a. |
| Semi-manufactures .. | 19 | 32 | 23 | 86 | 4 | n.a. |
| Malagasy Republic— | | | | | | |
| Semi-manufactures (a) | 20 | 19 | 25 | 11 | 6 | 13 |
| Morocco— | | | | | | |
| Unwrought | 221 | 163 | 245 | 261 | 280 | 298 |
| Mozambique— | | | | | | |
| Semi-manufactures .. | 15 | 20 | 16 | 33 | n.a. | n.a. |
| South Africa— | | | | | | |
| Unwrought | 1,037 | 621 | 1,000 | 670 | 504 | 794 |
| Sudan— | | | | | | |
| Unwrought and scrap .. | 12 | 23 | 19 | 34 | 35 | 22 |
| Semi-manufactures .. | n.a. | n.a. | n.a. | n.a. | n.a. | 107 |
| Tunisia— | | | | | | |
| Unwrought (a) | 19 | 26 | 28 | 34 | 10 | 15 |
| Semi-manufactures (a) | 62 | 59 | 13 | 12 | 10 | 11 |
| Cuba— | | | | | | |
| Unwrought | 71 | 56 | n.a. | n.a. | n.a. | n.a. |
| Semi-manufactures (a) | 74 | 120 | n.a. | n.a. | n.a. | n.a. |
| Mexico— | | | | | | |
| Unwrought | 753 | 816 | 626 | 178 | 191 | 525 |
| United States— | | | | | | |
| Ore (Sn content) | 5,440 | 10,773 | 14,026 | 8,917 | 5,364 | 1,473 |
| Unwrought | 41,149 | 43,578 | 39,538 | 39,898 | 41,064 | 43,151 |
| do. alloys (b) | 3,208 | 3,350 | 809 | 612 | 2,517 | 268 |
| Scrap | 2 | 1 | 1 | 18 | 6,570 | 2,154 |

(a) Including alloys.

(b) Including alloyed scrap, dross and residues.

IMPORTS OF TIN, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---------------------------------------|-------------|-------|-------------|--------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Argentina— | | | | | | |
| Unwrought | 1,490 | 1,465 | 1,696 | 1,958 | 954 | 1,189 |
| Brazil— | | | | | | |
| Ore | 327 | 1,705 | 2,411 | 2,143 | 1,843 | 2,942 |
| Unwrought (a) | 24 | 283 | 33 | 15 | 1 | 1 |
| Colombia— | | | | | | |
| Unwrought (a) | 55 | 137 | 91 | 141 | 126 | 265 |
| Semi-manufactures (a) | 57 | 181 | 68 | 61 | 66 | 42 |
| Chile— | | | | | | |
| Ore and concentrates | 5 | 10 | 10 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Unwrought | 183 | 238 | 374 | <i>r</i> 860 | 580 | 611 |
| Peru— | | | | | | |
| Unwrought (a) | 39 | 65 | 57 | 79 | 61 | 136 |
| Uruguay— | | | | | | |
| Unwrought and semi-manufactures | 35 | 114 | 78 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela— | | | | | | |
| Unwrought | 239 | 385 | 123 | 139 | 174 | 191 |
| Burma— | | | | | | |
| Unwrought | 63 | 105 | 20 | 29 | 21 | 5 |
| Semi-manufactures (a) | 36 | 157 | 64 | 51 | 24 | 6 |
| Formosa— | | | | | | |
| Unwrought (a) | 123 | 207 | 145 | 106 | 165 | 185 |
| Iran (b)— | | | | | | |
| Unwrought | 286 | 304 | 410 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Iraq— | | | | | | |
| Unwrought | 21 | 20 | 16 | 16 | 27 | <i>n.a.</i> |
| Semi-manufactures | 459 | 35 | 1,575 | 68 | 63 | <i>n.a.</i> |
| Israel— | | | | | | |
| Unwrought | 104 | 93 | 100 | 72 | 93 | 101 |
| Japan— | | | | | | |
| Ore and concentrates | 200 | 79 | 83 | 763 | 927 | 1,509 |
| Unwrought | 7,370 | 9,706 | 11,722 | 11,969 | 11,613 | 14,357 |
| Jordan— | | | | | | |
| Semi-manufactures | <i>n.a.</i> | 34 | <i>n.a.</i> | 26 | 26 | 33 |
| Korea (South)— | | | | | | |
| Unwrought and semi-manufactures | <i>n.a.</i> | 318 | 137 | 161 | 313 | 215 |
| Lebanon— | | | | | | |
| Unwrought | 2 | 4 | 4 | 13 | 11 | <i>n.a.</i> |
| Philippine Republic— | | | | | | |
| Unwrought (a) | 167 | 280 | 282 | 214 | 469 | 597 |
| Syria— | | | | | | |
| Unwrought and scrap | 57 | 30 | 50 | 93 | 70 | 56 |
| Turkey— | | | | | | |
| Unwrought (a) | 567 | 796 | 1,065 | 366 | 884 | 486 |
| Semi-manufactures (a) | 1 | 11 | 27 | 22 | 353 | 15 |

(a) Including alloys.

(b) Years ended March 20 of year following that stated.

TITANIUM MINERALS

PRODUCTION OF TITANIUM MINERALS

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------|---------|-----------|-----------|---------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Gambia (a)— | | | | | | |
| Ilmenite.. .. . | 28,896 | 13,202 | — | — | — | — |
| Rutile | 467 | 898 | — | — | — | — |
| Sierra Leone— | | | | | | |
| Rutile concentrates .. | — | — | — | — | — | (a) 100 |
| Canada (shipments) (b)— | | | | | | |
| Ilmenite.. .. . | 375,832 | 559,205 | 863,726 | 1,032,122 | 665,851 | 817,286 |
| Ceylon— | | | | | | |
| Ilmenite.. .. . | — | — | 6,000 | 10,000 | 4,153 | (a) 18,786 |
| India— | | | | | | |
| Ilmenite.. .. . | 309,161 | 298,236 | 245,807 | 171,445 | 135,824 | 25,553 |
| Rutile | 449 | 383 | 966 | 802 | 1,590 | 1,841 |
| Malaya (a)— | | | | | | |
| Ilmenite | 74,826 | 72,851 | 118,085 | 106,871 | 101,368 | 146,718 |
| Australia— | | | | | | |
| Ilmenite concentrates (c) | 69,948 | 83,577 | 106,586 | 166,400 | 179,494 | 203,423 |
| Rutile concentrates .. | 83,328 | 81,905 | 88,637 | 101,431 | 119,195 | 183,683 |
| OTHER COUNTRIES | | | | | | |
| Finland— | | | | | | |
| Ilmenite concentrates .. | 104,807 | 84,791 | 82,338 | 18,993 | 85,812 | 93,000 |
| Norway— | | | | | | |
| Ilmenite.. .. . | 208,617 | 223,398 | 230,842 | 306,003 | 247,132 | 238,429 |
| Portugal— | | | | | | |
| Ilmenite.. .. . | 452 | 1,887 | 895 | 97 | 67 | 40 |
| Spain— | | | | | | |
| Ilmenite.. .. . | 16,215 | 7,244 | 10,952 | 29,629 | 41,014 | 49,772 |
| Egypt— | | | | | | |
| Ilmenite.. .. . | (f) 2,700 | 15,300 | 11,800 | 33,932 | 43,937 | 532 |
| Rutile | — | 1,033 | (f) 1,000 | (f) 1,000 | 177 | 4 |
| Malagasy Republic— | | | | | | |
| Ilmenite.. .. . | 1,027 | 588 | 2,686 | 3,250 | 3,134 | 3,595 |
| Mozambique— | | | | | | |
| Ilmenite.. .. . | — | 10,251 | 700 | — | — | — |
| Senegal— | | | | | | |
| Ilmenite.. .. . | 33,000 | 29,412 | 21,571 | 17,220 | 22,078 | 11,996 |
| Rutile | 1,033 | — | — | 174 | 724 | 697 |
| South Africa— | | | | | | |
| Ilmenite.. .. . | (e) 26,811 | 77,887 | 80,743 | 88,402 | 77,764 | 27,713 |
| Rutile | 493 | 3,019 | 3,299 | 3,110 | 3,192 | 1,237 |
| Mexico— | | | | | | |
| Ilmenite.. .. . | 149 | — | — | — | — | 139 |
| United States (g)— | | | | | | |
| Ilmenite (d) | 502,980 | 566,862 | 702,118 | 653,939 | 721,183 | 793,214 |
| Rutile | 6,612 | 8,452 | 7,864 | 8,076 | 8,912 | 10,638 |

(a) Exports.

(b) Production of titanium dioxide slag (TiO₂) at Sorel was as follows (long tons): 1958—144,029; 1959—217,562; 1960—345,213; 1961—413,675; 1962—269,150; 1963—338,679.

(c) Despatches.

(d) Contains a mixed product containing ilmenite, leucoxene and rutile.

(e) Including 269 long tons of mixed concentrates.

(f) United States Bureau of Mines' estimate.

(g) Production of metal (commercial titanium sponge) was as follows (long tons): 1958—4,094; 1959—3,480; 1960—4,742; 1961—6,006; 1962—6,009; 1963—7,035.

PRODUCTION OF TITANIUM MINERALS (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Brazil— | | | | | | |
| Ilmenite.. .. . | 5,081 | (a) 5,000 | n.a. | n.a. | n.a. | n.a. |
| Rutile | 240 | 207 | 213 | 218 | 129 | 321 |
| Japan (b)— | | | | | | |
| Ilmenite.. .. . | 5,247 | 5,062 | 5,138 | 5,883 | 4,705 | 4,359 |
| Thailand— | | | | | | |
| Ilmenite.. .. . | 823 | 491 | — | — | — | — |
| WORLD'S TOTAL*— | | | | | | |
| Ilmenite | 1,769,000 | 2,055,000 | 2,500,000 | 2,650,000 | 2,300,000 | 2,400,000 |
| Rutile | 92,600 | 95,900 | 103,000 | 115,000 | 134,000 | 199,000 |

*Excluding the U.S.S.R.

(a) United States Bureau of Mines' estimate.

(b) Production of metal (commercial titanium sponge) was as follows (long tons): 1958—1,630; 1959—2,438; 1960—2,271; 1961—2,247; 1962—1,489; 1963—1,731.

EXPORTS OF TITANIUM MINERALS, ETC.

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ferro-titanium | 348 | 502 | 276 | 533 | 552 | 1,024 |
| Gambia— | | | | | | |
| Ilmenite | 28,896 | 13,202 | — | — | — | — |
| Rutile | 467 | 898 | — | — | — | — |
| Canada— | | | | | | |
| Titanium dioxide slag (70% TiO ₂) | 100,371 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Ceylon— | | | | | | |
| Ilmenite | — | — | 1 | — | 2,750 | 19,857 |
| Hong Kong— | | | | | | |
| Titanium oxide | 142 | 155 | 130 | 153 | 92 | 75 |
| India— | | | | | | |
| Ilmenite | r 283,664 | r 276,618 | 225,301 | 123,235 | 99,649 | 75,248 |
| Malaya— | | | | | | |
| Ilmenite | 74,826 | 72,851 | 118,085 | 106,871 | 101,368 | 146,718 |
| Australia— | | | | | | |
| Rutile | 75,615 | 80,938 | 93,706 | 99,652 | 117,291 | 154,508 |
| Ilmenite | 56,243 | 68,649 | 75,319 | 144,009 | 155,075 | 152,040 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg E.U.— | | | | | | |
| Titanium oxide | 655 | 4,337 | 9,021 | 5,849 | 9,931 | 10,202 |
| Finland— | | | | | | |
| Ilmenite | 95,409 | 63,539 | 64,131 | 34,397 | 37,176 | 62,305 |
| France— | | | | | | |
| Titanium minerals | 15 | 25 | <i>n.a.</i> | 725 | 175 | 70 |
| Ferro-titanium | 648 | 1,404 | 1,695 | 1,619 | 1,064 | 1,387 |
| Titanium oxide | 156 | 2,604 | 10,150 | 17,147 | 20,957 | 25,458 |
| Germany (Federal)— | | | | | | |
| Titanium minerals | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 87 | 221 |
| Titanium oxide | 34,493 | 38,722 | 45,914 | 48,285 | 49,898 | 54,555 |
| Italy— | | | | | | |
| Titanium oxide | 5,268 | 6,636 | 7,047 | 7,303 | 11,520 | 15,066 |
| Netherlands— | | | | | | |
| Titanium oxide | 319 | 956 | 2,422 | 650 | 120 | 2,626 |
| Norway— | | | | | | |
| Ilmenite | (a) 224,538 | } 214,311 | } 257,091 | } 298,549 | } 230,094 | } 236,711 |
| Rutile | 2 | | | | | |
| Titanium oxide | <i>n.a.</i> |  |  |  |  |  | 3,349 | 2,711 | 2,504 | 1,982 | 1,650 |
| Portugal— | | | | | | |
| Ilmenite | 101 | 100 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Spain— | | | | | | |
| Ilmenite | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 18,966 | 24,413 | 20,432 |
| Sweden— | | | | | | |
| Titanium minerals | 15 | 15 | 14 | 48 | 26 | 25 |
| Titanium oxide | 24 | 28 | 6 | 23 | 75 | 84 |
| Cameroun— | | | | | | |
| Rutile | 33 | 5 | 28 | — | 10 | — |
| Senegal— | | | | | | |
| Ilmenite | 28,610 | 20,849 | 32,102 | 21,317 | 22,599 | 13,658 |
| Rutile | 905 | — | — | — | — | — |
| South Africa— | | | | | | |
| Ilmenite | 15,741 | 57,490 | 99,453 | 80,494 | 59,356 | 14,459 |
| Rutile | 155 | 1,409 | 3,688 | 1,874 | 289 | — |

(a) The figures refer to exports of "Other ores" which are mainly ilmenite.

EXPORTS OF TITANIUM MINERALS, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------|--------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| United States— | | | | | | |
| Ores and concentrates.. | 1,112 | 4,157 | 1,125 | 1,282 | 1,093 | 1,082 |
| Titanium metal (a) .. | 387 | 889 | 1,164 | 1,134 | 1,231 | 1,567 |
| Ferro-titanium | 288 | 286 | 219 | 189 | 116 | 188 |
| Titanium oxide and pigments | 33,050 | 32,395 | 30,049 | 27,771 | 25,977 | 23,841 |
| Brazil— | | | | | | |
| Titanium minerals .. | — | — | — | 20 | — | — |
| Japan— | | | | | | |
| Titanium sponge metal | 1,947 | 1,757 | 1,702 | 1,620 | 989 | 1,189 |
| Titanium oxide.. .. | 13,647 | 13,916 | 18,803 | 16,199 | 21,692 | 23,576 |
| Thailand— | | | | | | |
| Ilmenite.. .. . | 492 | 394 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Including alloys and scrap.

IMPORTS OF TITANIUM MINERALS, ETC.

