





BRITISH GEOLOGICAL SURVEY

# WORLD MINERAL STATISTICS 1990–94

Production: Exports: Imports

Compiled by L E Taylor, G J Lofty, J A Hillier, M E Fellows,  
D G Bate, K A Linley, A J Mills, R White  
Research by G R Chapman

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BRITISH GEOLOGICAL SURVEY

Keyworth, Nottingham NG12 5GG  
☎ 0115-936 3100

Murchison House, West Mains Road, Edinburgh EH9 3LA  
☎ 0131-667 1000

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*The British Geological Survey is a component body of the Natural Environment Research Council.*

*All communications regarding the content of this publication should be addressed to the Group Manager, Minerals Group, British Geological Survey, Keyworth, Nottingham NG12 5GG ☎0115-936 3100.*

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*Compilers*

Staff of the Minerals Group  
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## PREFACE

This volume is the eighteenth in the series *World Mineral Statistics*.

The first volume in this series was published in 1978 but publication by the British Geological Survey, and its precursors, of descriptive statistics encompassing the mineral industry world-wide dates back to 1913 in the well-known *Statistical Summary of the Mineral Industry*. The current volume is therefore the latest in a continuous series encompassing 82 years.

A significant change in practice is embodied in the present volume: production data were formerly published in a special supplement one year ahead of trade data, as well as in the main volume, but publication of trade data has now been brought forward by one year and they are published together with the 'preliminary' production data. Consecutive volumes are thus now entitled '1988-92' and '1990-94'. Certain trade data were unavailable at the time of compilation and it is inevitable that several figures will be revised in the course of time but users of the volume will now have much earlier access to the statistics of world minerals production and trade.

A dial-up on-line subscription service is available and data will also be available on disc in 1996. Production data will no longer be available on micro-fiche but this service will be re-introduced if it appears that a demand exists.

Trends in mineral production have been generally downwards throughout the five year period covered by the book but there were signs that an up-turn was beginning in 1994. Primary production will have lagged behind consumption as increases in demand for many commodities were initially satisfied by supply from stocks.

The reasons for this gradual decline vary from commodity to commodity but the general recession in the major world economies is chiefly to blame, particularly, for example in the fall in the demand for steel and hence for iron ore and the numerous other minerals that are closely linked to the production of steel. In some cases this is compounded by a decrease in the intensity of use of certain materials per tonne of steel output; this is especially true of minerals used for refractory products, such as magnesite, and also of manganese, mine production of which was in 1994 the lowest recorded since 1983.

Base metals and light metals showed signs of recovery in 1993 and 1994, zinc in particularly showing a rise to an all-time production peak in 1993. Cobalt production continued on its downward trend which, commentators suggest, may lead to problems since demand is increasing. Nickel mine production has been relatively steady.

In the fuel minerals, coal production has been steady since falling to a 23-year low in 1991. Natural gas production fell slightly in 1994 but crude petroleum increased with the largest individual rise being recorded by the United Kingdom and the greatest fall by Russia.

The production of most of the industrial minerals has also fallen throughout the five-year span, although kaolin production has increased. Barytes production has fallen due to a decline in oil drilling activity while other minerals, notably fluorspar and asbestos, have declined in response to environmental concerns. It should be noted that production of natural gypsum, shown in the book, will have been augmented by the output of desulphogypsum from electricity generating stations.

The fertilizer elements, phosphorus and potassium, show chiefly the effects of the removal of subsidies for fertilizers in the states of the former Soviet Union and eastern Europe. Demand for fertilizer remains strong in many developing countries.

Many of the estimates shown in the trade tables are the result of reconstructing trade data and research to elucidate trade patterns and tonnages is always on-going.

This edition of *World Mineral Statistics* is the first full volume to contain data for the individual states of the former Soviet Union (FSU), Yugoslavia and Czechoslovakia. These data are still incomplete but the situation is improving. In order to make these figures as reliable as possible the compilers have consulted many other authorities in the fields of minerals and metals. The figures for the former Soviet Union, and for Russia in particular, illustrate the effect of the recent political and social changes, with a rise in the exports of metals from that country and the concurrent fall in the mine production of metals and fuel minerals. The future of metals supply from both the FSU and China remains one of the chief sources of uncertainty in world minerals supply at present.

The reader should be aware that this publication is compiled from a more comprehensive data set maintained by the staff of the Minerals Group of the British Geological Survey. Additional data such as those for value of minerals produced, for country breakdown of trade, and for trade in other minerals, are available on enquiry. Although data on consumption are not compiled it is possible to calculate approximate apparent consumption of many commodities from the published production and trade data, although stock changes have to be ignored unless such information is obtainable elsewhere.

In each new volume account is taken of revisions and information received after the publication of the previous issue, so that data for every year are as up-to-date as is practicable. The objective remains to present the latest complete information from primary sources, that is from individual producing and trading countries, rather than to reproduce data from compilations made by other organisations. However, such secondary sources have been fully consulted and the co-operation afforded to the British Geological Survey by numerous national and international organisations, in particular the International Consultative Group on Non-Ferrous Metal Statistics, is gratefully acknowledged.

The British Geological Survey continues to provide to customers a reliable, comprehensive and continuous set of data covering most of the minerals that enter international trade. After several years of world recession it appears that the second half of the decade may see real growth in world economic activity and hence in the demand for raw materials. Resources of most minerals are sufficient to meet demand for the foreseeable future but the uncertainties that surround the geographic patterns of production and trade make the availability of reliable statistics an essential tool for the analysis of activity in this sector. Funding constraints continue to make the future of this work uncertain but we shall endeavour to maintain a high standard of service to the international community. Indeed, given all the changes to earth science and mining institutions around the world, I believe it is vital to Britain and to many other nations that we continue to compile these statistics.

Criticisms and suggestions that might help us to meet your changing needs would be welcome.

Peter J Cook  
*Director*

British Geological Survey  
Keyworth  
Nottingham NG12 5GG

15 December 1995

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## EXPLANATORY NOTES

### Coverage

*World Mineral Statistics* covers the majority of economically important, and internationally traded, mineral commodities. For each commodity constant efforts are made to ensure that as many producing and trading countries as possible are reported and that trade data cover all major traded forms. For some commodities, where statistics on production and trade are not publicly available, estimates are made. Users of this compilation are advised that more statistical information than can be included in a publication of this nature is in the Minerals Group files and is available for consultation. Historical data (1913-1970) can be obtained from the predecessor to this series entitled the *Statistical Summary of the Mineral Industry*.

### Arrangement of countries

After the United Kingdom, if listed, countries are ordered alphabetically in geographical groupings as follows:

- European Union (EU)
- Europe other than EU; including the Soviet Union
- Africa
- North and Central America, including the Caribbean
- South America
- Asia
- Australasia, including the Pacific Islands

So far as possible the nomenclature follows the London Diplomatic List and United Nations usage.

*German Democratic Republic* For 1991 and 1992, the data shown against Federal Republic of Germany includes data for the former German Democratic Republic, where available.

*Yugoslavia* This refers to the former Socialist Federal Republic of Yugoslavia unless otherwise stated.

### Production

*Metals* Mine production of many metals is expressed in terms of metal content. This is clearly indicated at the head of the table, adjacent to the unit used. For aluminium, cobalt, copper, iron, lead, nickel, tin and zinc, mine production and metal production are shown in separate tables. Unless otherwise specified, metal production statistics relate to metal recovered from both domestic or imported materials, whether primary or secondary, but exclude remelted material.

### Trade

*Federal Republic of Germany* Data for 1990 include shipments to, and purchases from the German Democratic Republic.

*South Africa* Import data are taken from the trade statistics of the common customs area, which includes Botswana, Lesotho, Namibia, South Africa and Swaziland, and relate to this area as a whole. Where separate data are available for any of these countries they have also been shown even though this may result in some double counting.

Export data are taken from returns furnished by producers to the Department of Mineral and Energy Affairs, and may be shipments rather than actual exports.

Estimates for other South Africa exports, based on reconstruction from importing countries, may include material originating in any of the countries of the common customs area and so involve some double counting on tables where these are listed separately.

*USA* US trade statistics show trade between the US customs territory and foreign countries, but exclude trade between the US and Puerto Rico, and between the US and Guam, American Samoa and other US possessions. Also excluded is trade between any of these outlying areas, shipments from US possessions to foreign countries, and shipments for the use of the US Government in foreign countries.

*General* Although every effort has been made for provide comprehensive coverage of trade statistics the resulting trade compilations depend on the nature of the data available. The fact that a country is not shown as trading in a particular commodity does not necessarily imply that there is no trade in that item. The commodity may not be separately identified in the available trade statistics or may not be traded in significant quantities.

Where an estimate for a trade statistic has been reconstructed from the imports/exports of other countries, the resulting figure may be conservative, as complete coverage of world trade is seldom available.

In general, export statistics include re-exports. The distinction is only made when re-exports are recorded separate in the relevant national trade account and are deemed to be significant.

Tables showing trade in metals covered by Standard International Trade Classification (Revision 3) 689.1, 8 & 9, and 699.8 & 9 (Antimony, Bismuth, Cadmium, Chromium, Cobalt, Manganese, Molybdenum, Tantalum–Niobium, Titanium, Tungsten, Vanadium and Zirconium) include under the term 'metal', unwrought and wrought forms, powder, alloys, waste and scrap, unless these are separately shown. Trade tables of other metals include only unwrought forms under the term 'metal'.

## Acknowledgements

Compilation of this volume of mineral statistics has been possible only by obtaining information from a very large number of organisations throughout the world, chiefly home and overseas government departments and specialist national or international authorities concerned with particular sectors of the minerals or metals industries. To all these bodies the British Geological Survey expresses its grateful acknowledgement for the information made available, whether in published form or provided by direct correspondence.

Among the numerous overseas government agencies which have provided valuable information, particular acknowledgement is made to the United States Bureau of Mines; Natural Resources Canada; the Australian Bureau of Agricultural and Resource Economics; the Department of Mineral and Energy Affairs of South Africa; the Indian Bureau of Mines; and the Mines Departments of other countries whose regular statements, yearbooks and other reports are worthy of direct consultations by readers in search of detail.

Specialist commodity organisations which have kindly allowed information to be reproduced include the International Lead and Zinc Study Group, the UK Iron and Steel Statistics Bureau, the International Fertilizer Industry Association Ltd, the UN Food and Agriculture Organization and the UNCTAD. In a few instances, information on specific commodities has been obtained directly from company sources.

Supplementary information is also obtained from publications dealing with a wider range of commodities such as American Bureau of Metal Statistics, *Non-ferrous Metal Data*; Annales des Mines, *Realites Industrielles*; Metaleurop, *Annuaire Statistique*; Metallgesellschaft AG, *Metallstatistik*; Mining Journal, *Mining Annual Review*; Enirisorse, *Metalli Non Ferrosi*; World Bureau of Metal Statistics, *World Metal Statistics*; and publications of the United Nations and its agencies.

## Units

The Statistics shown in this volume are expressed in metric units. The following factors are given for converting to non-metric units:

tonnes  $\times$  0.9842 = long tons  
tonnes  $\times$  1.1023 = short tons  
kilograms  $\times$  2.2046 = pounds  
kilograms  $\times$  32.1507 = troy ounces  
cubic metres  $\times$  35.3147 = cubic feet  
1 tonne of crude petroleum equals on average 7 barrels of crude petroleum.  
1 flask mercury = 34.5 kilograms  
1 metric ton unit = 10 kilograms

Conversion of national currencies to pounds sterling has been made using the annual average factors shown for each country in *International Financial Statistics* published by the International Monetary Fund.

## Symbols

...	figures not available
0	quantity less than half unit shown
—	nil
*	estimated
BGS	British Geological Survey
S.I.T.C.	Standard International Trade Classification





# **STATISTICAL TABLES**

**Production of Bauxite**

tonnes

Country	1990	1991	1992	1993	1994
France	489 805	183 300	104 000	151 000	128 000
Greece	2 511 036	2 164 773	2 084 611	2 205 498	2 194 100
Italy	338	8 700	97 500	90 100	23 400
Albania	23 489	8 000	—	—	*2 000
Bosnia & Herzegovina	—	—	*200 000	*100	100
Hungary	2 559 100	2 036 700	1 721 100	1 561 300	1 015 100
Romania	247 400	200 500	176 100	186 600	184 100
Russia	—	—	4 578 000	4 260 000	3 633 000
Soviet Union (a)	9 246 000	7 870 000	—	—	—
Turkey	772 673	483 598	612 996	594 600	445 000
Yugoslavia (g)	2 952 460	(f) 2 542 000	792 000	*250 000	0
Ghana	382 100	485 100	338 200	423 700	426 100
Guinea	16 150 000	17 065 000	15 997 000	17 040 000	14 400
Mozambique	7 186	7 760	8 840	5 990	9 620
Sierra Leone	1 445 120	1 376 200	1 256 900	1 164 600	599 300
Dominican Republic	85 164	6 514	—	—	—
Jamaica	10 965 000	11 610 000	11 367 000	11 184 000	11 571 300
USA (b)	*495 000	*50 000	*45 000	*55 000	*100 000
Brazil (c)	9 748 948	10 364 200	9 365 600	9 669 000	8 673 300
Guyana	1 423 978	2 145 907	2 373 759	2 083 200	2 093 000
Suriname	3 266 759	3 136 341	3 251 900	3 156 100	3 765 900
Venezuela	771 422	1 997 066	1 117 525	2 914 446	4 772 900
China	3 655 200	5 926 000	6 660 900	*6 468 200	*6 500 000
India	4 853 000	4 735 000	4 898 300	5 223 300	4 809 100
Indonesia	1 163 820	1 246 322	803 507	1 320 418	1 342 400
Iran (d) (e)	92 509	98 425	169 350	296 815	*100 000
Kazakhstan	—	—	*1 732 000	*1 700 000	2 425 000
Malaysia	398 180	376 418	330 593	68 824	161 919
Pakistan	2 581	4 324	3 461	4 845	4 800
Australia	41 391 000	40 503 000	39 746 000	41 320 000	42 159 000
World total	115 100 000	116 600 000	109 800 000	113 400 000	97 200 000

(a) Including nepheline concentrates and alunite

(b) Dried bauxite equivalent

(c) Including beneficiated and direct shipping ore

(d) Alunite

(e) Years ended 20 March following that stated

(f) Excluding data from August to December for the Republic of Croatia

(g) As from 1992 data is for Serbia and Montenegro only

**Production of Alumina**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	120 000	120 000	120 000	120 000	120 000
France (a)	466 540	403 765	365 000	362 000	338 400
Germany, Federal Republic of	1 172 808	1 148 310	1 119 898	1 109 978	950 734
Greece	378 595	407 843	399 739	401 876	607 500
Irish Republic	926 500	980 392	972 549	1 103 268	1 786 000
Italy	491 400	525 800	498 300	549 100	852 100
Spain	655 000	656 200	626 800	692 200	1 070 600
Azerbaijan	—	—	*240 000	*206 000	30 000
Bosnia & Herzegovina	—	—	*100 000	—	—
Czechoslovakia	209 229	186 600	*100 000	—	—
German Democratic Republic (a)	27 000	—	—	—	—
Hungary (a)	826 000	653 000	545 000	421 000	243 400
Romania (a)	440 000	310 000	280 000	293 174	302 500
Russia	—	—	2 718 000	2 661 200	2 168 400
Slovakia	—	—	—	90 000	90 000
Slovenia	—	—	*45 000	—	—
Soviet Union (a)	5 639 000	5 276 000	—	—	—
Turkey	177 144	159 091	156 474	169 195	178 000
Ukraine	—	—	1 229 000	1 250 000	1 200 000
Yugoslavia (b)	1 086 298	780 000	197 000	—	—
Guinea	642 100	650 900	603 200	642 300	648 400
Canada	1 087 029	1 131 000	1 104 000	1 182 000	1 170 000
Jamaica	2 868 844	3 014 585	2 917 162	2 989 360	3 221 222
USA	*5 230 000	*5 230 000	*5 185 000	*5 290 000	*4 860 000
Brazil	1 654 800	1 742 500	1 833 000	1 853 200	1 867 500
Suriname	1 531 460	1 509 638	1 576 000	1 506 600	1 498 100
Venezuela	1 404 769	1 481 000	1 282 163	1 500 064	*1 600 000
China	1 463 800	1 522 000	1 583 000	1 827 255	1 847 000
India	1 334 000	1 435 000	1 484 000	1 489 500	1 455 800
Japan	458 893	564 700	466 700	460 100	460 100
Kazakhstan	—	—	*1 053 000	*1 100 000	*900 000
Australia	11 231 000	11 713 000	11 962 000	12 598 000	12 792 000
World total	41 500 000	41 600 000	40 800 000	41 900 000	42 300 000

Note(s):

(1) Where possible figures in this table show the alumina equivalent (Al<sub>2</sub>O<sub>3</sub>) of total hydrate produced, whether or not calcined