Long ton

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|---------|-----------|-----------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ilmenite.. .. | 256,899 | 243,886 | 338,517 | 273,354 | 275,890 | 226,810 |
| Rutile | 12,281 | 7,276 | 10,521 | 13,842 | 15,629 | 18,267 |
| Titanium sponge .. | — | — | 44 | (c) 7 | 31 | n.a. |
| Other titanium metal .. | 7 | 1 | 1 | 9 | 9 | n.a. |
| Titanium oxide.. .. | 154 | 1,747 | 840 | 1,915 | 1,880 | 3,895 |
| Canada— | | | | | | |
| Titanium oxide, etc. .. | 26,285 | 27,319 | 24,015 | 23,769 | 11,268 | 3,007 |
| Hong Kong— | | | | | | |
| Titanium oxide.. .. | 2,013 | 1,861 | 2,452 | 1,941 | 2,338 | 2,112 |
| India— | | | | | | |
| Rutile | 193 | 100 | 146 | 332 | 95 | — |
| Titanium oxide.. .. | 797 | 1,456 | (b) 926 | (b) 1,477 | (b) 2,392 | (b) 2,793 |
| Australia (a)— | | | | | | |
| Titanium oxide.. .. | 7,482 | 5,847 | 4,100 | 7,046 | 4,644 | 6,075 |
| New Zealand— | | | | | | |
| Titanium oxide.. .. | 4,608 | 2,441 | 3,477 | 3,558 | 3,494 | n.a. |
| Irish Republic— | | | | | | |
| Titanium oxide.. .. | n.a. | n.a. | 1,378 | 1,358 | 1,356 | 1,594 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ferro-titanium | n.a. | 452 | 289 | 192 | 139 | 162 |
| Titanium oxide.. .. | 2,086 | 2,649 | 3,437 | 3,605 | 3,805 | 4,221 |
| Belgium-Luxemburg .. | | | | | | |
| E. U.— | | | | | | |
| Ferro-titanium | 35 | 113 | 175 | 319 | 182 | 216 |
| Titanium white | 6,367 | 7,333 | 9,013 | 5,698 | 7,082 | 7,759 |
| Denmark— | | | | | | |
| Titanium white | 430 | 3,411 | 4,084 | 3,854 | 4,826 | 4,898 |
| Finland— | | | | | | |
| Titanium white | 3,515 | 4,277 | 4,785 | 3,949 | 2,269 | 1,072 |
| France— | | | | | | |
| Titanium minerals .. | 46,294 | 63,914 | 71,512 | 75,933 | 80,702 | 95,020 |
| Titanium oxide.. .. | 4,873 | 5,003 | 5,836 | 6,661 | 9,701 | 9,678 |
| Germany (Federal)— | | | | | | |
| Ilmenite.. .. | 197,000 | 205,796 | 280,514 | 264,845 | 208,954 | 220,473 |
| Other titanium minerals | 8,707 | 13,930 | 18,948 | 96,282 | 68,574 | 58,792 |
| Titanium metal | 41 | 116 | 131 | 189 | 274 | 352 |
| Titanium oxide.. .. | 1,765 | 2,311 | 855 | 321 | 2,994 | 4,568 |
| Greece— | | | | | | |
| Titanium oxide.. .. | 453 | 530 | 790 | 890 | 1,023 | 1,341 |
| Hungary— | | | | | | |
| Ferro-titanium | 48 | 60 | 48 | 87 | 88 | 88 |
| Iceland— | | | | | | |
| Titanium oxide.. .. | 195 | 169 | 261 | 242 | 215 | 227 |
| Italy— | | | | | | |
| Titanium minerals .. | 41,214 | 36,288 | 51,645 | 81,323 | 67,587 | 97,351 |
| Ferro-titanium | 272 | 234 | 286 | 507 | 457 | 401 |
| Titanium oxide.. .. | 4,363 | 4,320 | 7,360 | 8,193 | 10,859 | 13,633 |
| Netherlands— | | | | | | |
| Ferro-titanium | 32 | 32 | 36 | 43 | 28 | 37 |
| Titanium oxide.. .. | 11,589 | 16,384 | 19,627 | 17,648 | 18,396 | 20,229 |
| Norway— | | | | | | |
| Titanium oxide.. .. | n.a. | 5,432 | 5,382 | 4,513 | 6,330 | 6,369 |
| Poland— | | | | | | |
| Titanium oxide.. .. | 723 | 1,013 | 1,398 | 1,990 | n.a. | 2,891 |

(a) Years ended June 30 of that stated.

(b) Years ended March 31 following that stated.

(c) Excess of re-exports.

IMPORTS OF TITANIUM MINERALS, ETC. (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Portugal— | | | | | | |
| Rutile | 199 | 75 | <i>n.a.</i> | 255 | 326 | <i>n.a.</i> |
| Titanium oxide.. .. | 703 | 857 | 1,236 | 1,271 | 1,430 | 1,670 |
| Sweden— | | | | | | |
| Titanium minerals | 4,475 | 2,981 | 2,533 | 3,418 | 4,423 | 3,612 |
| Ferro-titanium | <i>n.a.</i> | 725 | 1,029 | 644 | 264 | 736 |
| Titanium oxide.. .. . | 7,231 | 9,383 | 10,333 | 9,997 | 12,566 | 13,188 |
| Switzerland— | | | | | | |
| Titanium oxide.. .. . | <i>n.a.</i> | <i>n.a.</i> | 4,550 | 4,943 | 6,078 | 5,503 |
| Yugoslavia— | | | | | | |
| Rutile | 256 | 1,059 | 1,458 | 424 | 680 | 1,645 |
| Titanium oxide.. .. . | 413 | 851 | 852 | 897 | 1,382 | 1,589 |
| Algeria— | | | | | | |
| Titanium minerals | 458 | 229 | 130 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Titanium oxide.. .. . | 282 | 267 | 355 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Congo Republic— | | | | | | |
| Titanium oxide.. .. . | 442 | 430 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Morocco— | | | | | | |
| Titanium oxide | 123 | 149 | 178 | 236 | 286 | 391 |
| Tunisia— | | | | | | |
| Titanium oxide.. .. . | 63 | 32 | 50 | 83 | 87 | 148 |
| Costa Rica— | | | | | | |
| Titanium oxide.. .. . | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 157 | 141 |
| Mexico— | | | | | | |
| Titanium oxide | 3,587 | 4,234 | 4,600 | 207 | 60 | 1,537 |
| United States— | | | | | | |
| Ilmenite (a) | 310,843 | 331,863 | 237,183 | 174,853 | 148,602 | 179,357 |
| Rutile | 32,646 | 20,740 | 26,102 | 24,551 | 32,112 | 42,626 |
| Titanium metal | 1,851 | 1,396 | 1,992 | 2,223 | 825 | 1,320 |
| Ferro-titanium | 90 | 113 | 74 | 163 | 107 | 37 |
| Titanium compounds | 633 | 2,515 | 5,521 | 8,056 | 14,800 | 13,493 |
| Argentina— | | | | | | |
| Titanium oxide.. .. . | 3,497 | 2,495 | 3,634 | 4,534 | 4,363 | 2,887 |
| Brazil— | | | | | | |
| Titanium oxide.. .. . | 2,504 | 2,727 | 3,482 | 4,278 | 5,371 | 6,982 |
| Chile— | | | | | | |
| Titanium oxide.. .. . | 789 | 927 | 1,190 | 1,652 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Titanium oxide.. .. . | 848 | 1,183 | 1,499 | 1,745 | 2,119 | 2,742 |
| Peru— | | | | | | |
| Titanium oxide.. .. . | 276 | 394 | 497 | 635 | 755 | 721 |
| Venezuela— | | | | | | |
| Titanium oxide.. .. . | 1,843 | 2,048 | 1,250 | 2,193 | 2,302 | 2,453 |
| Formosa— | | | | | | |
| Titanium oxide | <i>n.a.</i> | <i>n.a.</i> | 306 | 374 | 526 | 721 |
| Japan— | | | | | | |
| Ilmenite.. .. . | 58,950 | 81,144 | 126,586 | 139,792 | 120,366 | 139,649 |
| Titanium oxide.. .. . | 61 | 108 | 147 | 2,122 | 59 | 65 |
| Korea (South)— | | | | | | |
| Titanium oxide | 457 | 657 | 775 | 999 | 1,291 | 967 |
| Philippine Republic— | | | | | | |
| Titanium oxide.. .. . | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 1,954 | 2,682 | 841 |
| Turkey— | | | | | | |
| Titanium oxide | 271 | 456 | 238 | 910 | 973 | 1,383 |

(a) Including titanium dioxide slag (70% TiO₂) imported from Canada.

TUNGSTEN
PRODUCTION OF TUNGSTEN ORES AND CONCENTRATES

Long tons

| Producing Country and Description | 1958-1963 | | | | | | Estimated WO ₃ Content | | | | | |
|-----------------------------------|-----------|------|-------|-------|------|------|-----------------------------------|------|-------|-------|-------|------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
| COMMONWEALTH COUNTRIES | | | | | | | | | | | | |
| United Kingdom— | 2 | — | — | — | — | — | — | — | — | — | — | — |
| Concentrates .. | 85 | 30 | 9 | 46 | 19 | 3 | 61 | 22 | 33 | 14 | — | 2 |
| Southern Rhodesia— | — | — | — | 9 | — | — | — | — | 5 | — | — | — |
| Concentrates .. | — | — | — | — | — | — | — | — | — | — | — | — |
| Tanganyika— | — | — | — | — | — | — | — | — | — | — | — | — |
| Wolfram .. | — | — | — | — | — | — | — | — | — | — | — | — |
| Uganda— | 47 | 51 | 102 | 115 | 11 | 2 | 31 | 34 | 79 | 7 | 1 | 1 |
| Wolfram .. | — | — | — | — | — | — | — | — | — | — | — | — |
| Canada (a)— | 456 | — | — | — | 3 | n.a. | 308 | — | — | 2 | n.a. | n.a. |
| Concentrates .. | 38 | 39 | 31 | 17 | 15 | 7 | 25 | 25 | 11 | 10 | 5 | 5 |
| Hong Kong— | — | — | — | — | — | — | — | — | — | — | — | — |
| Wolfram .. | — | — | — | — | — | — | — | — | — | — | — | — |
| India— | — | — | — | — | — | — | — | — | — | — | — | — |
| Concentrates .. | — | 1 | 3 | 9 | 10 | 4 | — | 1 | 6 | 6 | 3 | 3 |
| Malaya— | 33 | 14 | 13 | 14 | 9 | 6 | 22 | 10 | 10 | 6 | — | — |
| Wolfram .. | 12 | 6 | 23 | 17 | — | — | 9 | 5 | 13 | — | — | — |
| Scheelite .. | — | — | — | — | — | — | — | — | — | — | — | — |
| Australia— | 517 | 903 | 1,131 | 1,142 | 492 | 394 | 372 | 653 | 827 | 351 | 285 | 285 |
| Wolfram .. | 733 | 1 | 420 | 1,017 | 995 | 958 | 478 | — | 709 | 691 | 675 | 675 |
| Scheelite .. | — | — | — | — | — | — | — | — | — | — | — | — |
| New Zealand— | 3 | 9 | 8 | 5 | 8 | 5 | 2 | 6 | 3 | 5 | 3 | 3 |
| Scheelite .. | — | — | — | — | — | — | — | — | — | — | — | — |
| TOTAL | | | | | | | 1,309 | 756 | 1,239 | 1,696 | 1,092 | 980 |
| OTHER COUNTRIES | | | | | | | | | | | | |
| Austria— | — | — | — | — | — | — | — | — | — | — | — | — |
| Concentrates .. | 110 | 116 | 185 | 242 | 250 | 190 | 77 | 82 | 170 | 172 | 132 | 132 |
| Finland— | — | — | — | — | — | — | — | — | — | — | — | — |
| Concentrates .. | n.a. | n.a. | — | n.a. | — | — | 87 | 22 | r 31 | — | — | — |

(a) Shipments (chiefly scheelite).

PRODUCTION OF TUNGSTEN ORES AND CONCENTRATES (cont.)

Long tons

| Producing Country and Description | Estimated WO ₃ Content | | | | | | 1963 | 1962 | 1961 | 1960 | 1959 | 1958 |
|---|-----------------------------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | | | | | | |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | |
| France— Concentrates | 949 | 791 | 597 | 647 | 614 | — | — | 432 | 403 | 514 | 617 | — |
| Italy— Concentrates | 9 | 5 | 7 | 2 | — | 2 | — | 1 | 5 | 3 | 6 | — |
| Portugal— Scheelite | 83 | 52 | 62 | 68 | 52 | 1,309 | 34 | 44 | 40 | 34 | 54 | 34 |
| Wolfram | 1,654 | 1,990 | 2,403 | 2,442 | 1,947 | — | 1,293 | 1,710 | 1,682 | — | 1,076 | 1,444 |
| Spain— Concentrates | 1,142 | { r 173 | r 336 | r 441 | 248 | 46 | { | 286 | 215 | 102 | 697 | 32 |
| Tin-tungstencentrates | — | { 721 | 686 | 775 | 568 | 212 | { | 352 | 336 | 355 | — | 55 |
| Sweden— Concentrates | 522 | 290 | 331 | 366 | 350 | 350 | 144 | 185 | 166 | 144 | 354 | 180 |
| U.S.S.R. (b) | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 5,300 | 5,900 | 5,600 | — | 5,000 | 6,500 |
| Yugoslavia | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 46 | 46 | 46 | — | 53 | 6,200 |
| Chad | 8 | — | — | — | — | — | n.a. | — | — | — | n.a. | 5 |
| Congo Republic— Concentrates | 659 | 542 | n.a. | n.a. | n.a. | n.a. | { | 319 | 541 | 483 | 429 | n.a. |
| Tin-tungsten ore | 775 | 657 | n.a. | n.a. | n.a. | n.a. | { | — | — | — | 135 | — |
| Egypt— Concentrates | — | — | — | n.a. | — | — | — | 49 | — | — | — | — |
| Rwanda and Burundi— Concentrates | 230 | 141 | 415 | 527 | 136 | n.a. | 150 | 393 | 270 | 92 | — | — |
| South Africa— Concentrates | 68 | 33 | 31 | 24 | 22 | 7 | 36 | 21 | 21 | 2 | 12 | 14 |
| Tin-scheelite concentrates | n.a. | n.a. | — | — | — | — | 8 | — | — | — | — | — |
| South West Africa— Wolfram | 13 | — | — | — | — | — | — | — | — | — | — | — |
| Scheelite | — | — | 2 | 6 | 2 | — | — | — | — | — | — | — |
| Tin-wolfram concentrates | 101 | 4 | 483 | 579 | 575 | 753 | 12 | 105 | 82 | 1 | — | 148 |
| Mexico | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 4 | 103 | 108 | 74 | 4 | 47 |
| United States— Concentrates (a) | 3,382 | 3,258 | 6,540 | 7,362 | 7,526 | 5,051 | 2,029 | 4,417 | 3,924 | 1,955 | 2,924 | 4,515 |

(a) Shipments from mine.

(b) United States Bureau of Mines' estimate.

PRODUCTION OF TUNGSTEN ORES AND CONCENTRATES (cont.)

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | Estimated WO ₃ Content | | | | | |
|-----------------------------------|--------|---------|--------|--------|--------|--------|-----------------------------------|----------|----------|----------|----------|--------|
| | | | | | | | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
| OTHER COUNTRIES (cont.) | | | | | | | | | | | | |
| Argentina— | | | | | | | | | | | | |
| Concentrates .. | 904 | 684 | 689 | 735 | 513 | 148 | 604 | 443 | 478 | 340 | 69 | |
| Bolivia (a)— | | | | | | | | | | | | |
| Concentrates .. | n.a. | 2,254 | 1,971 | n.a. | n.a. | n.a. | 1,316 | 1,431 | 1,270 | 1,499 | 1,347 | |
| Brazil— | | | | | | | | | | | | |
| Wolfram and scheelite .. | 2,093 | 1,713 | 1,390 | 1,013 | 1,018 | 456 | 1,256 | 1,028 | 834 | 611 | 274 | |
| Peru— | | | | | | | | | | | | |
| Concentrates .. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 531 | (c) 290 | (c) 288 | (c) 234 | (c) 273 | |
| Burma— | | | | | | | | | | | | |
| Tungsten concentrates .. | 201 | 230 | 349 | 309 | 216 | 89 | 121 | 138 | 209 | 130 | 50 | |
| Tin-wolfram concentrates | 1,172 | 743 | 1,096 | 1,186 | 1,162 | 1,153 | 470 | 300 | 440 | 460 | 460 | |
| China— | | | | | | | | | | | | |
| Concentrates (b) .. | 15,000 | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 9,000 | r 12,000 | r 13,000 | 13,000 | 13,000 | |
| Japan— | | | | | | | | | | | | |
| Concentrates .. | 672 | 906 | 822 | 812 | 906 | 640 | 471 | 640 | 580 | 621 | 459 | |
| Korea— | | | | | | | | | | | | |
| South— | | | | | | | | | | | | |
| Concentrates .. | 2,964 | 2,878 | 4,837 | 6,203 | 6,290 | 5,140 | 1,900 | 1,900 | 3,100 | 4,100 | 3,300 | |
| North— | | | | | | | | | | | | |
| Concentrates (b) .. | 3,000 | r 4,000 | 5,000 | 5,000 | 4,000 | 4,000 | 1,800 | 2,000 | 3,000 | 2,000 | 2,000 | |
| Thailand— | | | | | | | | | | | | |
| Concentrates .. | 598 | 457 | 401 | 467 | 387 | 187 | 385 | 300 | 260 | 248 | 121 | |
| TOTAL | | | | | | | r 29,000 | r 31,000 | r 37,000 | r 37,000 | r 39,000 | 33,000 |
| WORLD'S TOTAL | | | | | | | r 30,000 | r 32,000 | r 38,000 | r 38,000 | r 41,000 | 34,000 |

(a) Exports.

(b) Estimated.

(c) Recoverable.

EXPORTS OF TUNGSTEN, ETC.

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-------|-------|---------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Tungsten ore | 5 | 81 | 86 | 35 | 20 | — |
| Ferro-tungsten | 993 | 1,282 | 1,048 | 1,445 | 1,584 | 1,225 |
| Tungsten metal, etc. .. | 44 | 50 | 43 | 31 | 41 | 53 |
| Nigeria— | | | | | | |
| Tungsten ore | — | 1 | — | — | — | — |
| Rhodesia and Nyasaland— | | | | | | |
| Tungsten ores | 62 | 62 | 12 | 33 | 26 | 2 |
| Tanganyika— | | | | | | |
| Wolfram ore | — | — | — | 9 | <i>n.a.</i> | — |
| Uganda— | | | | | | |
| Wolfram ore | 27 | 12 | 68 | 189 | <i>n.a.</i> | 6 |
| Canada— | | | | | | |
| Tungsten ore | 459 | — | — | — | — | — |
| Hong Kong— | | | | | | |
| Tungsten ore | 15 | 74 | 30 | — | — | — |
| India— | | | | | | |
| Wolfram ore | 11 | — | — | — | 2 | — |
| Malaya— | | | | | | |
| Wolfram | 37 | 53 | 11 | 18 | 4 | 10 |
| Scheelite | 5 | 29 | 22 | 14 | — | — |
| Australia (a)— | | | | | | |
| Wolfram ores and concentrates | 387 | 596 | 1,192 | 1,055 | 760 | 452 |
| (<i>WO₃ content</i>) | 277 | 431 | 862 | 767 | 555 | 327 |
| Scheelite ores and concentrates | 1,149 | 167 | 185 | 816 | 974 | 295 |
| (<i>WO₃ content</i>) | 757 | 119 | 131 | 567 | 676 | 205 |
| New Zealand— | | | | | | |
| Scheelite | 11 | 14 | 15 | 6 | <i>n.a.</i> | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | — | 155 | 268 | 196 | 298 | 207 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ferro-tungsten | — | 6 | 14 | 101 | 118 | 96 |
| France— | | | | | | |
| Tungsten ore | 233 | 416 | 359 | 388 | 478 | 106 |
| Ferro-tungsten | 15 | 149 | 187 | 301 | 274 | 215 |
| Tungsten metal, etc. .. | 15 | 32 | 56 | 68 | 65 | 71 |
| Germany (Federal)— | | | | | | |
| Tungsten metal, etc. .. | 198 | 245 | 248 | 240 | 217 | 248 |
| Netherlands— | | | | | | |
| Ore | 84 | 24 | 61 | 77 | 114 | 187 |
| Portugal— | | | | | | |
| Tungsten ores | 1,365 | 2,449 | 2,380 | 2,584 | 2,008 | 1,133 |
| do. residues | — | — | 371 | 31 | — | — |
| Ferro-tungsten | 61 | 124 | 149 | — | <i>n.a.</i> | <i>n.a.</i> |
| Spain— | | | | | | |
| Tungsten ore | 744 | 596 | 616 | 703 | 281 | 37 |
| Sweden— | | | | | | |
| Ore | 240 | 87 | 67 | 47 | — | 18 |
| Tungsten metal, etc. .. | <i>n.a.</i> | 37 | 56 | 45 | 26 | 96 |
| Ferro-tungsten | 64 | 184 | 126 | 20 | 104 | 169 |
| Congo Republic (c)— | | | | | | |
| Tungsten ores | 1,147 | 1,212 | 1,123 | (b) 600 | (b) 100 | (b) 100 |
| South Africa— | | | | | | |
| Tungsten ore | — | 30 | — | — | — | 4 |
| South West Africa— | | | | | | |
| Tungsten ore | — | — | — | — | 3 | — |
| Tin-tungsten ore | 126 | 13 | — | 360 | 530 | 761 |

(a) Years ended June 30 of that stated.

(b) Estimated.

(c) Including Rwanda and Burundi.

EXPORTS OF TUNGSTEN, ETC. (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------|-------|-------|-------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Mexico— | | | | | | |
| Tungsten ore and concentrates | 6 | 126 | 185 | 445 | 60 | 85 |
| (<i>WO₃ content</i>) | 4 | 73 | 109 | 103 | 47 | 20 |
| United States— | | | | | | |
| Ore and concentrates | 20 | 1 | 565 | 185 | 35 | 44 |
| Ferro-tungsten | 1 | 34 | — | — | 5 | 1 |
| Tungsten metal, alloys and scrap | 49 | 169 | 359 | 113 | 55 | 71 |
| Tungsten powder | 58 | 71 | 74 | 50 | 66 | 80 |
| Argentina— | | | | | | |
| Tungsten ore | 578 | — | 350 | 15 | 2,067 | 1,026 |
| Bolivia— | | | | | | |
| Tungsten ore (<i>WO₃ content</i>) | 1,316 | 1,431 | 1,270 | 1,667 | 1,499 | 1,347 |
| Brazil— | | | | | | |
| Tungsten ores | 2,001 | 1,223 | 1,545 | 861 | 615 | 785 |
| Peru— | | | | | | |
| Tungsten ore and concentrates (<i>WO₃ content</i>) | 518 | 381 | 232 | 186 | 234 | 172 |
| Burma— | | | | | | |
| Ore and concentrates | 784 | 1,001 | 841 | 686 | 278 | 551 |
| Tin-tungsten ores | 625 | 174 | 171 | 264 | 397 | 381 |
| Japan— | | | | | | |
| Tungsten ore | 20 | — | — | — | <i>n.a.</i> | <i>n.a.</i> |
| Tungsten metal | 1 | 1 | 1 | 18 | 23 | 55 |
| Ferro-tungsten | 1 | — | — | — | <i>n.a.</i> | <i>n.a.</i> |
| Korea (South)— | | | | | | |
| Tungsten ore | 4,024 | 3,283 | 3,936 | 5,833 | 4,639 | 5,026 |
| Thailand— | | | | | | |
| Tungsten ore | 527 | 367 | 609 | 246 | 190 | 253 |

IMPORTS OF TUNGSTEN, ETC.

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------|-------|--------|--------|--------|--------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Tungsten ores | 4,288 | 4,357 | 5,639 | 5,132 | 5,389 | 4,904 |
| Tungsten metal, etc. | 3 | 8 | 13 | 9 | 6 | 24 |
| Canada— | | | | | | |
| Tungsten ore | 395 | 350 | 516 | 224 | 1,274 | 288 |
| Ferro-tungsten | 89 | 370 | 438 | 231 | 127 | 279 |
| Malaya— | | | | | | |
| Wolfram | — | 12 | — | — | — | — |
| Australia (b)— | | | | | | |
| Tungsten metal | 11 | 9 | 18 | 10 | 10 | 16 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Tungsten ore | 1,529 | 2,525 | 3,105 | 2,934 | 2,686 | 2,851 |
| Tungsten metal, etc. .. | n.a. | 13 | 33 | 37 | 35 | 44 |
| Ferro-tungsten | — | 415 | 254 | 244 | 302 | — |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Tungsten ore | 12 | 543 | 29 | 99 | 70 | 11 |
| Ferro-tungsten | 29 | 71 | 80 | 234 | 132 | 82 |
| France— | | | | | | |
| Tungsten ore | 1,515 | 1,513 | 1,817 | 2,298 | 1,980 | 2,156 |
| Tungsten metal, etc. .. | 9 | 33 | 23 | 35 | 36 | 40 |
| Germany (Federal)— | | | | | | |
| Tungsten ore | 3,805 | 4,634 | 5,124 | 5,240 | 4,681 | 3,913 |
| Tungsten metal, etc. .. | 256 | 103 | 264 | 161 | 122 | 79 |
| Hungary— | | | | | | |
| Ferro-tungsten | — | — | — | — | — | — |
| Italy— | | | | | | |
| Tungsten ore | 72 | 101 | 176 | 92 | 116 | 78 |
| Tungsten metal, etc. .. | 9 | 13 | 27 | 23 | 34 | 40 |
| Ferro-tungsten | 55 | 41 | 116 | 311 | 185 | 129 |
| Netherlands— | | | | | | |
| Tungsten ore | 97 | 113 | 341 | 457 | 203 | 20 |
| Ferro-tungsten | 6 | 3 | 3 | 4 | 21 | 2 |
| Sweden— | | | | | | |
| Tungsten ore | 403 | 705 | 972 | 1,070 | 1,312 | 1,277 |
| Tungsten metal, etc. .. | n.a. | 60 | 62 | 82 | 75 | 68 |
| Ferro-tungsten | 62 | 185 | 411 | 396 | 260 | 256 |
| U.S.S.R. (a)— | | | | | | |
| Tungsten concentrates | n.a. | n.a. | 18,600 | 18,000 | 12,800 | 11,800 |
| Yugoslavia— | | | | | | |
| Tungsten metal, etc. .. | 1 | 10 | 7 | 4 | 6 | 16 |
| Tungsten concentrates .. | — | 28 | 115 | 91 | 422 | 15 |
| Ferro-tungsten | 28 | 103 | 59 | 128 | 60 | 1 |
| United States— | | | | | | |
| Tungsten ore | 5,359 | 4,325 | 2,722 | 1,767 | 3,260 | 2,413 |
| (WO ₃ content) | 3,682 | 3,059 | 1,983 | 1,195 | 2,239 | 1,366 |
| Tungsten metal and carbide | | | | | | |
| (W content) | 45 | 88 | 71 | 25 | 222 | 37 |
| Ferro-tungsten | 87 | 294 | 100 | 191 | 294 | 487 |
| Tungsten ingots, bars, scrap, etc. | 111 | 201 | 154 | 100 | 119 | 156 |
| Japan— | | | | | | |
| Tungsten ore | 356 | 455 | 2,835 | 4,022 | 2,162 | 2,290 |
| Tungsten metal | — | — | — | — | 7 | — |

(a) Imports from China.

(b) Years ended June 30 of that stated.

URANIUM MINERALS

PRODUCTION OF URANIUM MINERALS

(Metal content)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|-------------------------|------------------------|-------------------------|-------------------------|-------------------------|-----------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Northern Rhodesia | 38 | 29 | — | — | — | — |
| Canada (a) | 10,148 | 12,032 | 9,652 | 7,299 | 6,382 | 6,323 |
| Australia | £102,395,044 (b) 550 | 122,918,724 (b) 950 | 99,132,645 (b) 1,150 | 68,929,772 (b) 1,250 | 52,701,539 (b) 1,050 | 45,332,644 919 |
| OTHER COUNTRIES | | | | | | |
| Finland | — | (b) 25 | (b) 40 | n.a. | n.a. | n.a. |
| France | 487 | 719 | 968 | 1,168 | 1,019 | 1,007 |
| Italy | — | 1 | 1 | n.a. | n.a. | n.a. |
| Congo Republic | 1,793 | 1,761 | 900 | 121 | — | — |
| Gabon | — | — | — | (b) 300 | (b) 350 | (b) 450 |
| Malagasy Republic (c) | (b) 55 | 88 | (b) 60 | (b) 50 | (b) 85 | (b) 80 |
| South Africa | 4,737 | 4,867 | 4,874 | 4,149 | 3,789 | 3,435 |
| United States (d) | £650,000,000 9,510 | 654,500,000 12,410 | 654,000,000 13,364 | 645,000,000 13,136 | 648,000,000 12,879 | 647,000,000 10,765 |
| Argentina | £84,700,000 (b) 15 | 107,000,000 (b) 10 | 118,000,000 (b) 11 | 103,000,000 n.a. | 97,000,000 n.a. | 80,400,000 n.a. |
| WORLD'S TOTAL (b) .. | 35,000 | 40,000 | 40,000 | 37,000 | 35,000 | 31,000 |

(a) Producers' shipments.

(b) Estimated.

(c) Uranium content of uranothorianite (average content 12% uranium).

(d) In addition, the following quantities of uranium were recovered from phosphate rock (long tons): 1958—8; 1959—23; 1960—86; 1961—39; 1962—nil; 1963—nil.

Uranium is known to have been produced in the U.S.S.R., in several Eastern European countries, Portugal, Spain, Sweden, Western Germany, Mozambique and elsewhere. An allowance has been made for these countries in the world's total.

EXPORTS OF URANIUM MINERALS, ETC.

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|---------------|-------------|-------------|-------------|------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Canada— Ores and concentrates | £ 101,284,232 | 115,949,495 | 96,890,046 | 67,883,901 | 55,549,230 | 45,540,191 |
| OTHER COUNTRIES | | | | | | |
| Congo Republic— Radium products (<i>Ra</i> content) <i>Mgrams</i> .. | 69,786 | 101,619 | 27,600 | 26,900 | 28,700 | 18,300 |
| Gabon— Concentrates <i>Long tons</i> .. | — | — | — | 954 | 1,157 | 1,228 |
| Malagasy Republic— Uranothorianite <i>Long tons</i> | 138 | 152 | 572 | 772 | 935 | 1,109 |
| South Africa— Concentrates (U_3O_8 content) <i>Long tons</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 4,117 | 3,696 |
| | £ <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 36,876,796 | 33,381,194 |
| Prescribed minerals (<i>a</i>) | £ 53,661,840 | 53,866,953 | 54,266,382 | 39,685,813 | 37,195,326 | <i>n.a.</i> |
| United States— Ores, concentrates and compounds <i>Long tons</i> | 3 | 9 | 9 | 19 | 12 | 5 |
| Metal and alloys <i>Long tons</i> | 40 | 6 | 5 | 10 | — | 3 |
| Radium metal (<i>Ra</i> content) <i>Mgrams</i> . | 140 | 2,207 | 712 | 334 | 328 | 311 |

(a) Mainly uranium but includes some thorium.

IMPORTS OF URANIUM MINERALS, ETC.

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Radium compounds <i>Grains</i> | 441 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Canada— Radium and compounds .. | £ 193,512 | 142,745 | 111,075 | 98,158 | 76,205 | 197,000 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg E.U.— Ore <i>Long tons</i> | <i>n.a.</i> | 627 | 3,058 | 2,443 | — | — |
| France— Ore <i>Long tons</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 120 | 1,396 | 1,912 |
| United States— Concentrates <i>Long tons</i> (U_3O_8 content) | 14,732 | 16,179 | 14,080 | 11,531 | 10,429 | 7,859 |
| Radium salts <i>Mgrams</i> . | 38,419 | 32,967 | 23,333 | 12,947 | 46,962 | 44,660 |
| Brazil— Radium and radium products <i>Mgrams</i> . | 96 | 681 | — | — | — | — |

VANADIUM
PRODUCTION OF VANADIUM ORES
(Metal content)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|------------------------------------|--------------|--------------|-----------------------|-----------------------|--------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Northern Rhodesia .. | — | — | <i>r</i> 129 | <i>r</i> 100 | 3 | — |
| OTHER COUNTRIES | | | | | | |
| Finland | 384 | 496 | 558 | 626 | 562 | (<i>e</i>) 551 |
| France (<i>a</i>) | 117 | 47 | 100 | 54 | — | 56 |
| Angola (<i>b</i>) | 18 | 3 | — | — | — | — |
| South Africa | 283 | 286 | 586 | 1,271 | 1,244 | 1,237 |
| South West Africa | 413 | 642 | 749 | 1,023 | 904 | 1,015 |
| United States (<i>c</i>) | 6,488 | 6,600 | 7,185 | 5,678 | 6,828 | 5,399 |
| Argentina | 4 | 4 | <i>n.a.</i> | <i>n.a.</i> | 8 | <i>n.a.</i> |
| WORLD'S TOTAL (<i>d</i>) .. | 7,707 | 8,078 | <i>r</i> 9,300 | <i>r</i> 8,800 | 9,500 | 8,300 |

(*a*) By-product vanadium from aluminium plants.

(*b*) Vanadium content of vanadium-lead ore.

(*c*) Shipments.

(*d*) Totals represent the sum of the countries shown and exclude vanadium ore known to have been produced in Mexico and other countries. Vanadiferous iron concentrates (about 0.5%V) are produced in Norway.

EXPORTS OF VANADIUM, ETC.