(a) Calcined

(b) As from 1992 data is for Serbia and Montenegro only

**Production of Primary Aluminium**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	289 796	293 512	244 163	239 099	231 223
France	330 824	346 194	423 000	426 200	384 100
Germany, Federal Republic of	714 946	705 033	626 491	551 933	504 956
Greece	152 362	150 878	150 850	146 800	138 000
Italy	231 800	218 000	160 700	155 600	175 600
Netherlands	(b) 257 884	(b) 253 563	(b) 227 328	231 800	219 400
Spain	355 300	355 200	359 000	355 900	338 100
Austria	89 434	80 384	32 866	—	—
Azerbaijan	—	—	*24 000	*7 000	5 000
Bosnia & Herzegovina	—	—	*30 000	*15 000	0
Croatia	—	—	20 406	*25 956	25 993
Czechoslovakia	30 076	49 387	32 670	—	—
German Democratic Republic	*21 000	—	—	—	—
Hungary	75 162	63 318	26 857	27 876	29 600
Iceland	86 773	88 768	89 478	94 200	99 300
Norway (a)	867 061	858 227	838 133	887 461	856 967
Poland	45 974	45 793	43 600	46 900	49 400
Romania	168 000	158 400	111 992	112 360	120 000
Russia	—	—	2 725 000	2 800 800	2 675 300
Slovakia	—	—	—	17 815	...
Slovenia	—	—	84 809	*74 700	74 300
Soviet Union	3 513 000	3 252 000	—	—	—
Sweden	92 100	96 339	103 297	82 400	82 900
Switzerland	71 602	65 899	50 794	36 439	24 171
Turkey	60 902	55 817	58 581	58 501	59 700
Ukraine	—	—	105 000	104 000	102 000
Yugoslavia (d)	349 087	*314 000	66 947	25 778	8 000
Cameroon	87 500	85 600	82 500	86 500	86 100
Egypt (c)	141 081	177 707	177 838	178 477	188 464
Ghana	174 200	173 400	179 000	174 100	140 700
South Africa	157 500	169 390	172 795	175 867	172 700
Canada	1 567 395	1 821 642	1 971 843	2 308 868	2 254 683
Mexico	67 515	50 827	24 806	25 774	—
USA	4 048 000	4 121 000	4 042 000	3 695 000	3 299 000
Argentina	165 608	166 290	153 000	170 593	173 371
Brazil	930 585	1 139 600	1 193 300	1 172 000	1 184 600
Suriname	31 282	30 657	32 350	591 000	26 700
Venezuela	599 480	609 548	567 399	575 000	591 000
Bahrain	212 500	209 800	292 460	450 000	451 903
China	854 300	963 000	1 096 400	1 220 400	1 446 100
Dubai	174 300	239 030	244 600	242 300	246 900
India	433 200	504 284	496 300	466 400	472 000
Indonesia	192 100	174 773	188 772	205 526	221 900
Iran	94 647	107 743	117 230	109 190	116 000
Japan	34 224	32 400	18 884	18 263	16 956
Korea, Republic of	13 285	13 604	*12 000	—	—
Tajikistan	—	—	*345 000	*253 000	236 500
Australia	1 234 000	1 235 000	1 246 000	1 381 000	1 318 000
New Zealand	259 700	260 400	241 600	266 900	268 000
World total	19 300 000	19 700 000	19 500 000	20 300 000	19 100 000

(a) May include some super purity aluminium

(b) Sales

(c) Years ended 30 June of that stated

(d) As from 1992 data is for Serbia and Montenegro only

## Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Bauxite	4 774	8 291	9 764	(j) 16 407	(j) 23 220
Alumina	11 735	11 033	12 762	...	...
Alumina hydrate	42 105	42 674	47 033	...	...
Unwrought	60 795	39 105	20 378	10 705	79 416
Unwrought alloys	95 804	91 217	114 782	118 750	140 720
Scrap	94 452	80 171	71 975	93 759	100 723
Belgium-Luxembourg					
Bauxite	1 725	1 236	992	442	...
Alumina	1 079	955	740	714	...
Unwrought	3 162	3 132	3 288	3 269	...
Unwrought alloys	29 735	50 594	71 298	84 554	...
Scrap	67 769	69 055	85 801	102 231	...
Denmark					
Unwrought	469	463	767	576	238
Unwrought alloys	9 045	7 760	13 637	18 525	17 117
Scrap	29 068	26 822	25 192	26 353	31 212
France					
Bauxite	13 143	17 450	12 723	10 362	13 392
Alumina	96 287	83 726	82 452	88 131	128 904
Alumina hydrate	131 590	94 769	99 969	110 091	107 738
Unwrought	53 067	40 220	132 185	67 922	94 811
Unwrought alloys	82 767	87 307	86 971	169 661	117 169
Scrap	150 037	141 033	137 326	113 237	142 299
Germany, Federal Republic of					
Bauxite	86 019	198 495	39 818	34 097	...
Alumina	239 600	238 977	203 344	174 152	...
Alumina hydrate	306 068	313 082	251 338	246 006	...
Unwrought	64 734	54 878	54 552	38 712	47 178
Unwrought alloys	254 705	235 549	269 988	208 711	224 729
Scrap	198 958	316 585	367 743	317 008	...
Greece					
Bauxite	401 648	824 573	965 679	861 487	...
Alumina	278 546	318 269	333 644	240 695	...
Alumina hydrate	7 500	14 831	16 432	134 760	...
Unwrought (a)	61 186	61 552	69 813	72 851	...
Scrap	2 378	2 080	5 091	6 432	...
Irish Republic					
Alumina	862 448	1 039 839	938 189	923 196	...
Alumina hydrate	53 440	37 877	48 323	...	...
Unwrought (a)	1 970	1 615	1 056	1 940	...
Scrap	12 210	11 278	13 203	11 997	...
Italy					
Bauxite	15 617	3 611	38 430	23 430	...
Alumina	412 368	389 418	465 075	320 057	...
Alumina hydrate	15 451	10 147	12 292	8 161	...
Unwrought	10 135	5 982	3 361	5 203	1 704
Unwrought alloys	18 150	11 548	23 032	29 164	23 088
Scrap	7 132	10 556	11 858	10 730	...
Netherlands					
Bauxite	25 048	21 909	23 677	11 024	...
Alumina	98 806	97 375	99 145	93 026	...
Alumina hydrate	2 441	4 066	9 542	1 871	...
Unwrought	119 967	99 846	88 245	135 095	...
Unwrought alloys	242 497	232 565	247 767	263 370	...
Scrap	132 672	129 089	145 123	139 651	...
Portugal					
Scrap	5 378	5 552	8 878	9 287	...
Spain					
Bauxite	1 182	627	540	696	...
Alumina	233 102	247 077	234 641	211 821	...
Alumina hydrate	48 559	56 504	75 935	83 771	...
Unwrought	8 515	19 576	15 672	9 857	...
Unwrought alloys	98 303	103 547	123 495	159 360	...
Scrap	3 736	7 588	14 117	16 059	...

## Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1990	1991	1992	1993	1994
Austria					
Unwrought (a)	52 057	64 680	65 917	56 495	68 078
Scrap	26 881	32 320	37 819	43 532	38 895
Azerbaijan					
Unwrought (a) (f)	—	—	*2 200	*6 800	...
Belarus					
Unwrought (a) (f)	—	—	*9 900	*12 000	...
Bulgaria					
Unwrought (a) (f)	*2 200	*1 500	*5 800	*8 300	...
Scrap (f)	*2 300	*3 200	*3 500	*1 000	...
Croatia					
Bauxite	—	—	341	1 105	...
Unwrought (a)	—	—	3 617	1 856	...
Czechoslovakia					
Unwrought (a) (f)	*14 900	*34 200	*30 100	—	—
Scrap (f)	*2 200	*5 500	*11 400	—	—
Czech Republic					
Unwrought (a) (f)	—	—	—	*26 000	...
Scrap (f)	—	—	—	*11 200	...
Estonia					
Unwrought (a) (f)	—	—	*12 100	*6 000	...
Scrap (f)	—	—	*10 500	*7 300	...
Finland					
Unwrought (a)	23 285	20 430	24 532	33 135	...
German Democratic Republic					
Unwrought (a) (f)	*30 700	—	—	—	—
Scrap (f)	*3 000	—	—	—	—
Hungary					
Bauxite	280 338	300 000	226 476	278 004	—
Alumina	613 163	460 000	469 426	354 501	168 996
Unwrought (a)	121 761	100 000	41 827	27 886	32 369
Scrap	11 312	...	16 525	10 495	17 170
Iceland					
Unwrought (a)	86 392	86 267	90 497	91 801	100 567
Latvia					
Unwrought (a) (f)	—	—	*8 800	*27 400	...
Scrap (f)	—	—	*8 900	*4 700	...
Lithuania					
Unwrought (a) (f)	—	—	*4 700	*18 100	...
Norway					
Unwrought	211 412	241 677	239 544	264 373	290 584
Unwrought alloys	565 864	568 547	563 181	523 949	575 781
Scrap	28 678	28 407	20 301	17 009	17 539
Poland					
Unwrought (a)	16 690	15 291	15 430	(f) *11 700	...
Scrap	2 452	16 783	(f) *15 600	(f) *9 400	...
Romania					
Unwrought	(f) *44 000	(f) *26 000	93 654	75 075	...
Scrap (f)	*1 600	*500	*200	*300	...
Russia					
Unwrought (a)	—	—	1 190 003	2 146 582	...
Slovenia					
Alumina	—	—	12 519	12 636	...
Unwrought	—	—	43 702	44 599	...
Soviet Union					
Unwrought (a) (f)	*671 500	...	—	—	—
Scrap (f)	*16 000	*39 400	—	—	—
Sweden					
Alumina	452	191	2 427	3 031	...
Unwrought	14 427	9 979	5 778	5 787	9 052
Unwrought alloys	49 713	47 823	48 330	47 200	46 196
Scrap	20 882	34 006	27 135	27 343	36 411
Switzerland					
Alumina	1 432	2 655	832	490	562
Unwrought (a)	30 618	32 928	13 971	5 671	7 600
Scrap	36 846	34 537	51 104	60 011	63 786

## Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1990	1991	1992	1993	1994
Turkey					
Bauxite	83 015	57 800	50 330	48 650	30 160
Alumina	63 016	34 048	41 641	51 301	38 442
Unwrought (a)	9 890	7 080	7 091	4 672	7 189
Ukraine					
Unwrought (a) (f)	—	—	*17 800	*50 500	...
Yugoslavia (i)					
Bauxite	506 966	(b) 241 280	...	...	...
Alumina	584 741	(b) —	...	...	...
Alumina hydrate	115 827	(b) —	...	...	...
Unwrought	196 275	(b) 49 365	...	...	...
Unwrought alloys	34 444	(b) 6 973	...	...	...
Scrap	591	(b) 370	...	...	...
Cameroon					
Unwrought (a)	70 050	54 425	67 200	68 400	...
Egypt					
Unwrought (a)	107 600	89 700	125 700	106 924	...
Ghana					
Bauxite	368 659	324 313	399 155	...	...
Unwrought (a)	127 500	129 700	154 200	112 100	...
Guinea					
Bauxite (f)	*13 200 000	*12 700 000	*11 100 000	*9 900 000	...
Alumina	640 000	650 000	600 000	640 000	...
Mozambique					
Bauxite	6 586	8 442	8 913	5 990	9 709
Sierra Leone					
Bauxite	1 430 000	1 176 800	1 365 100	944 900	...
South Africa					
Unwrought (a)	71 835	82 661	98 766	85 993	56 900
Scrap (f)	*2 300	*2 000	*3 200	*1 800	*3 200
Canada					
Alumina	134 334	85 696	94 998	97 178	96 600
Unwrought	664 549	769 866	856 177	1 093 209	949 820
Unwrought alloys	617 647	703 317	749 098	747 965	927 588
Scrap	188 363	173 675	197 415	199 168	236 634
Cuba					
Scrap (e)	412	970	419	—	...
Dominican Republic					
Bauxite (h)	76 529	30 337	—	—	...
Jamaica					
Bauxite	3 885 758	4 260 881	4 128 330	3 916 723	3 649 419
Alumina	2 885 131	3 037 461	2 951 068	2 950 270	3 349 033
Mexico					
Scrap	16 309	18 452	40 162	45 131	71 671
USA					
Bauxite	90 723	75 178	70 816	147 513	*150 000
of which: Re-exports	17 214	8 669	7 846	14 205	...
Alumina	1 216 084	1 431 849	1 162 495	1 358 132	...
Alumina hydrate	52 664	54 145	48 355	53 338	(j) *1 000 000
Unwrought	510 513	633 392	469 594	262 968	(a) 338 807
Unwrought alloys	173 557	158 489	134 370	174 842	...
Scrap	537 994	461 521	298 231	176 606	307 442
Argentina					
Unwrought	136 184	92 370	67 589	86 012	...
Brazil					
Bauxite	5 463 921	5 823 521	4 362 391	6 509 800	4 416 026
Alumina	172 114	120 440	149 415	196 379	*300 000
Unwrought	544 671	721 259	781 738	771 587	736 401
Unwrought alloys	47 311	30 348	34 799	28 043	41 439
Guyana					
Bauxite	1 389 000	1 328 000	895 000	...	...
Suriname					
Alumina	1 448 158	1 382 000	1 510 000	...	...
Unwrought	27 416	21 000	32 000	...	...

## Exports of Bauxite, Alumina and Aluminium

tonnes

Country	1990	1991	1992	1993	1994
Venezuela					
Alumina	121 493	233 696	226 983	307 383	...
Unwrought	368 265	386 083	383 318	375 744	(a) 445 000
Unwrought alloys	83 991	59 446	104 476	39 610	...
Scrap	4 910	11 547	17 629	20 487	...
Bahrain					
Unwrought (a)	112 711	101 351	149 500	333 449	308 400
China					
Bauxite	680 315	541 554	864 363	520 265	380 000
Alumina	556 149	646 294	148 682	100 276	40 000
Unwrought (a)	65 125	68 556	55 803	67 984	130 901
Scrap	1 715	2 706	14 962	11 711	...
Dubai					
Unwrought (a)	171 000	235 800	248 600	242 600	254 800
Hong Kong					
Bauxite (g)	14 461	10 561	3 915	1 010	261
Alumina (g)	38	17	24 316	32 003	26 463
Unwrought	17 381	21 955	(a) 79 912	(a) 83 992	(a) 106 308
of which: Re-exports	17 281	21 857	(a) 79 720	(a) 83 399	(a) 104 584
Scrap	32 999	31 895	51 287	44 091	82 148
of which: Re-exports	6 321	5 488	17 888	13 684	35 939
India (c)					
Bauxite	187 782	121 618	247 238	232 423	...
Alumina	317 218	334 442	347 123	544 506	...
Unwrought (a)	26 940	68 094	102 441	64 487	...
Indonesia					
Bauxite	813 637	1 077 036	596 830	1 211 649	...
Unwrought (a)	125 162	123 016	147 311	132 348	143 500
Israel					
Unwrought (a) (f)	*6 800	*2 100	*2 900	*1 800	...
Scrap (f)	*2 200	*4 000	*6 400	*7 600	...
Japan					
Alumina	158 656	121 012	48 519	71 356	68 496
Alumina hydrate	119 991	131 084	147 994	130 624	128 261
Unwrought	547	1 338	1 948	1 542	2 155
Unwrought alloys	4 267	3 311	3 206	7 101	9 539
Scrap	7 751	6 874	5 359	6 248	9 729
Jordan					
Scrap	1 207	1 440	2 370	2 487	...
Kazakhstan					
Alumina	—	—	15 000	12 000	...
Korea, Dem. P.R. of					
Unwrought (a) (f)	*3 900	*3 000	*3 300	*3 400	...
Korea, Republic of					
Unwrought (a)	6 307	1 810	15 889	20 305	59 384
Malaysia					
Bauxite	407 670	302 048	198 200	77 900	158 638
Scrap	...	4 826	6 416	5 706	...
Saudi Arabia					
Scrap	49 826	23 052	23 154	...	...
Singapore					
Alumina	20 581	11 788	14 369	19 096	32 299
of which: Re-exports	20 468	11 659	14 325	19 070	32 158
Unwrought	21 890	43 205	57 385	77 691	90 139
of which: Re-exports	19 362	39 311	55 173	72 161	86 083
Scrap	20 591	19 067	20 806	25 121	49 259
Taiwan					
Alumina	3 833	959	167	823	1 079
Unwrought (a)	47 687	52 867	72 224	97 204	104 884
Scrap	5 577	5 275	7 907	7 133	14 790
Tajikistan					
Unwrought (a) (f)	—	—	*11 500	*40 200	...



**Exports of Bauxite, Alumina and Aluminium**

tonnes

Country	1990	1991	1992	1993	1994
Australia					
Bauxite	*5 700 000	*5 450 000	*5 348 000	*4 800 000	*4 900 000
Alumina	8 785 000	9 274 000	9 604 000	9 753 000	10 601 000
Unwrought (a)	936 400	953 400	930 000	1 056 000	948 000
Scrap (d)	50 046	62 793	52 506	33 821	...
New Zealand (d)					
Unwrought (a)	230 556	240 941	249 667	223 698	239 687
Scrap	9 207	9 602	9 273	11 744	10 945

## Note(s):

- (1) Except where alumina hydrate is separately specified, national trade figures for alumina can be considered as inclusive of hydrate
- (2) In this table the term 'unwrought' aluminium corresponds to item 684.1 of the Standard International Trade Classification (Revision 3) and comprises ingots, blocks, unwrought bars, etc.
- (3) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

- (a) Including alloys
- (b) Data for the Federal Republic of Yugoslavia only
- (c) Years ended 31 March following that stated
- (d) Years ended 30 June of that stated
- (e) Imports into the Netherlands
- (f) BGS estimates, based on known imports into certain countries
- (g) Re-exports
- (h) Some material believed to come from stocks
- (i) As from 1992 data is for Serbia and Montenegro only
- (j) Including alumina