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|------|-------|-------|--------------------|-------------|--------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Ferro-vanadium .. | 7 | 14 | 94 | 19 | 5 | 3 |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg E.U.— Ferro-vanadium .. | 1 | — | 10 | 95 | 228 | 387 |
| Finland— Oxide | — | — | 1,878 | 1,981 | 1,286 | 1,560 |
| France— Ferro-vanadium .. | 55 | 73 | 336 | 166 | 68 | 10 |
| Italy— Oxide | — | 2 | 1 | 45 | — | — |
| Sweden— Ferro-vanadium .. | 80 | 97 | 183 | 141 | 155 | 197 |
| Congo Republic— Ore | — | — | 1,834 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| South Africa— Oxide | 519 | 521 | 1,034 | (<i>b</i>) 2,258 | 1,463 | (<i>c</i>) 1,728 |
| South West Africa— Concentrates (<i>V content</i>) (<i>a</i>) .. | 300 | 350 | 600 | 700 | 600 | 900 |
| United States— Ore, concentrates, etc. (<i>V content</i>) | 563 | 1,107 | 3,294 | 1,858 | 902 | 26 |
| Flue dust and other waste (<i>V content</i>) .. | 5 | 37 | 35 | 82 | 73 | 829 |
| Ferro-vanadium .. | 68 | 135 | 144 | 107 | 179 | 164 |

(*a*) Estimated.

(*b*) Including 46 tons of ammonium vanadate.

(*c*) Including 24 tons of ammonium vanadate.

IMPORTS OF VANADIUM, ETC.

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a)— | | | | | | |
| Ferro-vanadium .. | <i>n.a.</i> | — | — | 71 | 24 | 59 |
| Oxide | 282 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Other compounds .. | 64 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| OTHER COUNTRIES | | | | | | |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ferro-vanadium .. | 12 | 19 | 36 | 21 | 37 | 24 |
| Oxide | 29 | 14 | 55 | 264 | 437 | 501 |
| France— | | | | | | |
| Ore | 42 | <i>n.a.</i> | <i>n.a.</i> | — | 252 | — |
| Oxide | 346 | 424 | 1,006 | 1,025 | 652 | 218 |
| Germany (Federal)— | | | | | | |
| Ore | — | — | 5 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Hungary— | | | | | | |
| Ferro-vanadium .. | 106 | 89 | 59 | 89 | 138 | 109 |
| Italy— | | | | | | |
| Ore | 51 | — | — | 1 | — | — |
| Oxide | 25 | 40 | 69 | 127 | 39 | 113 |
| Netherlands— | | | | | | |
| Ferro-vanadium .. | 9 | 3 | 4 | 11 | 9 | 4 |
| Sweden— | | | | | | |
| Ferro-vanadium .. | 7 | 39 | 67 | 61 | 37 | 52 |
| United States— | | | | | | |
| Ore | — | 5 | 4 | — | — | — |
| (V content) | — | 3 | 2 | — | — | — |
| Japan— | | | | | | |
| Ore | 153 | 814 | 284 | 981 | 593 | — |
| Ferro-vanadium .. | — | — | — | — | <i>n.a.</i> | — |

(a) Excluding vanadium contained in petroleum soot, slags and residues.

VERMICULITE
PRODUCTION OF VERMICULITE

| Producing Country | Long tons | | | | | |
|-------------------------------|----------------|----------------|----------------|-------------------------|----------------|----------------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Kenya | 86 | 100 | 253 | — | 20 | 91 |
| Southern Rhodesia | 250 | 45 | — | — | — | — |
| Tanganyika | 82 | 111 | 18 | 140 | 64 | 27 |
| India | — | 2 | 210 | 622 | 426 | 666 |
| OTHER COUNTRIES | | | | | | |
| Egypt | 270 | 296 | 118 | — | 279 | <i>n.a.</i> |
| South Africa | 48,495 | 46,784 | 61,627 | 63,498 | 76,370 | 88,177 |
| Sudan | 118 | 98 | — | 50 | — | — |
| United States (b) | 170,146 | 184,446 | 177,743 | 184,497 | 183,703 | 202,034 |
| Argentina | 144 | (a) 785 | 312 | 483 | 2,645 | (a) 2,660 |
| WORLD'S TOTAL* | 220,000 | 233,000 | 240,000 | <i>r</i> 249,000 | 264,000 | 294,000 |

*Excluding vermiculite produced in the U.S.S.R. and Brazil.

(a) United States Bureau of Mines' estimate.

(b) Sold or used by producers.

EXPORTS OF VERMICULITE

| Exporting Country | Long tons | | | | | |
|-------------------------------|-----------|--------|--------|--------|--------|--------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
| COMMONWEALTH COUNTRIES | | | | | | |
| Rhodesia and Nyasaland | 4 | 7 | 4 | 1 | 4 | 4 |
| OTHER COUNTRIES | | | | | | |
| South Africa | 43,718 | 52,614 | 56,666 | 63,455 | 69,527 | 80,768 |

IMPORTS OF VERMICULITE

| Importing Country | Long tons | | | | | |
|-------------------------------|-------------|-------------|------------|------------|------------|------------|
| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) | 9,621 | 15,263 | 14,558 | 16,608 | 23,437 | 25,275 |
| Canada | (£148,238) | (£167,364) | (£153,603) | (£162,116) | (£178,211) | (£189,842) |
| Australia (c) | <i>n.a.</i> | <i>n.a.</i> | 1,198 | 1,866 | 1,780 | 1,711 |
| OTHER COUNTRIES | | | | | | |
| France (b) | 10,925 | 8,193 | 7,711 | 14,480 | 15,436 | 13,019 |
| Mexico | 672 | 808 | 795 | 706 | 334 | 367 |
| United States (a) | 7,616 | 10,597 | 11,068 | 11,529 | 10,802 | 12,801 |
| Venezuela | <i>n.a.</i> | 262 | 162 | 150 | 57 | 280 |

(a) Exports from South Africa to country stated.

(b) May include perlite, etc.

(c) Years ended June 30 of that stated.

ZINC

PRODUCTION OF ZINC ORE

(Metal content)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|----------------|----------------|----------------|------------------|----------------|----------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 241 | — | 250 | — | 41 | — |
| Northern Rhodesia (c) .. | 30,250 | 29,895 | 29,794 | 29,861 | 39,800 | 48,670 |
| Canada (h) | 379,553 | 353,579 | 363,279 | 371,432 | 413,522 | 422,967 |
| India | 4,001 | 5,401 | 5,298 | r 5,037 | 5,344 | 5,767 |
| Australia | 293,708 | 275,411 | 317,489 | 311,157 | 337,532 | 351,428 |
| TOTAL | 707,753 | 664,286 | 716,110 | r 717,487 | 796,239 | 828,832 |
| Irish Republic | — | 1,163 | 1,229 | 164 | — | — |
| OTHER COUNTRIES | | | | | | |
| Austria | 7,598 | 8,030 | 8,741 | 8,064 | 8,713 | 9,025 |
| Bulgaria | 49,200 | 54,700 | 57,800 | r 54,600 | 61,700 | n.a. |
| Finland (b) | 46,200 | 53,200 | 41,364 | 45,860 | 51,347 | 65,305 |
| France | 14,630 | 15,729 | 16,905 | 15,432 | 17,175 | 17,372 |
| Germany (Federal) (i) .. | 84,046 | 80,800 | 84,964 | 85,883 | 85,707 | 90,783 |
| Germany (East) (g) .. . | 6,900 | 6,900 | 6,900 | 6,900 | 6,900 | 6,900 |
| Greece | 15,495 | 11,508 | 13,813 | 17,104 | 16,910 | 17,900 |
| Italy | 134,820 | 130,444 | r 128,549 | 118,171 | 121,823 | 93,468 |
| Norway | 8,942 | 9,739 | 10,174 | 9,183 | 11,659 | 14,810 |
| Poland | 120,800 | 127,300 | 141,800 | 137,372 | 142,800 | 144,800 |
| Portugal | 15 | — | — | — | 11 | 168 |
| Spain | 81,040 | 84,505 | 84,750 | 86,592 | 77,281 | 90,284 |
| Sweden | 69,471 | 77,276 | 73,058 | r 78,176 | 80,560 | 80,100 |
| U.S.S.R. (c) (e) | 325,000 | 330,000 | 340,000 | 400,000 | 400,000 | 400,000 |
| Yugoslavia | 59,071 | 59,715 | 55,491 | 58,936 | 60,148 | 50,456 |
| Algeria | 32,790 | 38,191 | 39,500 | 41,472 | 41,000 | (e) 34,000 |
| Congo Republic | 112,184 | 66,139 | 107,457 | 97,525 | 93,681 | 101,910 |
| Congo, Republic of .. . | — | — | — | 1,261 | 823 | 42 |
| Morocco | 48,481 | 54,733 | 48,392 | 40,135 | 33,876 | 32,516 |
| South Africa | — | — | — | 15 | — | — |
| South West Africa .. . | 39,964 | 19,273 | 24,000 | 24,000 | 25,000 | 22,900 |
| Tunisia | 4,070 | 3,270 | 3,760 | 3,340 | 4,267 | 4,300 |
| Cuba | (g) 100 | (d) 168 | (d) 69 | — | — | — |
| Greenland | 5,930 | 8,239 | 9,960 | 6,714 | 2,145 | — |
| Guatemala (b) | 4,712 | — | r 9,883 | r 7,801 | 803 | 1,151 |
| Honduras (d) | 1,281 | 1,274 | r 4,208 | 6,117 | 6,293 | 7,352 |
| Mexico | 220,566 | 259,767 | 258,280 | 264,725 | 246,724 | 236,030 |
| United States (b) .. . | 367,862 | 379,735 | 388,774 | 414,634 | 451,331 | 472,548 |
| Argentina | 36,000 | r 40,155 | 34,841 | r 31,698 | 30,970 | 28,200 |
| Bolivia (a) | 13,997 | 3,339 | 3,963 | 5,248 | 3,588 | 4,574 |
| Chile | 1,197 | 996 | 1,035 | 160 | 488 | 479 |
| Colombia (g) | — | 700 | 300 | r 1,200 | 300 | 100 |
| Peru | 132,419 | (b) 140,838 | (b) 175,309 | (b) 171,123 | (b) 159,678 | (b) 178,598 |
| Burma | 10,769 | 10,486 | 9,759 | 7,233 | 8,068 | 8,093 |
| China (g) | 45,000 | r 60,000 | r 80,000 | 98,000 | 98,000 | 98,000 |
| Iran (f) | 8,800 | 6,600 | 8,400 | 13,300 | 7,400 | (g) 7,400 |
| Japan | 140,715 | 140,089 | 154,259 | 165,602 | 189,000 | 195,000 |
| Korea (South) | 350 | 3 | 40 | 450 | 400 | 1,100 |
| Korea (North) (g) .. . | 80,000 | 80,000 | 80,000 | r 90,000 | 90,000 | 110,000 |

(a) Exports.

(b) Recoverable.

(c) Smelter production.

(d) Imports into the United States.

(e) Estimated.

(f) Years ended March 20 of year following that stated.

(g) United States Bureau of Mines' estimate.

(h) Refined zinc plus recoverable zinc in ores, etc., exported.

(i) Excluding zinc in pyrites.

PRODUCTION OF ZINC ORE (cont.)

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Philippine Republic .. | — | 5 | 4,899 | 3,261 | 4,390 | 3,832 |
| Thailand | 536 | 750 | 1,045 | 884 | (a) 900 | (a) 900 |
| Turkey | (a) 2,000 | 3,572 | r 3,287 | r 8,149 | 6,072 | 4,504 |
| TOTAL | 2,300,000 | 2,400,000 | 2,500,000 | 2,600,000 | 2,600,000 | 2,700,000 |
| WORLD'S TOTAL .. | 3,000,000 | 3,100,000 | 3,200,000 | 3,300,000 | 3,400,000 | 3,500,000 |

Zinc ore is also produced in Czechoslovakia, Roumania and North Vietnam.

(a) Estimated.

METAL PRODUCTION OF ZINC

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom .. | 74,587 | 72,966 | 74,303 | 92,884 | 97,276 | 99,028 |
| Northern Rhodesia .. | 30,250 | 29,895 | 29,794 | 29,861 | 39,800 | 48,670 |
| Canada | 225,083 | 227,952 | 233,007 | 239,292 | 250,141 | 253,590 |
| Australia | 114,773 | 116,461 | 120,230 | 138,694 | 167,928 | 179,777 |
| TOTAL | 444,693 | 447,274 | 457,334 | 500,731 | 555,145 | 581,065 |
| OTHER COUNTRIES | | | | | | |
| Austria | 10,444 | 11,257 | 11,339 | 11,876 | 11,897 | 11,673 |
| Belgium | 213,912 | 220,759 | 243,653 | 241,670 | 202,904 | 203,070 |
| Bulgaria | 8,104 | 8,950 | 16,642 | 21,772 | 50,908 | 55,179 |
| France | 146,077 | 143,945 | r 150,400 | r 164,000 | 166,500 | 170,600 |
| Germany (Federal) .. | 173,906 | 178,331 | 179,499 | 182,594 | 168,458 | 154,262 |
| Germany (East) (a) .. | — | — | — | 1,000 | 5,000 | 10,000 |
| Italy | 71,446 | r 72,783 | r 78,608 | 77,165 | 76,440 | 72,433 |
| Netherlands | 26,147 | 31,647 | 35,510 | 38,967 | 36,464 | 35,197 |
| Norway | 44,804 | 48,007 | 43,268 | 46,009 | 44,266 | 45,910 |
| Poland | 160,047 | 165,000 | 173,000 | 179,000 | 178,000 | 178,000 |
| Spain | 24,321 | 24,142 | 44,254 | 51,665 | 61,591 | 63,708 |
| U.S.S.R. (a) | 325,000 | 330,000 | 340,000 | 400,000 | 400,000 | 400,000 |
| Yugoslavia | 30,754 | 31,446 | 35,367 | 36,286 | 38,683 | 41,577 |
| Congo Republic | 52,594 | 53,944 | 52,515 | 56,060 | 55,017 | 51,893 |
| Mexico | 56,544 | 54,787 | 52,070 | 50,999 | 56,009 | 55,854 |
| United States (b) (c) .. | 697,541 | 713,095 | 713,854 | 756,067 | 785,174 | 796,950 |
| Argentina | 14,172 | 12,594 | 15,756 | 14,211 | 16,506 | 19,388 |
| Peru | 28,602 | 25,659 | 31,886 | 31,255 | 32,236 | 53,850 |
| China (d) | 40,000 | r 60,000 | r 65,000 | r 90,000 | 90,000 | 90,000 |
| Japan | 135,273 | 153,079 | 172,686 | 203,734 | 235,832 | 277,810 |
| Korea (North) (d) .. | 20,000 | 24,000 | r 50,000 | r 60,000 | 60,000 | 65,000 |
| TOTAL | 2,300,000 | 2,300,000 | 2,500,000 | 2,700,000 | 2,800,000 | 2,900,000 |
| WORLD'S TOTAL .. | 2,700,000 | 2,800,000 | 2,900,000 | 3,200,000 | 3,300,000 | 3,400,000 |

Zinc is also produced in Czechoslovakia, Roumania and North Vietnam.

(a) Estimated.

(b) In addition secondary zinc recovered was as follows (long tons):

| | | | |
|--------------|---------|--------------|---------|
| 1958 | 205,654 | 1961 | 212,471 |
| 1959 | 246,655 | 1962 | 233,944 |
| 1960 | 237,339 | 1963 | 239,513 |

(c) The production by grades (including redistilled secondary) was as follows (long tons):

| | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------|---------|---------|---------|---------|---------|---------|
| A—High grade—Special .. | 266,466 | 295,814 | 318,933 | 315,595 | 350,804 | 367,191 |
| Ordinary | 77,553 | 64,100 | 63,689 | 79,907 | 84,094 | 93,126 |
| B—Intermediate grade .. | 17,311 | 15,619 | 14,144 | 13,721 | 12,590 | 16,404 |
| C and D—Brass special .. | 73,072 | 67,237 | 74,560 | 62,215 | 67,813 | 87,670 |
| Selected | 1,161 | 1,262 | 65 | — | 116 | 3,490 |
| E—Prime Western | 303,590 | 320,686 | 303,829 | 333,947 | 322,328 | 282,912 |

(d) United States Bureau of Mines' estimate.