**Imports of Bauxite, Alumina and Aluminium**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Bauxite	440 915	387 027	386 252	327 832	336 107
Alumina	625 284	586 109	513 295	404 327	415 788
Alumina hydrate	17 204	23 513	48 683	39 388	61 731
Unwrought	130 688	122 361	241 472	479 556	377 366
Unwrought alloys	110 318	99 403	126 397	115 708	99 649
Scrap	16 864	29 040	40 330	48 350	59 912
Belgium-Luxembourg					
Bauxite	37 310	44 774	70 494	31 692	...
Alumina	11 025	10 383	9 871	10 077	...
Alumina hydrate	47 101	53 027	74 669	84 647	...
Unwrought	225 569	251 813	229 896	236 740	...
Unwrought alloys	141 923	118 815	116 966	74 148	...
Scrap	117 184	140 597	173 607	149 550	...
Denmark					
Bauxite	2 667	2 185	2 139	2 299	1 811
Alumina	814	544	554	493	585
Alumina hydrate	4 515	4 929	5 527	4 638	3 247
Unwrought	1 926	427	675	156	589
Unwrought alloys	28 046	29 788	27 615	21 048	28 958
Scrap	6 082	9 637	15 938	21 030	24 325
France					
Bauxite	1 388 476	1 239 070	1 342 577	974 586	1 216 638
Alumina	373 484	355 082	578 636	627 557	558 350
Alumina hydrate	78 103	36 737	33 248	41 124	79 476
Unwrought	248 642	254 583	250 189	219 413	272 287
Unwrought alloys	292 455	296 966	268 270	152 832	172 541
Scrap	137 528	203 559	215 863	142 663	144 503
Germany, Federal Republic of					
Bauxite	3 076 544	2 549 118	2 616 678	2 243 062	...
Alumina	970 227	877 748	689 469	563 200	...
Alumina hydrate	35 750	69 750	74 813	62 769	...
Unwrought	545 143	666 475	795 465	517 910	740 645
Unwrought alloys	355 557	340 544	366 921	346 934	456 663
Scrap	229 002	195 137	204 621	181 768	...
Greece					
Bauxite	800	200	160	73 716	...
Alumina	419	620	811	2 488	...
Unwrought (a)	11 843	26 627	47 400	19 321	...
Scrap	1 258	1 444	961	22 790	...
Irish Republic					
Bauxite	1 746 337	1 976 987	1 984 334	2 185 000	...
Alumina	3 852	4 362	30 840	...	...
Unwrought (a)	7 705	7 720	7 598	10 338	...
Italy					
Bauxite	1 680 619	1 667 669	1 708 486	1 706 722	...
Alumina	210 232	196 319	153 655	88 224	...
Alumina hydrate	146 823	128 488	106 075	65 317	...
Unwrought	339 639	298 966	312 022	229 748	293 727
Unwrought alloys	198 994	212 679	217 196	206 041	283 866
Scrap	174 198	168 084	182 458	211 168	...
Netherlands					
Bauxite	142 916	133 475	124 534	151 078	...
Alumina	459 077	567 626	541 830	470 794	...
Alumina hydrate	43 689	57 017	69 163	58 843	...
Unwrought	138 298	134 939	140 195	264 842	...
Unwrought alloys	51 926	48 161	54 873	106 238	...
Scrap	126 757	118 272	134 476	124 726	...
Portugal					
Bauxite	1 786	1 971	324	...	...
Alumina	7 943	7 690	6 667	3 858	...
Unwrought	15 320	14 232	15 033	6 616	...
Unwrought alloys	34 157	35 935	45 054	48 738	...

## Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1990	1991	1992	1993	1994
Spain					
Bauxite	1 922 855	1 935 071	1 812 749	1 586 305	...
Alumina	24 718	21 879	23 806	22 319	...
Alumina hydrate	13 809	15 380	14 605	18 111	...
Unwrought	15 400	35 910	43 477	68 307	...
Unwrought alloys	15 771	26 033	28 284	20 063	...
Scrap	24 198	15 080	16 949	23 922	...
Austria					
Bauxite	34 466	48 763	40 540	43 421	38 057
Alumina	222 498	176 497	82 439	32 727	34 362
Alumina hydrate	8 552	8 715	6 667	7 025	5 949
Unwrought	52 372	53 384	96 694	96 783	216 976
Unwrought alloys	97 725	96 813	103 877	81 999	82 050
Scrap	41 628	51 683	52 210	45 305	54 275
Bulgaria					
Unwrought (a) (f)	*8 000	*8 900	*11 600	*4 200	...
Croatia					
Bauxite	—	—	17 851	15 428	...
Alumina	—	—	1 004	1 074	...
Unwrought (a)	—	—	24 212	15 416	...
Scrap	—	—	3 867	2 077	...
Czechoslovakia					
Bauxite	581 000	400 000	200 000	—	—
Alumina (f)	*700	*3 400	*2 200	—	—
Unwrought (a)	102 000	50 000	50 000	—	—
Scrap (f)	*1 700	*2 700	*3 600	—	—
Czech Republic					
Alumina (f)	—	—	—	*2 700	...
Scrap (f)	—	—	—	*5 200	...
Finland					
Bauxite	7 070	8 037	6 982	6 243	...
Alumina	3 317	1 134	1 524	5 781	...
Alumina hydrate	21 513	27 166	28 059	30 814	...
Unwrought	20 754	15 585	15 445	16 834	...
Unwrought alloys	5 382	3 859	5 392	8 868	...
Scrap	27 004	37 758	55 318	55 664	...
German Democratic Republic					
Alumina (f)	*25 500	—	—	—	—
Unwrought (a) (f)	*102 000	—	—	—	—
Hungary					
Unwrought (a)	204 070	94 200	100 030	95 285	130 669
Iceland					
Alumina	160 290	185 459	204 448	158 224	169 580
Norway					
Bauxite	14 185	19 010	32 392	25 614	39 545
Alumina	1 861 687	1 697 538	1 691 213	1 722 893	1 720 504
Alumina hydrate	35 809	33 442	32 009	28 060	30 214
Unwrought	71 411	67 715	81 901	70 590	147 605
Unwrought alloys	9 548	13 323	23 584	32 125	49 305
Scrap	23 732	28 246	38 893	35 666	68 505
Poland					
Bauxite	29 099	17 866	63 369	...	...
Alumina	130 046	112 506	(f) *93 000	(f) *104 300	...
Unwrought	44 961	17 300	26 544	(a) (f) *64 500	...
Romania					
Bauxite	(f) *398 200	(f) *572 000	487 862	521 045	...
Alumina	(f) *28 200	(f) *32 100	8 269	12 011	...
Russia					
Bauxite	—	1 851 000	2 848 500	2 792 300	...
Slovakia					
Bauxite	—	—	—	287 990	...
Unwrought (a)	—	—	—	12 092	...
Slovenia					
Bauxite	—	—	17 584	8 712	...
Alumina	—	—	166 206	189 747	...
Unwrought	—	—	16 930	21 214	...

**Imports of Bauxite, Alumina and Aluminium**

tonnes

Country	1990	1991	1992	1993	1994
Soviet Union					
Bauxite (f)	*3 813 900	...	—	—	—
Alumina (f)	*1 558 800	*862 200	—	—	—
Sweden					
Bauxite	48 816	65 879	50 741	54 145	...
Alumina	165 454	445 735	163 780	173 606	...
Alumina hydrate	53 972	59 921	50 928	57 245	...
Unwrought	15 607	21 073	26 429	31 145	102 289
Unwrought alloys	31 110	27 896	24 074	32 905	55 098
Scrap	6 808	4 593	4 619	5 944	8 714
Switzerland					
Bauxite	691	1 051	1 688	1 193	1 717
Alumina	150 483	144 331	107 945	73 151	59 658
Unwrought	63 586	64 597	61 456	63 520	105 402
Unwrought alloys	41 010	28 793	33 615	27 514	31 762
Scrap	4 110	6 191	4 339	4 053	6 646
Turkey					
Bauxite	44 790	36 129	34 864	48 296	65 475
Alumina	1 851	2 958	1 966	2 340	3 220
Unwrought	63 568	26 286	34 493	50 335	29 495
Unwrought alloys	37 393	36 696	47 326	70 552	38 007
Yugoslavia (b)					
Bauxite	439 702	(g) 22 545	2 196	...	...
Alumina	245 465	(g) 434	738	...	...
Unwrought	18 180	(g) 11 595	2 009	...	...
Unwrought alloys	4 564	(g) 416	409	...	...
Algeria					
Alumina	15	2 092	2 000	...	...
Unwrought (a)	8 475	5 574	5 672	...	...
Cameroon					
Alumina	163 311	521 157	165 000	...	...
Ghana					
Alumina	165 000	175 000	180 000	...	...
Kenya					
Alumina	*3 400	*3 000	*2 300	...	...
Morocco					
Bauxite	9 102	6 351	10 898	2 306	...
Alumina	4 761	4 091	4 403	...	...
Unwrought (a)	2 461	2 039	2 143	2 844	...
Nigeria					
Unwrought (a)	3 000	2 500	2 500	...	...
South Africa					
Bauxite	7 294	11 094	22 058	8 811	15 693
Alumina	310 779	303 872	288 737	330 890	314 278
Alumina hydrate	10 954	11 597	10 691	15 125	17 313
Scrap	1 699	5 863	1 942	1 367	1 549
Tunisia					
Bauxite	3 053	2 015	1 510	1 335	...
Alumina	24 560	28 195	26 916	102	...
Alumina hydrate	5 562	4 131	6 982	...	...
Unwrought	(a) 1 583	(a) 2 610	(a) 1 483	3 870	...
Canada					
Bauxite	2 310 461	2 773 509	2 799 415	2 860 528	2 929 411
Alumina	1 982 952	2 456 234	2 558 970	3 275 750	3 347 836
Unwrought	27 300	27 676	22 887	34 877	37 184
Unwrought alloys	57 358	46 201	62 583	74 203	104 392
Scrap	52 603	46 339	52 524	52 934	63 361
Costa Rica					
Unwrought (a)	7 707	4 235	6 235	...	...