PRODUCTION OF ELECTROLYTIC ZINC IN CERTAIN COUNTRIES*

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|---------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Northern Rhodesia .. | 20,600 | 21,200 | 18,800 | 22,600 | 26,500 | <i>n.a.</i> |
| Canada | 225,083 | 227,952 | 233,007 | 239,292 | 250,141 | 253,590 |
| Australia (Tasmania) .. | 114,773 | 116,461 | 120,230 | 138,694 | 167,928 | 179,777 |
| OTHER COUNTRIES | | | | | | |
| Austria | 10,444 | 11,257 | 11,339 | 11,876 | 11,897 | 11,673 |
| France | 59,300 | 61,800 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Italy | 60,878 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Norway | 44,804 | 48,007 | 43,268 | 46,009 | 44,266 | 45,910 |
| Poland | 65,500 | 69,500 | 72,600 | 77,700 | 80,800 | <i>n.a.</i> |
| Congo Republic | 52,594 | 53,944 | 52,515 | 56,060 | 55,017 | 51,893 |
| United States | 291,472 | 250,279 | 285,515 | 289,642 | 316,195 | 319,726 |
| Japan | 83,668 | 98,222 | 107,096 | 132,265 | 154,206 | 174,330 |

*This production is already included in the Metal table.

PRODUCTION OF ZINC DUST IN CERTAIN COUNTRIES

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|--------|--------|--------|--------|--------|--------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom | 10,256 | 12,194 | 14,265 | 11,862 | 10,861 | 13,343 |
| Australia | 2,190 | 2,575 | 2,697 | 3,131 | 3,660 | 4,030 |
| OTHER COUNTRIES | | | | | | |
| France | 1,872 | 2,438 | 3,719 | 4,885 | 4,845 | 4,441 |
| Germany (Federal) .. | 7,634 | 9,035 | 10,503 | 8,592 | 8,641 | 7,156 |
| United States | 23,671 | 29,248 | 27,489 | 31,046 | 36,587 | 36,037 |
| Japan | 4,587 | 4,880 | 5,959 | 7,591 | 9,142 | 9,201 |

 PRODUCTION OF ROLLED ZINC SHEETS, PLATES AND STRIPS
 IN CERTAIN COUNTRIES

Long tons

| Producing Country | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------|--------|--------|--------|--------|--------|--------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom (a) .. | 25,222 | 23,852 | 25,350 | 27,401 | 24,112 | 23,007 |
| OTHER COUNTRIES | | | | | | |
| France | 69,268 | 66,223 | 61,456 | 68,605 | 69,740 | 61,130 |
| United States (b) .. | 34,704 | 36,310 | 33,031 | 35,355 | 36,346 | 36,623 |
| Japan | 5,692 | 6,722 | 6,856 | 6,995 | 7,157 | 5,822 |

(a) Including wire.

(b) Excluding strip and ribbon zinc re-rolled from scrap originating in fabricating plants operated in connection with zinc rolling-mills, as follows:

| Long tons | | | Long tons | | |
|-----------|-------|--------|-----------|-------|--------|
| 1958 | .. .. | 11,401 | 1961 | .. .. | 11,338 |
| 1959 | .. .. | 13,083 | 1962 | .. .. | 12,104 |
| 1960 | .. .. | 10,080 | 1963 | .. .. | 10,837 |

EXPORTS OF ZINC*

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-----------|-----------|-----------|------------|------------|-----------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates | 200 | 4 | 4,976 | 38 | 2,192 | 1,382 |
| Unwrought | 1,649 | 1,441 | 2,942 | 2,135 | 7,048 | (a) 8,792 |
| Scrap | n.a. | n.a. | n.a. | n.a. | n.a. | 1,080 |
| Semi-manufactures (a) | (d) 5,811 | (d) 5,165 | (d) 7,303 | (d) 5,998 | (d) 7,218 | 4,338 |
| Oxide | 9,024 | 11,094 | 7,911 | 9,479 | 9,644 | 7,036 |
| Lithopone, etc. | 3,379 | 4,450 | 6,264 | 6,194 | 5,447 | 3,897 |
| Nigeria— | | | | | | |
| Ore and concentrates | — | — | 346 | — | — | — |
| Rhodesia and Nyasaland— | | | | | | |
| Ores and concentrates | — | — | — | 952 | 1,843 | 1,518 |
| Unwrought | 27,933 | 30,473 | 29,435 | 25,258 | 41,051 | 46,546 |
| Canada— | | | | | | |
| Ore (Zn content) | 194,485 | 161,682 | 151,691 | 177,966 | 216,479 | 190,218 |
| Unwrought | 174,739 | 160,315 | 184,903 | 185,957 | 188,146 | 178,573 |
| Scrap (a) | 4,992 | 5,343 | 4,761 | 3,165 | 4,903 | 5,109 |
| Oxide | 1,322 | 1,153 | 645 | 497 | 1,563 | — |
| Hong Kong— | | | | | | |
| Unwrought (a) | 362 | 443 | 1,256 | 1,388 | 523 | 1,098 |
| Scrap | n.a. | 77 | 175 | 7 | 30 | 1 |
| Semi-manufactures (a) | 540 | 346 | 282 | 215 | 164 | 153 |
| Oxide | 43 | 45 | 91 | 24 | 17 | 8 |
| Lithopone | 380 | 407 | 29 | 593 | 47 | 106 |
| India— | | | | | | |
| Concentrates, etc. | 4,833 | 12,417 | (c) 9,638 | (c) 10,190 | (c) 11,653 | (c) 9,765 |
| Dross, scrap and ashes | 619 | 1,593 | (c) 260 | (c) 500 | (c) 140 | (c) 1,102 |
| Semi-manufactures (a) | 29 | 179 | (c) 349 | (c) 314 | (c) 67 | (c) 184 |
| Zinc white | — | — | (c) — | (c) — | (c) 112 | (c) 336 |
| Malaya— | | | | | | |
| Unwrought (a) | — | 8 | 4 | 2 | 2 | 2 |
| Semi-manufactures (a) | 255 | 194 | 274 | 249 | 302 | 308 |
| Australia (b)— | | | | | | |
| Ores and concentrates (Zn content) | 158,253 | 152,414 | 136,706 | 175,231 | 145,035 | 153,818 |
| Unwrought | 30,210 | 44,998 | 31,904 | 30,322 | 73,148 | 98,730 |
| Scrap | (e) 393 | (e) 275 | (e) 544 | 6,024 | 156 | 308 |
| Semi-manufactures | 1,379 | 1,351 | 1,272 | 5,003 | 1,943 | 801 |
| Oxide | 79 | 127 | 105 | 79 | 94 | 51 |
| Irish Republic— | | | | | | |
| Ores and concentrates | 1,057 | 2,599 | 2,891 | 1,537 | — | — |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 1,987 | 20 | 86 | 39 | 21 | — |
| Unwrought (a) | 4,008 | 4,630 | 5,198 | 5,015 | 3,631 | 2,736 |
| Scrap | 1,034 | 154 | 107 | 59 | 84 | 859 |
| Lithopone | 1,546 | 2,042 | 2,347 | 2,402 | 2,034 | 2,060 |
| Belgium-Luxemburg | | | | | | |
| E.U.— | | | | | | |
| Ore | 53,437 | 63,884 | 44,970 | 70,357 | 75,661 | 50,306 |
| Unwrought | 128,463 | 121,181 | 141,351 | 143,640 | 110,074 | 120,874 |
| Scrap | 4,854 | 6,629 | 8,803 | 6,056 | 4,031 | 5,743 |
| Semi-manufactures (a) | 29,012 | 23,766 | 24,570 | 28,461 | 27,587 | 30,773 |
| Lithopone, etc. | 10,883 | 15,050 | 21,321 | 22,311 | 19,686 | 18,705 |

*In these tables the description "unwrought" zinc corresponds to item 686.1 in the Standard International Trade Classification (Revised) and comprises blocks, pigs, slabs, etc. "Semi-manufactures" corresponds to S.I.T.C.(R). 284.0 (8) and 686.2, and includes zinc dust as well as rods, wire, sheets, tubes, pipes, etc.

(a) Including alloys.

(d) Including unwrought alloys.

(b) Years ended June 30 of that stated.

(e) Including shavings.

(c) Years ended March 31 following that stated.

EXPORTS OF ZINC (cont.)

Long ton

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Denmark— | | | | | | |
| Unwrought | 2,516 | 1,169 | 2,309 | 406 | 129 | 150 |
| do. alloys | 1,561 | 3,104 | 2,186 | 2,471 | 1,980 | 904 |
| Scrap | 1,107 | 1,191 | 1,374 | 887 | 1,836 | 1,698 |
| Semi-manufactures .. | n.a. | 65 | 8 | 5 | 156 | 284 |
| Finland— | | | | | | |
| Concentrates | 88,644 | 118,853 | 88,451 | 85,509 | 99,870 | 140,685 |
| Unwrought | 411 | 1,054 | 193 | 85 | — | 238 |
| France— | | | | | | |
| Ore | — | 12 | 23,821 | 23,719 | 7,167 | 491 |
| Unwrought | 442 | 4,256 | 5,648 | 2,182 | 4,559 | 14,020 |
| do. alloys | 12 | 279 | 262 | 95 | 183 | 324 |
| Semi-manufactures (a) | 1,507 | 2,267 | 2,690 | 4,061 | 3,729 | 4,557 |
| Oxide | 2,260 | 3,402 | 5,354 | 4,824 | 4,309 | 4,536 |
| Lithopone, etc. . . | 558 | 716 | 1,629 | 1,543 | 1,082 | 1,268 |
| Germany (Federal)— | | | | | | |
| Ore | 9,188 | 16,938 | 16,659 | 18,867 | 12,737 | 32,574 |
| Unwrought (a) | 28,397 | 19,658 | 27,374 | 31,200 | 24,991 | 29,398 |
| Scrap (a) | 462 | 79 | 132 | 871 | 2,035 | 3,180 |
| Semi-manufactures (a) | 8,099 | 8,975 | 9,104 | 7,473 | 6,633 | 7,280 |
| Zinc-white, zinc-grey .. | 13,192 | 17,709 | 15,767 | 10,686 | 9,820 | 11,463 |
| Lithopone | 41,545 | 39,572 | 38,523 | 41,778 | 35,833 | 33,688 |
| Greece— | | | | | | |
| Ore and concentrates .. | 27,582 | 32,441 | 30,631 | 29,692 | 30,647 | 18,766 |
| Italy— | | | | | | |
| Ore | 87,609 | 82,724 | 58,848 | 75,147 | 65,663 | 39,049 |
| Unwrought | 15,436 | 17,253 | 10,429 | 6,265 | 2,088 | 297 |
| Semi-manufactures (a) | 451 | 359 | 501 | 359 | 488 | 304 |
| Oxide | 363 | 449 | 207 | 96 | 370 | 681 |
| Lithopone, etc. . . | 5,225 | 5,488 | 4,137 | 4,028 | 3,524 | 3,420 |
| Netherlands— | | | | | | |
| Ore | 1,863 | 1,632 | 1,766 | 4,719 | 3,819 | 3,809 |
| Unwrought | 14,517 | 25,487 | 23,461 | 20,355 | 20,893 | 23,064 |
| do. alloys | 113 | 456 | 257 | 109 | 47 | 46 |
| Scrap (a) | 4,977 | 2,869 | 2,446 | 4,557 | 7,681 | 7,829 |
| Semi-manufactures (a) | 1,334 | 2,011 | 1,380 | 1,281 | 1,173 | 1,279 |
| Oxide | n.a. | n.a. | n.a. | 9,297 | 8,775 | 10,134 |
| Lithopone, etc. . . | n.a. | n.a. | n.a. | 11,462 | 10,207 | 10,224 |
| Norway— | | | | | | |
| Ore | 10,686 | 10,296 | 14,166 | 9,534 | 14,961 | 14,276 |
| Unwrought | 36,720 | 36,146 | 31,900 | 31,232 | 31,641 | 32,335 |
| do. alloys | n.a. | 729 | 817 | 810 | 1,347 | 783 |
| Ashes and scrap | 1,444 | (b) 296 | (b) 653 | (b) 421 | (b) 707 | (b) 704 |
| Semi-manufactures (a) | 2 | 28 | 42 | 334 | 663 | 1,124 |
| Zinc-white | 2,714 | 377 | 408 | 773 | 614 | 766 |
| Poland— | | | | | | |
| Unwrought and sheets | 89,003 | 88,412 | 96,160 | 89,510 | 82,870 | 74,327 |
| Unwrought alloys | 6,271 | 6,938 | 6,784 | 6,797 | n.a. | n.a. |
| Zinc-white | 6,954 | 8,855 | 9,908 | 5,310 | n.a. | n.a. |
| Lithopone | 472 | 279 | 629 | 734 | n.a. | 468 |
| Portugal— | | | | | | |
| Zinc-white | 15 | 19 | 21 | 9 | 45 | 72 |
| Spain— | | | | | | |
| Ore | 53,749 | 129,526 | 73,912 | 29,653 | 29,123 | 32,178 |
| Unwrought (a) | — | 407 | 19,972 | 21,707 | 23,469 | 23,437 |
| Sweden— | | | | | | |
| Ore | 136,131 | 141,555 | 137,120 | 143,140 | 147,158 | 146,049 |
| Unwrought (a) | 362 | 449 | 327 | 146 | 108 | 71 |
| Scrap | 620 | 1,006 | 869 | 1,196 | 1,738 | 1,069 |
| Zinc-white | 645 | 747 | 870 | 998 | 750 | 945 |
| Lithopone | n.a. | 10 | 13 | 71 | 73 | 63 |

(a) Including alloys.

(b) Scrap only.

EXPORTS OF ZINC (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------------|---------|---------|------------|------------|------------|------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Switzerland— | | | | | | |
| Unwrought and scrap .. | 5,124 | 4,945 | 919 | 751 | 1,085 | 1,111 |
| Semi-manufactures (d) | 91 | 57 | 35 | 51 | 74 | 37 |
| Zinc-white, etc. .. | 279 | 317 | (e) — | (e) 12 | (e) 1 | (e) 2 |
| U.S.S.R.— | | | | | | |
| Concentrates | 36,800 | 65,700 | 48,200 | 38,600 | 19,100 | — |
| Unwrought | 65,400 | 72,100 | 89,000 | 114,400 | 106,300 | 81,099 |
| Yugoslavia— | | | | | | |
| Concentrates | 26,783 | 27,987 | 18,336 | 18,552 | 29,563 | 24,662 |
| Unwrought | 11,809 | 9,301 | 8,762 | 7,830 | 7,097 | 5,710 |
| Semi-manufactures .. | 4,151 | 4,210 | 4,748 | 5,181 | 6,791 | 8,674 |
| Oxide | 496 | 1,639 | 2,062 | 1,301 | 558 | 750 |
| Lithopone | 347 | 883 | 651 | 96 | 400 | 443 |
| Algeria— | | | | | | |
| Ore | 52,559 | 73,571 | 64,781 | 74,900 | 67,509 | 57,352 |
| Unwrought (a) | 25 | 40 | 25 | n.a. | n.a. | n.a. |
| Scrap | 423 | 428 | 513 | n.a. | n.a. | n.a. |
| Semi-manufactures (a) | 76 | 57 | 31 | n.a. | n.a. | n.a. |
| Oxide | — | — | 119 | n.a. | n.a. | n.a. |
| Congo Republic— | | | | | | |
| Ores and concentrates .. | 82,363 | 73,748 | (c) 96,000 | (c) 90,000 | (c) 60,000 | (c) 75,000 |
| Unwrought | 50,403 | 52,836 | (c) 50,000 | (c) 50,000 | (c) 60,000 | (c) 45,000 |
| Morocco— | | | | | | |
| Ore | 54,381 | 97,941 | 69,511 | 74,101 | 62,327 | 65,187 |
| South Africa— | | | | | | |
| Unwrought | 1 | 11 | 17 | 7 | 12 | n.a. |
| Fume, dust, shavings, etc. | 109 | 81 | 90 | 111 | 139 | n.a. |
| South West Africa— | | | | | | |
| Ores and concentrates (b) | 42,647 | 19,273 | 24,046 | 23,052 | 38,191 | 38,421 |
| Tunisia— | | | | | | |
| Ore | 6,250 | 6,020 | 4,190 | 9,544 | 6,653 | 6,970 |
| Greenland— | | | | | | |
| Ore | 8,507 | 9,367 | 17,567 | 10,247 | 10,213 | — |
| Guatemala— | | | | | | |
| Ore | 11,328 | — | 15,387 | 13,437 | 4,288 | n.a. |
| Honduras— | | | | | | |
| Ore and concentrates .. | — | — | 6,565 | 12,131 | 9,631 | 10,561 |
| Mexico— | | | | | | |
| Ores and concentrates | 297,661 | 345,842 | 375,624 | 395,153 | 393,102 | 351,785 |
| Unwrought | 35,916 | 40,397 | 29,779 | 27,324 | 28,946 | 28,911 |
| Oxide | 1,337 | 2,155 | 2,810 | 2,456 | 1,281 | 2,619 |
| United States— | | | | | | |
| Ore and concentrates (b) | — | 1 | 12 | 1,491 | 122 | 15 |
| Unwrought | 1,851 | 10,383 | 67,093 | 44,691 | 32,233 | 30,226 |
| Scrap (b) | 4,771 | 10,118 | 10,865 | 5,268 | 7,090 | 1,602 |
| Semi-manufactures (a) | 4,915 | 4,572 | 5,955 | 6,224 | 5,211 | 5,398 |
| Oxide | 2,270 | 2,247 | 1,908 | 1,949 | 1,840 | 2,644 |
| Lithopone | 547 | 480 | 170 | 543 | 312 | 749 |
| Argentina— | | | | | | |
| Ore | — | — | 26,235 | 50,141 | 19,372 | 46,624 |
| Unwrought | n.a. | 16 | n.a. | — | — | 3,134 |
| Bolivia— | | | | | | |
| Ores (b) | 13,997 | 3,339 | 3,963 | 5,248 | 3,588 | 4,574 |

(a) Years ended March 20 following that stated.

(b) Zn content.

(c) Estimated.

(d) Including alloys.

(e) Zinc white only.

EXPORTS OF ZINC (cont.)

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| OTHER COUNTRIES (cont.) | | | | | | |
| Chile— | | | | | | |
| Concentrates | 2,165 | — | — | — | 103 | n.a. |
| Peru— | | | | | | |
| Ores, etc. (Zn content) .. | 105,920 | 128,862 | 131,171 | 173,423 | 142,088 | 145,800 |
| Unwrought (Zn content) | 28,494 | 25,237 | 24,106 | 29,859 | 36,710 | 38,179 |
| Burma— | | | | | | |
| Concentrates | 36,744 | 29,706 | 20,022 | 12,403 | 15,462 | 16,002 |
| Iran (a)— | | | | | | |
| Ore | 15,473 | 6,729 | 15,567 | 21,219 | n.a. | n.a. |
| Japan— | | | | | | |
| Unwrought | 7,068 | 8,589 | 5,821 | 1,329 | 293 | 1,121 |
| Semi-manufactures (a) | 56 | 30 | 50 | 66 | 176 | 784 |
| Oxide | 77 | 44 | 24 | 82 | 49 | 157 |
| Lithopone | 22 | — | 1 | 20 | n.a. | n.a. |
| Korea (South)— | | | | | | |
| Ore | n.a. | n.a. | 1,083 | 551 | 714 | 3,094 |
| Philippine Republic— | | | | | | |
| Concentrates | — | — | 11 | 3,051 | 7,431 | 11,779 |
| Turkey— | | | | | | |
| Ore | 1,575 | 3,486 | 1,968 | 11,263 | 7,261 | 837 |

(a) Years ended March 20 following that stated.

IMPORTS OF ZINC*

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— | | | | | | |
| Ore and concentrates .. | 121,194 | 152,325 | 189,112 | 206,184 | 188,130 | 212,113 |
| Unwrought | 133,523 | 173,810 | 185,878 | 163,070 | 142,109 | (a) 159,171 |
| Waste and scrap .. | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 2,713 |
| Semi-manufactures(a) | (c) 795 | (c) 754 | (c) 934 | (c) 1,777 | (c) 1,027 | 848 |
| Oxide | 5 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lithopone, etc. . . | 4,358 | 2,685 | 2,615 | 2,524 | 1,867 | 2,083 |
| Malta— | | | | | | |
| Semi-manufactures .. | (£3,987) | (£3,101) | (£8,396) | <i>n.a.</i> | (£7,454) | (£9,161) |
| Ghana— | | | | | | |
| Unwrought (a) .. | } 65 | 65 | 73 | 18 | 47 | 42 |
| Semi-manufactures (a) | | | | 184 | 19 | 56 |
| Kenya— | | | | | | |
| Unwrought (a) .. | 88 | 68 | 77 | 100 | 204 | 1,379 |
| Semi-manufactures (a) | 44 | 40 | 46 | 9 | — | 16 |
| Nigeria— | | | | | | |
| Unwrought and semi-manufactures (a) | 90 | 50 | 67 | 35 | 37 | 37 |
| Rhodesia and Nyasaland— | | | | | | |
| Semi-manufactures (a) | 148 | 120 | 124 | 49 | 86 | 537 |
| Tanganyika— | | | | | | |
| Unwrought (a) .. | — | — | 1 | 4 | 5 | 301 |
| Semi-manufactures (a) | 16 | 31 | 26 | 36 | 26 | 23 |
| Uganda— | | | | | | |
| Semi-manufactures (a) | 4 | 3 | 5 | 4 | 16 | 3 |
| Canada— | | | | | | |
| Unwrought (a) .. | 555 | 750 | 44 | 688 | 634 | 571 |
| Semi-manufactures (a) | 1,467 | 1,648 | 1,550 | 1,548 | 1,477 | 1,749 |
| Zinc-white | 621 | 646 | 678 | 1,999 | 2,443 | 1,993 |
| Lithopone | 1,109 | 875 | 798 | 562 | — | — |
| Barbados— | | | | | | |
| Semi-manufactures (a) | 7 | 5 | 5 | 7 | 11 | 7 |
| Jamaica— | | | | | | |
| Semi-manufactures (a) | 18 | 12 | 17 | 43 | 39 | 91 |
| Trinidad and Tobago— | | | | | | |
| Semi-manufactures (a) | 43 | 29 | 25 | 59 | 48 | <i>n.a.</i> |
| Ceylon— | | | | | | |
| Unwrought (a) .. | 66 | 91 | 101 | 91 | 85 | 182 |
| Semi-manufactures (a) | 61 | 29 | 57 | 18 | 74 | 35 |
| Cyprus— | | | | | | |
| Semi-manufactures (a) | 43 | 61 | 34 | 40 | 49 | 46 |
| Hong Kong— | | | | | | |
| Unwrought (a) .. | 2,445 | 2,390 | 4,006 | 5,366 | 4,501 | 4,455 |
| Scrap | 32 | 357 | 456 | 431 | 37 | 77 |
| Semi-manufactures (a) | 916 | 1,050 | 897 | 547 | 544 | 522 |
| Oxide | 508 | 527 | 538 | 573 | 794 | 648 |
| Lithopone | 1,695 | 2,102 | 1,716 | 2,327 | 1,319 | 1,185 |
| India— | | | | | | |
| Unwrought | 57,122 | 46,921 | (b) 66,725 | (b) 64,345 | (b) 83,847 | (b) 79,856 |
| do. alloys | 1,159 | 869 | (b) 2,888 | (b) 1,522 | (b) 2,306 | (b) 3,023 |
| Semi-manufactures (a) | 1,251 | 248 | (b) 1,403 | (b) 964 | (b) 1,292 | (b) 1,140 |
| Zinc-white | 8 | 7 | (b) 17 | (b) 5 | (b) 2 | (b) 182 |
| Lithopone | 133 | 163 | (b) 379 | (b) 352 | (b) 474 | (b) 501 |
| Malaya— | | | | | | |
| Unwrought (a) .. | 3 | 4 | 16 | 27 | 308 | 619 |
| Semi-manufactures (a) | 960 | 878 | 1,305 | 1,253 | 800 | 897 |
| Pakistan— | | | | | | |
| Unwrought (a) .. | 674 | 1,525 | 1,899 | 3,574 | 220 | 2,781 |
| Zinc-white | 263 | 248 | 464 | 413 | 499 | 378 |
| Lithopone | 1,091 | 507 | 1,639 | 1,364 | 1,832 | 1,557 |

* See footnote on p.397 concerning the descriptions "unwrought" zinc and "semi-manufactures" used in these tables.

(a) Including alloys.

(c) Including unwrought alloys.

(b) Years ended March 31 following that stated.

IMPORTS OF ZINC (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|---------|---------|---------|---------|---------|---------|
| COMMONWEALTH COUNTRIES (cont.) | | | | | | |
| Sarawak— | | | | | | |
| Semi-manufactures (a) | 139 | 204 | 402 | 432 | 935 | 303 |
| Australia (b)— | | | | | | |
| Unwrought and semi-manufactures (a) .. | 156 | 129 | 911 | 2,531 | 1,687 | 1,839 |
| Oxides | 7 | 5 | 37 | — | — | — |
| Lithopone | 1,353 | 1,623 | 1,582 | 1,531 | 1,454 | 1,497 |
| New Zealand— | | | | | | |
| Unwrought (a) .. | 2,211 | 2,088 | 2,549 | 2,664 | 2,580 | } 3,945 |
| Semi-manufactures (a) | 465 | 326 | 345 | 755 | 459 | |
| Oxide | 314 | 31 | 108 | 79 | 101 | n.a. |
| Lithopone | 266 | 184 | 174 | 136 | 133 | n.a. |
| Irish Republic— | | | | | | |
| Unwrought (a) .. | 1,582 | 1,524 | 2,163 | 2,464 | 2,729 | 2,733 |
| Semi-manufactures (a) | 364 | 296 | 99 | 80 | 149 | 164 |
| OTHER COUNTRIES | | | | | | |
| Austria— | | | | | | |
| Ore | 10,369 | 11,555 | 10,127 | 9,271 | 12,921 | 12,441 |
| Unwrought (a) .. | 3,918 | 3,070 | 6,485 | 7,905 | 5,913 | 5,541 |
| Semi-manufactures (a) | 165 | 331 | 476 | 499 | 443 | 422 |
| Zinc-white and zinc-grey | 374 | 786 | 629 | 658 | 721 | 483 |
| Lithopone | 359 | 20 | 19 | 3 | 96 | 372 |
| Belgium-Luxemburg E.U.— | | | | | | |
| Ore | 453,528 | 526,753 | 540,052 | 496,045 | 440,448 | 416,148 |
| Unwrought | 3,336 | 491 | 2,991 | 17,436 | 35,155 | 24,023 |
| Scrap | 36 | 861 | 368 | 133 | 1,186 | 405 |
| Semi-manufactures (a) | 371 | 279 | 97 | 143 | 201 | 430 |
| Oxide | 1,221 | 1,234 | 1,421 | 1,433 | 1,799 | 2,013 |
| Lithopone, etc. . . | 1,713 | 1,980 | 1,637 | 1,608 | 1,349 | 1,361 |
| Denmark— | | | | | | |
| Unwrought | 9,665 | 11,296 | 11,544 | 9,733 | 10,770 | 8,720 |
| do. alloys | 143 | 380 | 430 | 216 | 238 | 636 |
| Scrap | 270 | 513 | 142 | 32 | 63 | 60 |
| Semi-manufactures (a) | 5,946 | 5,513 | 5,232 | 6,257 | 6,740 | 5,084 |
| Zinc-white | 1,627 | 1,940 | 1,642 | 1,623 | 1,496 | 1,428 |
| Lithopone | 1,849 | 1,883 | 1,854 | 1,963 | 2,020 | 2,060 |
| Finland— | | | | | | |
| Unwrought (a) .. | 2,995 | 5,361 | 4,729 | 6,286 | 4,642 | 5,770 |
| Scrap | 72 | 54 | 5 | — | — | — |
| Semi-manufactures (a) | 358 | 466 | 540 | 587 | 501 | 302 |
| Zinc-white | 646 | 802 | 725 | 490 | 424 | 403 |
| Lithopone | 1,309 | 1,631 | 1,919 | 1,833 | 1,786 | 1,737 |
| France— | | | | | | |
| Ore | 346,203 | 236,309 | 285,755 | 320,391 | 293,211 | 276,635 |
| Unwrought | 14,596 | 13,597 | 21,699 | 31,108 | 31,881 | 20,207 |
| Scrap | 8,946 | 4,035 | 6,050 | 8,474 | 10,542 | 13,156 |
| Semi-manufactures (a) | 1,517 | 1,670 | 5,603 | 4,755 | 4,665 | 6,528 |
| Oxide | 197 | 541 | 714 | 1,534 | 883 | 1,341 |
| Lithopone, etc. . . | 9,700 | 16,165 | 19,217 | 21,051 | 20,134 | 21,385 |
| Germany (Federal)— | | | | | | |
| Ores | 177,297 | 142,087 | 158,346 | 136,247 | 131,494 | 122,680 |
| Unwrought (a) .. | 75,456 | 103,970 | 136,444 | 139,343 | 126,580 | 133,960 |
| Scrap (a) | 402 | 695 | 555 | 409 | 851 | 780 |
| Semi-manufactures (a) | 10,249 | 9,206 | 10,012 | 9,454 | 12,154 | 14,795 |
| Zinc-white and zinc-grey | 2,165 | 2,151 | 2,365 | 3,254 | 3,438 | 3,763 |
| Lithopone | 2,297 | 2,659 | 2,965 | 3,714 | 3,160 | 2,867 |

(a) Including alloys.

(b) Years ended June 30 and that stated.

IMPORTS OF ZINC (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--------------------------------------|---------|---------|-----------|-----------|-----------|-----------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Greece— | | | | | | |
| Unwrought | 2,183 | 2,773 | 3,754 | 4,923 | 5,260 | 4,905 |
| Semi-manufactures (a) | 749 | 499 | 373 | 286 | 253 | 485 |
| Zinc-white | 324 | 241 | 232 | 241 | 246 | 325 |
| Lithopone | 2,864 | 3,009 | 3,207 | 3,187 | 3,230 | 3,606 |
| Hungary— | | | | | | |
| Crude | 7,107 | 8,403 | 10,663 | 9,225 | 9,897 | 10,777 |
| Iceland— | | | | | | |
| Unwrought (a) | 37 | 36 | 18 | 20 | 22 | 12 |
| Semi-manufactures (a) | 35 | 23 | 43 | 52 | 63 | 61 |
| Zinc-white | 53 | 32 | 77 | 37 | 57 | 37 |
| Italy— | | | | | | |
| Ore | 2,528 | — | 982 | 2,513 | 1,075 | 8,922 |
| Unwrought | 6,407 | 6,749 | 11,299 | 12,748 | 26,412 | 28,952 |
| do. alloys | 941 | 309 | 856 | 2,040 | 2,504 | 1,879 |
| Scrap | 1,061 | 4,744 | 4,395 | 4,550 | 5,155 | 7,005 |
| Semi-manufactures (a) | 1,222 | 252 | 177 | 436 | 134 | 3,683 |
| Oxide | 400 | 489 | 705 | 741 | 684 | 2,281 |
| Lithopone, etc... .. | 980 | 1,078 | 1,002 | 1,221 | 294 | 757 |
| Netherlands— | | | | | | |
| Ore | 71,262 | 72,952 | 70,653 | 90,282 | 72,593 | 75,554 |
| Unwrought | 12,285 | 9,973 | 11,584 | 13,437 | 14,308 | 13,490 |
| do. alloys | 908 | 1,398 | 2,011 | 2,068 | 2,194 | 2,165 |
| Scrap | 488 | 796 | 756 | 451 | 317 | 424 |
| Semi-manufactures (a) | 5,844 | 5,449 | 5,567 | 5,995 | 4,879 | 6,458 |
| Oxide | 1,272 | 1,468 | 1,557 | 1,037 | 1,568 | 1,768 |
| Lithopone, etc... .. | 1,821 | 1,731 | 1,976 | 1,980 | 1,926 | 1,986 |
| Norway— | | | | | | |
| Ore | 88,260 | 61,278 | 83,668 | 65,874 | 68,368 | 83,521 |
| Unwrought | 172 | 260 | 1,151 | 1,040 | 2,259 | 1,720 |
| Ashes and scrap | 1,056 | (b) 750 | (b) 902 | (b) 923 | (b) 474 | (b) 941 |
| Semi-manufactures (a) | 1,444 | 1,464 | 1,373 | 2,374 | 2,857 | 5,289 |
| Zinc-white | 331 | 496 | 470 | 453 | 588 | 451 |
| Lithopone, etc... .. | 422 | 358 | 334 | 329 | 354 | 235 |
| Poland— | | | | | | |
| Concentrates | 105,345 | 141,041 | 109,498 | 145,104 | 122,000 | 146,155 |
| Portugal— | | | | | | |
| Unwrought and scrap | 2,854 | 2,682 | 3,128 | 4,866 | 4,552 | 5,008 |
| Semi-manufactures | 127 | 148 | 251 | 192 | 241 | 264 |
| Oxide | 720 | 617 | 430 | 460 | 486 | 436 |
| Lithopone | 1,985 | 1,926 | 2,221 | 2,276 | 2,234 | 2,113 |
| Spain— | | | | | | |
| Unwrought and scrap | 9,466 | 7,719 | 1 | — | — | 1 |
| Semi-manufactures (a) | 47 | 32 | 17 | 19 | 36 | 13 |
| Sweden— | | | | | | |
| Unwrought | 22,846 | 29,107 | 32,206 | 23,844 | 33,174 | 24,789 |
| do. alloys | n.a. | 1,049 | 1,765 | 2,038 | 2,729 | 2,786 |
| Scrap | — | 61 | 103 | 50 | 231 | 55 |
| Semi-manufactures (a) | 1,276 | 1,114 | 1,283 | 1,206 | 1,122 | 1,281 |
| Zinc-white | 4,484 | 4,703 | 4,502 | 4,389 | 4,053 | 3,541 |
| Lithopone, etc... .. | 6,267 | 6,173 | 5,863 | 5,603 | 4,466 | 4,348 |
| Switzerland— | | | | | | |
| Unwrought | 15,009 | 14,180 | 23,552 | 26,594 | 19,997 | 20,082 |
| Semi-manufactures (a) | 2,440 | 2,504 | 3,860 | 3,505 | 3,018 | 3,551 |
| Zinc-white, lithopone, etc. | 8,535 | 8,496 | (c) 1,998 | (c) 1,713 | (c) 1,811 | (c) 1,560 |
| U.S.S.R.— | | | | | | |
| Unwrought | 30,900 | 40,900 | 59,900 | 69,300 | 50,800 | 49,210 |
| do. alloys | 3,937 | 4,921 | 6,299 | 6,299 | 5,708 | 5,905 |
| Semi-manufactures | 4,527 | 3,937 | 3,937 | 3,937 | 4,134 | 3,937 |

(a) Including alloys.