## Imports of Bauxite, Alumina and Aluminium

tonnes

Country	1990	1991	1992	1993	1994
Mexico					
Bauxite	46 028	44 051	37 242	36 485	...
Alumina	141 745	96 180	17 762	22 229	...
Alumina hydrate	40 320	45 786	46 152	45 061	48 227
Unwrought	13 178	24 428	45 173	83 264	71 359
Unwrought alloys	18 461	29 523	31 156	42 145	66 388
Scrap	15 855	16 053	16 179	15 261	21 102
Panama					
Unwrought (a)	761	1 167	1 281	1 645	...
USA					
Bauxite, crude dried	12 628 163	11 174 990	11 111 732	11 638 115	...
Bauxite, calcined	558 000	298 000	346 000	237 000	...
Alumina	4 087 503	4 622 317	4 761 504	3 969 902	*3 100 000
Unwrought	438 543	517 338	610 755	1 090 378	(a) 2 484 821
Unwrought alloys	523 194	510 797	553 049	755 615	...
Scrap	214 853	208 423	263 838	308 537	389 561
Argentina					
Bauxite	19 911	30 752	26 235	38 229	...
Alumina	207 153	347 544	248 171	293 426	...
Alumina hydrate	9 211	10 300	8 724	11 050	...
Brazil					
Bauxite	207 360	356 707	182 741	111 600	...
Alumina	423 308	662 845	728 543	851 259	683 300
Unwrought	354	1 028	180	3 860	1 685
Unwrought alloys	2 222	1 163	1 134	2 633	5 306
Scrap	4 956	4 440	1 154	770	975
Chile					
Bauxite	4 152	3 576	4 427	8 471	4 147
Unwrought	6 371	7 644	12 302	14 154	14 253
Colombia					
Bauxite	6 201	5 902	8 844	4 649	...
Alumina	5 202	4 891	7 049	6 438	...
Unwrought	(a) 21 221	12 658	17 450	16 972	...
Unwrought alloys	...	9 878	13 792	13 038	...
Ecuador					
Unwrought	3 428	4 453	2 193	4 766	...
Peru					
Bauxite	2 949	1 266	393	3 930	...
Alumina	1 918	646	...	1 885	...
Unwrought	1 046	3 408	*4 000	3 543	...
Uruguay					
Bauxite	3 400	3 990	4 106	2 800	1 124
Alumina	1 335	1 205	1 545	1 506	1 543
Unwrought	2 090	1 900	1 884	2 101	2 076
Venezuela					
Bauxite	3 485 827	3 082 470	1 460 760	1 657 613	...
Alumina	5 638	13 568	4 998	5 283	...
Alumina hydrate	1 862	1 600	1 456	570	...
Unwrought (a)	305	187	2 744	3 241	...
Abu Dhabi					
Scrap	8 625	6 461	11 375	7 979	...
Bahrain					
Alumina	436 867	404 931	538 000	943 653	...
China					
Bauxite	...	...	54 085	95 998	...
Alumina	583 012	686 178	800 697	972 328	1 910 000
Unwrought (a)	71 771	43 711	229 626	165 640	168 853
Scrap	5 490	6 149	44 578	61 307	...
Dubai					
Alumina	300 000	425 000	419 282	...	...
Hong Kong					
Bauxite	12 497	9 850	6 658	1 626	160
Alumina	60	60	25 479	34 604	33 382
Unwrought	46 208	58 666	(a) 125 773	(a) 129 099	(a) 147 913
Scrap	5 693	8 460	24 977	24 507	73 033

**Imports of Bauxite, Alumina and Aluminium**

tonnes

Country	1990	1991	1992	1993	1994
India (c)					
Alumina	6 682	3 890	4 663	3 772	...
Unwrought (a)	16 148	14 712	3 748	43 823	...
Scrap	7 608	828	1 849	22 063	...
Indonesia					
Alumina	303 594	225 280	291 763	377 018	...
Alumina hydrate	54 469	63 958	85 345	77 919	...
Unwrought	11 522	35 549	28 535	36 416	...
Unwrought alloys	13 255	20 089	19 724	31 354	...
Iran (e)					
Alumina	40 000	50 000	75 000	...	...
Israel					
Alumina (f)	*900	*900	*2 500	*1 300	...
Unwrought (a)	18 244	...	22 704	29 330	...
Japan					
Bauxite	2 302 206	2 048 992	1 820 974	1 852 019	1 856 447
Alumina	19 008	33 489	20 182	30 279	42 117
Alumina hydrate	54 448	70 874	63 123	97 568	73 718
Unwrought	1 983 773	2 057 144	1 892 543	1 926 429	1 984 596
Unwrought alloys	669 290	773 874	648 570	677 923	654 810
Scrap	352 699	291 742	243 004	206 448	217 252
Jordan					
Alumina	22 871	31 498	23 620	12 913	...
Unwrought	3 588	4 799	2 997	6 886	...
Korea, Dem. P.R. of					
Alumina (f)	*9 400	*12 100	*37 800	*60 100	...
Unwrought (a) (f)	*700	*6 500	*7 300	*4 100	...
Korea, Republic of					
Bauxite	34 536	37 396	42 908	58 058	63 312
Alumina	14 328	13 191	19 790	41 894	48 576
Alumina hydrate	100 765	120 263	137 142	335 765	177 451
Unwrought	301 611	300 104	297 813	418 456	503 432
Unwrought alloys	60 315	91 690	127 665	162 887	185 893
Scrap	39 576	57 805	53 957	32 306	35 490
Malaysia					
Alumina	...	19 867	19 240	...	...
Unwrought	217 130	28 326	32 449	(a) 88 038	...
Unwrought alloys	31 452	38 611	43 509	...	...
Scrap	...	3 045	2 727	...	...
Pakistan (d)					
Alumina	2 360	3 046	4 276	3 443	...
Unwrought (a)	8 630	4 553	12 286	14 131	...
Scrap	27 017	33 294	58 272	78 099	...
Philippines					
Bauxite	1 962	7 105	9 479	2 355	...
Alumina	7 155	8 478	6 897	3 684	...
Unwrought (a)	14 631	17 617	26 067	23 037	...
Saudi Arabia					
Bauxite	182 905	126 428	71 772	...	...
Unwrought (a)	22 273	16 196	59 910	...	...
Singapore					
Alumina	1 426	1 901	1 718	2 030	1 952
Alumina hydrate	62 258	76 948	85 957	60 557	45 879
Unwrought	46 158	55 067	86 093	110 042	120 453
Scrap	3 357	3 989	2 892	3 221	2 961
Taiwan					
Bauxite	48 025	45 321	48 092	48 599	61 832
Alumina	33 085	22 725	28 475	44 414	43 294
Alumina hydrate	22 191	28 254	38 683	32 073	41 159
Unwrought	170 088	214 008	203 991	231 111	291 623
Unwrought alloys	75 269	101 596	132 350	164 458	167 845
Scrap	70 265	128 649	110 110	113 868	168 744

**Imports of Bauxite, Alumina and Aluminium**

tonnes

Country	1990	1991	1992	1993	1994
Thailand					
Bauxite	25 102	32 076	32 929	37 168	...
Alumina	10 008	8 339	8 517	7 513	...
Alumina hydrate	17 800	9 051	18 087	27 852	...
Unwrought	75 581	83 911	81 403	96 288	...
Unwrought alloys	52 555	62 836	67 103	85 336	...
Scrap	2 012	709	869	2 619	...
Australia					
Bauxite	19 000	20 000	29 000	21 000	12 000
Alumina	10 000	10 000	—	—	—
Unwrought (a)	1 600	2 400	5 000	4 700	2 000
Scrap (d)	2 574	2 752	2 901	6 549	...
New Zealand (d)					
Bauxite	4 457	6 744	2 328	3 159	2 561
Alumina	511 261	493 688	567 235	444 586	506 587
Unwrought (a)	8 341	5 839	1 790	2 888	5 064
Scrap	544	1 973	3 973	2 234	2 835

## Note(s):

- (1) Except where alumina hydrate is separately specified, national trade figures for alumina can be considered as inclusive of hydrate
  - (2) In this table the term 'unwrought' aluminium corresponds to item 684.1 of the Standard International Trade Classification (Revision 3) and comprises ingots, blocks, unwrought bars, etc.
  - (3) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- (a) Including alloys
  - (b) As from 1992 data is for Serbia and Montenegro only
  - (c) Years ended 31 March following that stated
  - (d) Years ended 30 June of that stated
  - (e) Years ended 20 March following that stated
  - (f) BGS estimates, based on known exports from certain countries
  - (g) Data for the Federal Republic of Yugoslavia only

**Mine Production of Antimony**

tonnes (metal content)

Country	1990	1991	1992	1993	1994
Austria	469	—	—	—	—
Czechoslovakia	917	297	240	—	—
Czech Republic	—	—	—	*100	0
Romania	*400	*300	*400	—	0
Russia	—	—	*10 000	*6 000	7 000
Slovakia	—	—	—	*250	400
Soviet Union	*18 000	*16 000	—	—	—
Turkey	552	288	258	104	*100
Yugoslavia (c)	409	*400	—	—	100
Morocco	172	157	184	168	—
South Africa	5 258	4 176	3 951	4 111	4 534
Zimbabwe	55	86	137	51	35
Canada	658	469	948	673	750
Guatemala	840	557	323	90	230
Mexico	2 614	2 753	1 064	1 494	1 758
USA	*500	*500	*500	*500	*500
Bolivia	8 454	7 287	6 022	5 556	7 050
Peru (a)	307	278	339	219	385
China	54 800	58 300	59 400	60 000	82 400
Kyrgyzstan	—	—	*2 000	*1 600	2 500
Pakistan	38	—	—	—	—
Tajikistan	—	—	*1 500	*1 200	1 000
Thailand	326	60	269	622	296
Australia (b)	1 300	1 500	1 701	1 700	1 700
World total	96 100	93 400	89 200	84 400	110 700

## Note(s):

- (1) This table includes antimony content of antimonial lead alloys  
(2) In addition to the countries listed, Afghanistan, Hungary and Iran are believed to produce antimony

- (a) Including Sb content of antimonial lead plus Sb content of ores for export  
(b) Including Sb content of lead and zinc concentrates  
(c) As from 1992 data is for Serbia and Montenegro only



## Exports of Antimony

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Metal	115	273	305	135	238
Oxide (a)	*4 900	*5 500	*5 400	*5 600	...
Belgium-Luxembourg					
Oxide (a)	*3 800	*3 400	*3 500	*3 400	...
France					
Metal	72	206	97	195	288
Oxide	5 007	4 408	4 363	...	6 183
Germany, Federal Republic of					
Metal	76	144	53	72	...
Oxide	675	653	725	843	...
Italy					
Metal	46	2	19	7	...
Oxide	24	22	63	210	...
Netherlands					
Metal	—	—	—	183	...
Oxide	495	304	389	1 332	...
Spain					
Oxide	156	306	341	491	...
Austria					
Sulphide (b)	67	3	0	—	—
Russia					
Metal (a)	—	—	*2 300	*2 600	...
Oxide (a)	—	—	*200	*200	...
Soviet Union					
Metal (a)	*1 000	*2 000	—	—	—
Oxide (a)	*100	*100	—	—	—
Turkey					
Metal	293	105	10	—	117
Morocco					
Ore	377	60	...	...	...
South Africa					
Ore (c)	92	96	90	0	60
Oxide	4 764	(a) *2 500	(a) *2 100	(a) *3 400	...
Canada					
Ores & concentrates	463	81	893	1 497	1 307
Mexico					
Ores & concentrates	819	773	656	...	...
Metal	250	494	275	...	...
USA					
Ores & concentrates	417	715	48	...	...
Metal	736	806	1 052	365	1 350
Oxide	8 608	4 551	5 798	4 694	9 446
Bolivia					
Ore	11 686	6 029	2 224	1 422	5 565
Metal	453	458	*300	*450	626
Oxide	762	3 915	*6 600	5 439	6 283
China					
Ores & concentrates	10 241	5 087	4 518	2 652	...
Metal	33 368	29 373	33 322	36 249	12 927
Oxide	13 014	14 429	16 905	17 367	...
Sulphide	10 040	4 064	...	2 518	...
Hong Kong					
Metal (e)	...	...	19 046	24 930	14 454
Thailand					
Ore	302	—	84	42	...
Metal	1 132	1 263	1 470	1 408	...

Antimony

**Exports of Antimony**

tonnes

Country	1990	1991	1992	1993	1994
Australia					
Ores & concentrates (d)	1 622	3 114	3 028	2 872	...

- (a) BGS estimates, based on known imports into certain countries
- (b) Believed to be crude liquated sulphide
- (c) Sb content
- (d) Years ended 30 June of that stated
- (e) Re-exports

## Imports of Antimony

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Ore (b)	*800	*500	*200	*150	...
Metal	604	1 184	3 193	2 441	4 301
Oxide	2 172	2 154	1 897	1 637	1 680
Belgium-Luxembourg					
Ore	3 863	1 855	486	515	...
Metal	2 953	1 983	3 479	3 785	...
Oxide	1 299	654	956	797	...
Denmark					
Oxide	83	76	56	60	54
France					
Ore	9 620	7 183	2 631	...	8 663
Metal	2 977	3 768	4 494	7 517	11 194
Oxide	1 080	911	953	...	890
Germany, Federal Republic of					
Metal	3 145	3 426	1 286	804	...
Oxide	5 517	4 853	5 657	4 955	...
Italy					
Metal	1 247	1 405	1 308	1 105	...
Oxide	2 682	2 698	3 069	2 917	...
Netherlands					
Metal	51	72	31	578	...
Oxide	1 531	1 426	1 405	2 497	...
Portugal					
Metal	98	107	193	52	...
Spain					
Metal	683	959	924	1 058	...
Oxide	508	486	602	438	...
Austria					
Metal	49	68	101	138	185
Oxide	220	193	220	195	237
Croatia					
Metal	—	—	23	27	...
Finland					
Oxide	229	141	150	173	...
German Democratic Republic					
Oxide (b)	*10	—	—	—	—
Norway					
Metal	45	40	13	9	21
Oxide	168	139	175	195	213
Sweden					
Metal	59	29	97	75	...
Oxide	563	502	446	426	...
Switzerland					
Metal	79	67	86	16	7
Oxide	390	408	534	622	743
Yugoslavia (e)					
Metal	135	(d) 10	16	...	...
South Africa					
Metal	221	210	246	282	608
Tunisia					
Metal	84	78	110	...	...
Canada					
Metal	182	110	149	209	354
Oxide	1 277	1 165	1 106	1 490	1 752
Mexico					
Metal	495	450	485	582	1 054
USA					
Ore	5 681	4 395	3 029	1 720	9 400
Metal	13 940	13 502	15 100	14 363	18 200
Oxide	14 472	14 347	17 085	19 322	21 300

**Imports of Antimony**

tonnes

Country	1990	1991	1992	1993	1994
Brazil					
Ore	196	131	...	...	...
Metal	732	511	481	657	...
Oxide	102	116	...	...	...
Sulphide	60	65	...	...	...
Colombia					
Metal	102	187	157	117	...
Venezuela					
Metal	39	35	85	49	...
China					
Metal	50	84	2 667	2 686	...
Hong Kong					
Metal	...	...	21 278	23 446	13 819
India (a)					
Metal	1 505	907	682	1 244	...
Oxide	184	140	54	85	...
Indonesia					
Metal	230	216	298	363	...
Oxide	121	114	188	216	...
Japan					
Ores & concentrates	5 997	6 051	5 270	4 496	3 312
Metal	6 316	6 172	5 707	5 059	6 639
Oxide	6 299	8 645	8 623	9 490	10 258
Sulphide	184	219	274	251	378
Korea, Republic of					
Ores & concentrates	2 326	100	—	—	0
Metal	2 178	2 976	4 756	5 507	8 512
Oxide	505	958	690	711	1 015
Malaysia					
Metal	224	138	294	...	...
Pakistan (c)					
Metal	110	110	67	55	...
Taiwan					
Metal	1 954	2 443	1 866	1 957	2 469
Oxide	1 075	1 753	2 069	2 254	2 491
Thailand					
Ores & concentrates	7 956	2 665	2 238	1 897	...
Oxide	427	393	4 337	430	...
Australia					
Metal (c)	66	98	284	232	...
Oxide (c)	449	444	363	415	...