(b) Scrap only.

(c) Zinc-white only.

IMPORTS OF ZINC (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Yugoslavia— | | | | | | |
| Unwrought | 30 | 227 | 770 | — | — | 2,090 |
| Semi-manufactures | <i>n.a.</i> | 6 | 202 | 5 | 7 | 75 |
| Oxide | 4 | 32 | 11 | 49 | 19 | 785 |
| Lithopone | <i>n.a.</i> | <i>n.a.</i> | 453 | 146 | 49 | 507 |
| Algeria— | | | | | | |
| Unwrought (a) | 18 | 3 | 263 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures (a) | 978 | 921 | 789 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Oxide | 547 | 733 | 555 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lithopone, etc. . . . | 1,253 | 1,401 | 1,683 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Angola— | | | | | | |
| Semi-manufactures (a) | 95 | 107 | 94 | 60 | 93 | 57 |
| Oxide | 37 | 30 | 29 | 35 | 49 | 42 |
| Congo Republic— | | | | | | |
| Unwrought and scrap | 11 | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Oxide | 67 | 92 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lithopone | 369 | 481 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Egypt— | | | | | | |
| Unwrought | 558 | 1,149 | 1,688 | 951 | 2,088 | <i>n.a.</i> |
| Semi-manufactures | 496 | 604 | 637 | 511 | 330 | <i>n.a.</i> |
| Zinc-white | 713 | 477 | 893 | 950 | 73 | <i>n.a.</i> |
| Lithopone | 4,211 | 1,614 | 5,247 | 2,691 | <i>n.a.</i> | <i>n.a.</i> |
| Malagasy Republic— | | | | | | |
| Semi-manufactures (a) | 172 | 102 | 99 | 99 | 126 | 87 |
| Oxide | 9 | 4 | 4 | 5 | 4 | — |
| Morocco— | | | | | | |
| Unwrought | 597 | 387 | 502 | 463 | 613 | 557 |
| Semi-manufactures (a) | 186 | 173 | 149 | 152 | 187 | 284 |
| Oxide | 344 | 325 | 449 | 405 | 562 | 560 |
| Lithopone | 901 | 926 | 986 | 1,112 | 977 | 1,358 |
| Mozambique— | | | | | | |
| Semi-manufactures | 12 | 30 | 21 | 22 | <i>n.a.</i> | <i>n.a.</i> |
| Oxide | 35 | 34 | 52 | 72 | 65 | <i>n.a.</i> |
| South Africa— | | | | | | |
| Unwrought | 22,895 | 14,622 | 28,201 | 22,596 | 26,667 | 33,687 |
| Semi-manufactures | 127 | 124 | 150 | 166 | 255 | <i>n.a.</i> |
| Lithopone | 1,928 | 1,646 | 1,609 | 1,214 | 1,233 | <i>n.a.</i> |
| Oxide | 292 | 273 | 264 | 234 | 154 | <i>n.a.</i> |
| Sudan— | | | | | | |
| Unwrought | 5 | 7 | 3 | 8 | 8 | 20 |
| Semi-manufactures | 46 | 113 | 25 | 146 | 94 | 195 |
| Tunisia— | | | | | | |
| Unwrought and scrap (a) | 104 | 63 | 49 | 84 | 94 | 25 |
| Semi-manufactures (a) | 80 | 69 | 107 | 107 | 67 | 80 |
| Oxide | 61 | 75 | 134 | 90 | 157 | 144 |
| Lithopone | 419 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Cuba— | | | | | | |
| Unwrought | 204 | 226 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures | 128 | 1,470 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Mexico— | | | | | | |
| Semi-manufactures | 58 | 78 | 76 | 41 | 30 | 32 |
| Oxide | 32 | 38 | 27 | 35 | 34 | 43 |
| United States— | | | | | | |
| Ore (<i>Zn content</i>) | 480,088 | 378,691 | 341,909 | 319,333 | 405,448 | 332,071 |
| Unwrought | 165,797 | 146,841 | 107,969 | 111,774 | 121,425 | 118,154 |
| Dross and scrap | 867 | 1,016 | 1,075 | 1,259 | 2,471 | 2,568 |
| Semi-manufactures | 890 | 888 | 824 | 1,133 | 1,986 | 3,696 |
| Oxide | 10,472 | 14,741 | 11,335 | 9,127 | 11,509 | 12,377 |
| Lithopone | 61 | 65 | 55 | 66 | 87 | 142 |
| Argentina— | | | | | | |
| Unwrought | 7,867 | 6,955 | 412 | 313 | 84 | 428 |
| Sheets and plates | — | — | 70 | 219 | 102 | 63 |
| Zinc-white | — | 1 | 1 | 1 | 4 | 2 |

(a) Including alloys

IMPORTS OF ZINC (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|---------|-------------|-------------|-------------|
| OTHER COUNTRIES | | | | | | |
| <i>(cont.)</i> | | | | | | |
| Brazil— | | | | | | |
| Unwrought (a) .. | 22,837 | 21,825 | 30,275 | 32,318 | 41,567 | 38,288 |
| Semi-manufactures (a) .. | 93 | 27 | 74 | 38 | 545 | 17 |
| Zinc-white | 2,647 | 1,200 | 455 | 621 | 82 | 120 |
| Lithopone | 6,138 | 7,516 | 7,477 | 9,540 | 9,621 | 7,708 |
| Chile— | | | | | | |
| Unwrought | 2,459 | 1,477 | 2,776 | 4,158 | 3,524 | <i>n.a.</i> |
| Bars and sheets (a) .. | 136 | 163 | 205 | 185 | 108 | <i>n.a.</i> |
| Zinc-white | 3 | — | 15 | 2 | 7 | <i>n.a.</i> |
| Lithopone | 10 | 4 | — | 10 | <i>n.a.</i> | <i>n.a.</i> |
| Colombia— | | | | | | |
| Unwrought (a) .. | 424 | 1,433 | 2,497 | 721 | 1,223 | 4,739 |
| Semi-manufactures (a) .. | 387 | 309 | 397 | 533 | 403 | 148 |
| Zinc-white | 942 | 616 | 787 | 1,013 | 1,209 | 1,642 |
| Lithopone | 292 | 316 | 547 | 506 | 577 | 790 |
| Peru— | | | | | | |
| Semi-manufactures (a) .. | 137 | 173 | 146 | 237 | 248 | 284 |
| Zinc-white | 17 | 17 | 14 | 23 | 25 | 21 |
| Lithopone | 419 | 394 | 350 | 406 | 417 | 337 |
| Uruguay— | | | | | | |
| Unwrought and sheets .. | 648 | 1,421 | 1,351 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Lithopone | 269 | 1,000 | 771 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Zinc-white | 343 | 365 | 372 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Venezuela— | | | | | | |
| Unwrought | 17 | 56 | 115 | 191 | 162 | 301 |
| Oxide | 580 | 710 | 606 | 617 | 766 | 784 |
| Lithopone | 735 | 543 | 348 | 535 | 523 | 400 |
| Burma— | | | | | | |
| Unwrought | 140 | 158 | — | 223 | — | 22 |
| Semi-manufactures (a) .. | 161 | 150 | 365 | 201 | 505 | 327 |
| Formosa— | | | | | | |
| Unwrought (a) .. | 1,057 | 605 | 1,318 | 1,915 | 3,000 | 3,740 |
| Semi-manufactures (a) .. | 260 | 271 | 257 | 279 | 263 | 145 |
| Lithopone | <i>n.a.</i> | <i>n.a.</i> | 1,214 | 1,210 | 1,325 | 1,394 |
| Indonesia— | | | | | | |
| Unwrought and scrap .. | 29 | 42 | 127 | 242 | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures (a) .. | 652 | 961 | 974 | 1,514 | <i>n.a.</i> | <i>n.a.</i> |
| Zinc-white | 1,536 | 1,332 | 2,141 | 3,271 | <i>n.a.</i> | <i>n.a.</i> |
| Iran (b)— | | | | | | |
| Unwrought | 12 | 30 | 34 | — | <i>n.a.</i> | <i>n.a.</i> |
| Semi-manufactures (a) .. | 52 | 84 | 110 | 54 | <i>n.a.</i> | <i>n.a.</i> |
| Iraq— | | | | | | |
| Semi-manufactures .. | 232 | 63 | 42 | 88 | 93 | <i>n.a.</i> |
| Israel— | | | | | | |
| Unwrought (a) .. | 2,150 | 2,385 | 2,855 | 2,861 | 1,896 | 2,019 |
| Semi-manufactures .. | 510 | 512 | 564 | 268 | 631 | 401 |
| Oxide | 274 | 349 | 1,100 | 1,293 | 522 | 423 |
| Lithopone | 1,173 | 753 | 1,256 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan— | | | | | | |
| Ore | 19,631 | 58,695 | 107,790 | 185,432 | 142,414 | 145,176 |
| Unwrought | 7,982 | 9,295 | 25,736 | 47,118 | 8,007 | 8,271 |
| Scrap | 53 | 170 | 48 | 59 | 64 | 27 |
| Semi-manufactures (a) .. | 18 | 1 | 8 | 87 | 33 | 79 |
| Korea (South)— | | | | | | |
| Unwrought | <i>n.a.</i> | 3,216 | 2,270 | 4,638 | 4,938 | 10,302 |
| Semi-manufactures .. | | 1,088 | 1,521 | 1,680 | 1,428 | 1,500 |
| Lithopone | | 1,054 | | | | |
| Lebanon— | | | | | | |
| Unwrought | 190 | 467 | 512 | 710 | 777 | <i>n.a.</i> |
| Semi-manufactures .. | 48 | 135 | 98 | 148 | 146 | <i>n.a.</i> |
| Oxide and lithopone .. | 101 | 172 | 65 | 77 | 66 | <i>n.a.</i> |

(a) Including alloys.

(b) Years ended March 20 of year following that stated.

IMPORTS OF ZINC (cont.)

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | | | | |
|-----------------------------------|---------|--------|--------|---------|-------|-------|-----|-------|-----|-------|
| OTHER COUNTRIES | | | | | | | | | | |
| <i>(cont.)</i> | | | | | | | | | | |
| Philippine Republic— .. | | | | | | | | | | |
| Unwrought (a) .. | } 4,257 | 11,864 | 11,355 | { 5,520 | 7,624 | 7,694 | | | | |
| Semi-manufactures (a) .. | | | | | | | | | | |
| Oxide | | | | | | | 776 | 1,045 | 891 | 1,676 | 1,009 |
| Lithopone | 232 | 332 | 389 | 677 | 159 | 422 | | | | |
| Syria— | | | | | | | | | | |
| Oxide and lithopone .. | 720 | 494 | 784 | 953 | 657 | 568 | | | | |
| Thailand— | | | | | | | | | | |
| Unwrought (a) .. | 19 | 431 | 2,160 | 5,589 | 7,089 | 9,147 | | | | |
| Semi-manufactures (a) | 1,637 | 1,040 | 1,821 | 1,587 | 1,715 | 1,594 | | | | |
| Oxide | 215 | 142 | 215 | 236 | 299 | 343 | | | | |
| Lithopone | 169 | 323 | 506 | 301 | 707 | 538 | | | | |
| Turkey— | | | | | | | | | | |
| Unwrought | 487 | 1,570 | 3,248 | 3,851 | 3,339 | 1,920 | | | | |
| Semi-manufactures (a) | 846 | 2,471 | 2,864 | 1,526 | 2,500 | 3,289 | | | | |
| Oxide | 133 | 1,880 | 1,204 | 1,449 | 1,803 | 1,718 | | | | |
| Lithopone | 635 | 1,764 | 1,466 | 131 | 140 | 73 | | | | |

(a) Including alloys.

ZIRCONIUM MINERALS

PRODUCTION OF ZIRCONIUM MINERALS

Long tons

| Producing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|--------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Gambia (a) | 10 | — | — | — | — | — |
| Nigeria | 90 | 1,116 | 1,757 | 743 | — | 791 |
| Malaya (a) | 25 | 81 | 57 | 56 | 60 | 258 |
| Australia— | | | | | | |
| Zircon concentrates .. | 59,269 | 113,356 | 102,362 | 136,462 | 133,844 | 183,903 |
| OTHER COUNTRIES | | | | | | |
| Egypt (c) | 40 | 60 | 364 | — | 168 | <i>n.a.</i> |
| Malagasy Republic | 23 | 44 | 130 | 315 | 348 | 382 |
| Senegal | 6,800 | 8,533 | 10,186 | 5,303 | 2,299 | 3,022 |
| South Africa | 1,008 | 5,289 | 6,577 | 6,792 | 6,769 | 2,364 |
| United States (d) (e) | 27,181 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Brazil (b) | 9,349 | 9,684 | 5,677 | 6,612 | 2,359 | 350 |

Zirconium minerals are also known to have been produced in Ceylon, India, the U.S.S.R. and Cambodia.

(a) Exports.

(b) Zircon and baddeleyite.

(c) United States Bureau of Mines' estimate.

(d) Production of zirconium sponge metal in the United States was as follows (long tons):

1958—1,129; 1959—1,254; 1960—1,271; 1961—1,515; 1962—1,136; 1963—912.

(e) Excluding Idaho.

EXPORTS OF ZIRCONIUM MINERALS, ETC.

Long tons

| Exporting Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| Gambia— | | | | | | |
| Zircon | 10 | — | — | — | — | — |
| Nigeria— | | | | | | |
| Ores and concentrates | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 876 |
| Malaya— | | | | | | |
| Zircon | 25 | 81 | 57 | 56 | 60 | 258 |
| Australia— | | | | | | |
| Zircon concentrates .. | 60,895 | 108,820 | 104,630 | 140,333 | 131,843 | 179,697 |
| OTHER COUNTRIES | | | | | | |
| Germany (Federal)— | | | | | | |
| Ore | <i>n.a.</i> | <i>n.a.</i> | 1,085 | 591 | 575 | 567 |
| Congo Republic— | | | | | | |
| Ore | 37 | — | — | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Senegal— | | | | | | |
| Zircon | 4,970 | 8,149 | 10,602 | 5,280 | 2,054 | 3,247 |
| South Africa— | | | | | | |
| Zircon concentrates .. | 391 | 4,821 | 5,400 | 5,240 | 5,950 | 2,504 |
| United States— | | | | | | |
| Ores and concentrates | 1,780 | 1,349 | 1,234 | 1,140 | 1,487 | 1,266 |
| Zirconium metal, etc. .. | 45 | 40 | 475 | 80 | 97 | 131 |
| Brazil (a) | — | 49 | — | 53 | — | — |

(a) Chiefly baddeleyite.

IMPORTS OF ZIRCONIUM MINERALS, ETC.

Long tons

| Importing Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|--|-----------|-----------|-----------|-----------|-----------|------------|
| COMMONWEALTH COUNTRIES | | | | | | |
| United Kingdom— Zirconium ores .. | 17,778 | 28,063 | 33,712 | 30,756 | 32,924 | 32,356 |
| Canada— Zirconium oxide .. | (£8,263) | (£14,443) | (£8,735) | (£11,462) | (£19,503) | (£20,172) |
| Zirconium silicate .. | (£54,219) | (£56,104) | (£59,402) | (£74,780) | (£73,485) | (£105,702) |
| OTHER COUNTRIES | | | | | | |
| France— Zirconium ore .. | 7,853 | 9,285 | 15,389 | 16,387 | 18,641 | 19,374 |
| Germany (Federal)— Zirconium ore .. | 6,964 | 16,869 | 18,653 | 23,018 | 23,568 | 25,176 |
| Italy— Zirconium ore .. | 9,928 | 4,176 | 8,007 | 6,700 | 7,420 | 10,980 |
| United States— Zirconium ore .. | 17,165 | 48,998 | 30,607 | 30,183 | 27,565 | 46,913 |
| Zirconium metal .. | 105 | 3 | 1 | 1 | 1 | — |

OTHER MINERALS AND METALS

These minerals are not separately recorded in the statistical returns of several countries.

| Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| Germanium (in terms of metal) | | | | | | |
| PRODUCTION*— | | | | | | |
| Italy Lb. | — | 3,000 | 12,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Congo Republic Lb. | 35,850 | 30,080 | 55,340 | 29,870 | 18,000 | 16,000 |
| South West Africa Lb. | 14,000 | 16,000 | 42,000 | 34,580 | 89,203 | 44,859 |
| United States (c) Lb. | <i>n.a.</i> | (a) 40,000 | (a) 54,000 | (a) 40,000 | (a) 37,000 | (a) 20,000 |
| EXPORTS— | | | | | | |
| South-West Africa Lb. | 14,000 | 16,000 | r 42,000 | r 34,580 | 89,203 | 675 |
| Indium | | | | | | |
| PRODUCTION†— | | | | | | |
| Canada † Troy ounces | 69,000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Japan † Troy ounces | 21,900 | 62,890 | <i>n.a.</i> | <i>n.a.</i> | 150,700 | 150,800 |
| Nepheline Syenite | | | | | | |
| PRODUCTION— | | | | | | |
| Canada Ton | 179,737 | 204,216 | 214,854 | 214,571 | 227,159 | 226,786 |
| Norway Ton | — | — | — | 8,008 | 19,625 | 22,000 |
| EXPORTS— | | | | | | |
| Canada Ton | 142,929 | 159,036 | 172,587 | 173,748 | 172,909 | 181,484 |
| IMPORTS— | | | | | | |
| United Kingdom £ | 58,788 | 70,115 | 89,619 | 145,540 | 206,721 | <i>n.a.</i> |
| United States .. Ton | 147,298 | 165,421 | 175,059 | 167,379 | 168,635 | 175,749 |
| Perlite | | | | | | |
| PRODUCTION— | | | | | | |
| United Kingdom Ton | 113 | 413 | 1,135 | 823 | 1,730 | 3,895 |
| Australia .. Ton | 300 | 708 | 796 | 394 | 608 | — |
| New Zealand .. Ton | 360 | 378 | 348 | 387 | 387 | 564 |
| Greece Ton | 8,201 | 1,999 | 27,400 | 16,911 | 20,000 | <i>n.a.</i> |
| United States .. Ton | 332,000 | 396,000 | 344,000 | 334,000 | 364,000 | 361,000 |
| Turkey Ton | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 200 | 700 | 20 |
| EXPORTS— | | | | | | |
| Greece Ton | 3,900 | 3,164 | 12,204 | 9,099 | <i>n.a.</i> | <i>n.a.</i> |
| IMPORTS— | | | | | | |
| United Kingdom £ | 58,941 | 101,062 | 154,349 | 180,198 | 287,414 | <i>n.a.</i> |
| Sodium Carbonate (Natural) | | | | | | |
| PRODUCTION— | | | | | | |
| Kenya Ton | 111,038 | 151,405 | 124,510 | 142,430 | 122,120 | 101,870 |
| United States (b) Ton | 562,000 | 656,000 | 722,000 | 720,000 | 873,000 | 999,000 |
| EXPORTS— | | | | | | |
| Kenya Ton | 104,016 | 148,177 | 115,208 | 142,673 | 111,201 | 106,873 |
| Sodium Sulphate (Natural) | | | | | | |
| PRODUCTION— | | | | | | |
| Canada Ton | 154,658 | 160,299 | 191,257 | 224,104 | 220,243 | 229,387 |
| Spain Ton | 16,006 | 15,496 | 16,864 | 17,793 | 20,373 | 32,936 |
| United States (b) Ton | 310,000 | 360,000 | 402,000 | 416,000 | 409,000 | 388,000 |
| Chile Ton | <i>n.a.</i> | <i>n.a.</i> | 8,401 | 13,089 | <i>n.a.</i> | 31,918 |
| Argentina .. Ton | 5,388 | <i>n.a.</i> | <i>n.a.</i> | 11,022 | <i>n.a.</i> | <i>n.a.</i> |
| Turkey Ton | <i>n.a.</i> | 472 | 613 | 2,446 | 4,699 | (a) 10,000 |
| EXPORTS— | | | | | | |
| Canada Ton | 35,503 | 42,787 | 56,992 | 77,795 | 66,115 | 58,346 |

*Germanium is also produced in the United Kingdom.

†The United States is also a substantial producer of indium but statistics of production are not available.

(a) Estimated.

(b) Sold or used by producers.

(c) From primary material of both domestic and foreign origin.

OTHER MINERALS AND METALS (cont.)

| Country and Description | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 |
|-------------------------|-------------|-------------|-------------|---------|---------|-------------|
| Tellurium | | | | | | |
| PRODUCTION— | | | | | | |
| Canada Lb. | 38,250 | 13,023 | 44,682 | 77,609 | 58,725 | 76,842 |
| United States (a) Lb. | 123,000 | 177,000 | 271,000 | 205,000 | 264,000 | 201,000 |
| Peru Lb. | 14,870 | 62,600 | 59,343 | 76,300 | 50,473 | 26,234 |
| Japan Lb. | 100 | 2,760 | 13,671 | 16,487 | 23,168 | 13,256 |
| EXPORTS— | | | | | | |
| Germany (Federal) Lb. | — | 220 | — | 1,102 | 5,952 | 1,543 |
| Peru Lb. | 9,105 | 58,934 | 51,039 | 74,673 | 9,202 | 2,121 |
| IMPORTS— | | | | | | |
| Germany (Federal) Lb. | 16,800 | 18,100 | 16,100 | 22,900 | 22,000 | 8,818 |
| Wollastonite | | | | | | |
| PRODUCTION— | | | | | | |
| New Zealand .. Ton | — | — | — | — | 6 | 9 |
| Finland Ton | <i>n.a.</i> | <i>n.a.</i> | 2,342 | 2,605 | 2,382 | 2,091 |
| Sudan Ton | 25 | — | 20 | — | — | <i>n.a.</i> |
| Mexico (b) .. Ton | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 |
| United States— | | | | | | |
| Industrial | (c) | (c) | (c) | (c) | (c) | (c) |
| Ornamental .. Ton | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 6,853 | 2,400 | (b) 2,143 |

(a) Including tellurium content of compounds.

(b) Estimated.

(c) In the range 30,000 to 40,000 tons per annum.

MINERALS PRODUCED IN COUNTRIES OF THE COMMONWEALTH AND STERLING AREA

The following list comprises those minerals produced in Commonwealth and Sterling Area countries during the period 1958-1963 for which data have been given in the preceding tables. Minerals outside the general coverage of the statistics in this Summary are excluded. Where the name of an element appears alone, the word "ores" or "minerals" is implied to follow; this list does not extend to the production of metals.

| | | |
|--|--|---|
| <p>Abu Dhabi (Protected State) Petroleum</p> <p>Aden Salt</p> <p>Australia Antimony Asbestos Barytes Bauxite Bentonite Beryl Bismuth Cadmium China Clay Chrome Coal Cobalt Copper Diamonds Diatomaceous earth Feldspar, China stone Fluorspar Fuller's earth Garnet Gold Gypsum Iron Lead Lithium Magnesite, Dolomite Manganese Mica Molybdenum Monazite Perlite Phosphate Platinum, Osmiridium Pyrites Salt Selenium Sillimanite, Andalusite Silver Sulphur Talc, Pyrophyllite Tantalite, Columbite Tin Titanium Tungsten Uranium Zinc Zircon</p> <p>Bahamas Salt</p> | <p>Bahrein (Protected State) Petroleum</p> <p>Barbados Natural gas Petroleum</p> <p>Basutoland Diamonds</p> <p>Bechuanaland Asbestos Gold Kyanite Manganese Silver</p> <p>British Guiana Bauxite Diamonds Gold Manganese</p> <p>Brunei Natural gas Natural gasoline Petroleum</p> <p>Canada Arsenic Asbestos Barytes Bentonite Bismuth Cadmium Coal Cobalt Copper Diatomaceous earth Feldspar Fluorspar Garnet Gold Graphite Gypsum, Anhydrite Indium Iron Lead Lithium Magnesite, Dolomite Mica Molybdenum Natural gas Natural gasoline Nepheline syenite Nickel</p> | <p>Canada—(cont.) Niobium Petroleum Platinum Potash salts Pyrites Salt Selenium Silver Sodium sulphate Sulphur Talc Tantalite, Columbite Tellurium Thorium Tin Titanium Tungsten Uranium Zinc</p> <p>Ceylon Feldspar Graphite Gypsum Ilmenite Monazite Salt Zircon</p> <p>Christmas Island Phosphate</p> <p>Cyprus Asbestos Bentonite Chrome Cobalt Copper Gypsum Pyrites Salt</p> <p>Fiji Gold Iron Manganese Silver</p> <p>Gambia Titanium Zircon</p> <p>Ghana Bauxite Diamonds Gold Manganese Salt Silver</p> |
|--|--|---|

Minerals produced in countries of the Commonwealth and Sterling Area (cont.)

Hong Kong

China clay
Feldspar
Graphite
Iron
Lead
Tungsten

India

Asbestos
Barytes
Bauxite
Bentonite
Beryl
China Clay
Chrome
Coal
Copper
Columbite
Corundum
Diamonds
Feldspar
Fluorspar
Fuller's earth
Garnet
Gold
Gypsum
Iron
Lead
Magnesite, Dolomite
Manganese
Mica
Monazite
Nitrate of potash
Petroleum
Phosphate
Pyrites
Salt
Sillimanite, Kyanite
Silver
Talc
Titanium
Tungsten
Vermiculite
Zinc
Zircon

Jamaica

Bauxite
Gypsum
Phosphate

Kenya

Asbestos
Beryl
China clay
Columbite
Copper
Diatomaceous earth
Feldspar
Gold
Graphite
Gypsum
Kyanite
Magnesite
Mica

Kenya—(cont.)

Pumice
Salt
Silver
Sodium carbonate
Vermiculite

Kuwait

(Protected State)

Petroleum

Malaya

Bauxite
China clay
Coal
Columbite
Gold
Iron
Manganese
Monazite
Tin
Titanium
Tungsten
Zircon

Malta

Salt

Mauritius

Salt

Nauru Island

Phosphate

New Guinea

Gold
Platinum
Silver

New Hebrides

Manganese

New Zealand

Asbestos
Bentonite
Coal
Copper
Diatomaceous earth
Gold
Iron
Magnesite, Dolomite
Manganese
Natural gas
Natural gasoline
Perlite
Petroleum
Pumice
Salt
Silver
Tungsten
Wollastonite

Nigeria

China clay
Coal
Feldspar
Gold
Lead

Nigeria—(cont.)

Molybdenum
Monazite, Thorite
Natural gas
Petroleum
Salt
Tantalite, Columbite
Tin
Zircon

Northern Rhodesia

Beryl
Cadmium
Cobalt
Copper
Gold
Lead
Manganese
Mica
Salt
Selenium
Silver
Tantalite, Columbite
Tin
Uranium
Vanadium
Zinc

Ocean Island

Phosphate

Pakistan

Antimony
Barytes
Bauxite
Bentonite
China clay
Chrome
Coal
Dolomite
Feldspar
Fuller's earth
Gypsum
Iron
Magnesite
Manganese
Natural gas
Petroleum
Salt
Strontium
Talc

Papua

Gold
Manganese

Qatar

(Protected State)

Petroleum

St. Kitts

Salt

Sarawak

Bauxite
Gold
Petroleum
Phosphate

Minerals produced in countries of the Commonwealth and Sterling Area (cont.)

Seychelles

Phosphate

Sierra Leone

Bauxite
 Chrome
 Diamonds
 Gold
 Iron
 Platinum
 Titanium

Southern Rhodesia

Antimony
 Arsenic
 Asbestos
 Barytes
 Bauxite
 Beryl
 China clay
 Chrome
 Coal
 Copper
 Corundum
 Diatomaceous earth
 Feldspar
 Fluorspar
 Gold
 Iron
 Kyanite
 Lead
 Lithium
 Magnesite, Dolomite
 Manganese
 Mica
 Nickel
 Phosphate
 Pyrites
 Silver
 Talc
 Tantalite
 Tin
 Tripoli
 Tungsten
 Vermiculite

Swaziland

Asbestos
 Barytes
 Beryl
 China clay
 Coal
 Gold
 Pyrophyllite
 Silver
 Tin

Tanganyika

China clay
 Coal
 Copper
 Corundum
 Diamonds
 Garnet
 Gold
 Graphite

Gypsum

Lead
 Magnesite
 Mica
 Niobium
 Phosphate
 Salt
 Silver
 Tin
 Tungsten
 Vermiculite

Trinidad

Gypsum
 Natural asphalt
 Natural gas
 Natural gasoline
 Petroleum
 Sulphur

Turks and Caicos Islands

Salt

Uganda

Beryl
 Bismuth
 Cobalt
 Copper
 Gold
 Lead
 Lithium
 Mica
 Phosphate
 Salt
 Silver
 Tantalite, Columbite
 Tin
 Tungsten

United Kingdom

Barytes, Witherite
 Bromine
 China clay
 China stone
 Coal
 Copper
 Diatomaceous earth
 Fluorspar
 Fuller's earth
 Germanium
 Gypsum, Anhydrite
 Iron
 Lead
 Magnesite, Dolomite
 Natural gas
 Oil-shale
 Perlite
 Petroleum
 Pyrites
 Salt
 Strontium
 Sulphur
 Talc
 Tin

United Kingdom

(cont.)

Tungsten
 Zinc

Virgin Islands

Salt

Burma

Antimony
 Barytes
 Bismuth
 Coal
 Copper
 Gold
 Gypsum
 Iron
 Lead
 Nickel
 Petroleum
 Salt
 Silver
 Talc
 Tin
 Tungsten
 Zinc

Iceland

Pumice
 Diatomaceous earth

Irish Republic

Barytes
 Coal
 Copper
 Gypsum
 Lead
 Pyrites
 Zinc

Jordan

Gypsum
 Phosphate
 Salt

Libya

Petroleum
 Salt

South Africa

Antimony
 Asbestos
 Barytes
 Bentonite
 Beryl
 Bismuth
 China clay
 Chrome
 Coal
 Copper
 Corundum
 Diamonds
 Diatomaceous earth
 Feldspar

Minerals produced in countries of the Commonwealth and Sterling Area (cont.)

South Africa—(cont.)

Fluorspar
Fuller's earth
Gadolinite
Garnet
Gold
Graphite
Gypsum
Iron
Lead
Lithium
Magnesite
Manganese
Mica
Molybdenum
Monazite
Nickel
Oil-shale
Phosphate
Platinum, Osmiridium
Pyrites

South Africa—(cont.)

Salt
Silver
Sillimanite, Andalusite
Sulphur
Talc
Tantalite
Tin
Titanium
Tungsten
Uranium
Vanadium
Vermiculite
Zinc
Zircon

South West Africa

Beryl
Bismuth
Cadmium
Copper

South West Africa

—(cont.)

Diamonds
Feldspar
Fluorspar
Germanium
Gold
Iron
Lead
Lithium
Manganese
Mica
Phosphate
Salt
Sillimanite, Kyanite
Silver
Tantalite, Columbite
Tin
Tungsten
Vanadium
Zinc

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Dolomite 195-204
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Garnet 1, 2, 4, 6, 7
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