(a) Years ended 31 March following that stated

(b) BGS estimates, based on known exports from certain countries

(c) Years ended 30 June of that stated

(d) Data for the Federal Republic of Yugoslavia only

(e) As from 1992 data is for Serbia and Montenegro only

**Production of White Arsenic**

tonnes

Country	1990	1991	1992	1993	1994
Belgium	*3 000	*2 500	*2 000	*2 000	*2 000
France	6 500	2 309	—	—	—
Germany, Federal Republic of	*360	*300	*300	*300	*300
Portugal	247	256	*133	*150	*150
Georgia	—	—	*1 500	*1 000	...
Russia	—	—	*3 000	*2 000	*2 000
Soviet Union	*7 800	*7 000	—	—	—
Sweden	*7 000	*2 500	—	—	—
Ghana (d)	—	*500	*500	*500	*500
Namibia (a)	1 637	1 804	2 300	2 290	2 775
Canada	485	236	*250	*250	...
Mexico (b)	6 348	6 497	5 667	5 870	5 856
Bolivia	300	463	633	663	341
Chile (c)	5 831	6 822	6 016	6 242	3 940
Peru	643	661	607	391	286
China	*9 000	*10 000	*14 000	*13 000	*13 000
Japan	*500	*500	*500	*500	*500
Kazakhstan	—	—	*2 000	*2 000	*2 000
Philippines	5 092	*5 000	*5 000	*2 000	*2 000

## Note(s):

- (1) This table includes calculated trioxide equivalent of arsenic metal produced except where this would involve double counting
  - (2) In addition to the countries listed, Argentina, Austria, former Czechoslovakia, Finland, Hungary, Spain, United Kingdom and former Yugoslavia are believed to produce arsenic
- (a) Output of Tsumeb Corp. only, trioxide equivalent of reported black arsenic
  - (b) Including trioxide equivalent of black arsenic
  - (c) Exports
  - (d) By product of gold ore processing. Excludes significant quantities of non-commercial grade material

**Exports of Arsenic**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Metallic arsenic	92	38	112	10	11
Belgium-Luxembourg					
Metallic arsenic	4	...	96	22	...
France					
Metallic arsenic	784	1 576	1 375	...	1 736
Germany, Federal Republic of					
Metallic arsenic	2	74	9	14	...
Italy					
Metallic arsenic	...	12	11	...	...
Netherlands					
Metallic arsenic	27	12	25	41	...
Namibia					
White arsenic	2 055	1 785	2 419	2 474	2 246
USA					
Metallic arsenic	219	261	106	364	79
Bolivia					
White arsenic	300	463	633	663	341
Chile					
White arsenic	5 831	6 822	6 016	6 242	3 940
China					
White arsenic (b)	*2 000	*12 000	*13 400	*10 800	...
Metallic arsenic	(b) *1 200	(b) *1 200	1 760	1 882	...
Hong Kong					
White arsenic (a)	763	4 264	...	...	...
Korea, Republic of					
White arsenic	187	34	136	128	97

Note(s):

(1) This table does not purport to be comprehensive: data relating to arsenic are not fully recorded by many countries

(a) Re-exports

(b) BGS estimates, based on known imports into certain countries

## Imports of Arsenic

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Metallic arsenic	80	268	89	268	120
Belgium-Luxembourg					
Metallic arsenic	97	93	95	97	...
France					
Metallic arsenic	260	289	374	...	94
Germany, Federal Republic of					
Metallic arsenic	29	68	92	...	...
Italy					
Metallic arsenic	208	164	129	...	...
Netherlands					
Metallic arsenic	30	—	—	58	...
Spain					
Metallic arsenic	30	35	100	58	...
Austria					
Metallic arsenic	22	17	22	14	21
Norway					
Metallic arsenic	19	32	24	24	20
Sweden					
Metallic arsenic	29	7	11	21	...
Turkey					
White arsenic	...	...	...	51	21
Yugoslavia (d)					
Metallic arsenic	27	(a)—	...	...	...
South Africa					
Metallic arsenic	31	44	...	...	...
USA					
White arsenic	26 257	27 142	30 672	27 514	26 800
Metallic arsenic	796	1 018	730	781	1 330
Brazil					
White arsenic	453	396	...	...	...
Uruguay					
White arsenic	39	42	—	...	...
Hong Kong					
White arsenic	658	4 676	...	...	...
India (b)					
White arsenic	211	504	690	220	...
Metallic arsenic	41	103	257	503	...
Indonesia					
White arsenic	2	160	139	140	...
Japan					
White arsenic	362	234	...	...	...
Metallic arsenic	95	336	12	40	28
Taiwan					
White arsenic	245	223	411	607	278
Thailand					
Metallic arsenic	37	20	26	38	...
Australia					
White arsenic (c)	966	962	1 066	1 062	...
New Zealand (c)					
Metallic arsenic	143	11	9	8	29

Note(s):

(1) This table does not purport to be comprehensive: data relating to arsenic are not fully recorded by many countries

(a) Data for the Federal Republic of Yugoslavia only

(b) Years ended 31 March following that stated

(c) Years ended 30 June of that stated

(d) As from 1992 data is for Serbia and Montenegro only

**Production of Asbestos**

tonnes

Country	1990	1991	1992	1993	1994
Greece	65 993	4 788	28 592	56 948	72 000
Italy	3 862	—	—	—	—
Bosnia & Herzegovina	—	—	*500	*500	*300
Bulgaria	500	400	*500	*400	*400
Russia	—	—	*1 500 000	*866 677	*800 000
Soviet Union	*2 400 000	*2 000 000	—	—	—
Yugoslavia (f)	6 578	(d) 5 289	1 175	*1 100	*1 100
Egypt (e)	367	450	375	603	514
South Africa					
Amosite	26 566	27 383	5 132	—	—
Crocidolite	31 521	31 551	24 476	11 614	6 273
Chrysotile	103 407	101 563	103 660	92 380	88 511
Swaziland					
Chrysotile	35 938	13 888	32 301	28 360	26 720
Zimbabwe					
Chrysotile	160 500	141 697	150 158	156 881	151 905
Canada					
Chrysotile	724 620	639 008	590 641	517 000	518 000
USA (a)	*20 000	20 061	15 573	13 704	10 100
Argentina	275	270	215	309	*350
Brazil	205 220	238 852	172 448	184 918	*191 900
Colombia (c)	159 600	164 825	170 221	*150 000	129 000
China	191 800	213 000	229 600	307 000	*240 000
India					
Amphibole	26 053	24 094	43 788	43 600	*44 000
Iran (b)	*2 800	*3 000	*4 300	*4 500	*4 500
Japan					
Chrysotile	5 184	4 395	4 281	2 636	...
Kazakhstan	—	—	*400 000	*325 000	*300 000
Korea, Republic of	1 534	—	2 308	2 200	*2 000
World total	4 200 000	3 600 000	3 500 000	2 800 000	2 600 000

## Note(s):

(1) In addition to the countries listed, Democratic P.R. of Korea and Romania are believed to produce asbestos

(a) Sold or used by producers

(b) Years ended 20 March following that stated

(c) Crude

(d) Excluding data from August to December for the Republic of Croatia

(e) Years ended 30 June of that stated

(f) As from 1992 data is for Serbia and Montenegro only



**Exports of Unmanufactured Asbestos**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	291	111	118	29	35
Belgium-Luxembourg	310	103	57	1 290	...
France	101	386	535	17	83
Germany, Federal Republic of	608	2 184	523	140	...
Greece	56 963	27 728	22 554	47 309	...
Italy	4 893	1 156	1 686	168	...
Spain	127	86	187	4	...
Austria	675	48	35	320	—
Hungary	5 784	(a) *2 300	...	...	110
Russia	—	194 540	87 299	74 926	...
Soviet Union (a)	*248 200	...	—	—	—
South Africa	178 750	147 504	131 109	110 080	92 099
Swaziland	19 292	...	...	...	...
Zimbabwe	172 206	138 838	128 811	...	...
Canada	649 485	686 053	600 577	510 386	529 897
USA	28 875	25 694	25 463	27 909	17 500
Brazil	53 142	67 765	67 428	76 062	75 631
China	7 135	612	2 303	3 049	...
India (b)	254	4	100	216	...
Japan	142	147	116	142	108
Kazakhstan (a)	—	—	*9 200	*4 700	...
Saudi Arabia	422	47	5 092	...	...
Singapore	2 181	700	387	405	10
of which: Re-exports	2 180	692	365	404	6

(a) BGS estimates, based on known imports into certain countries

(b) Years ended 31 March following that stated

**Imports of Unmanufactured Asbestos**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	16 022	11 248	10 269	9 681	11 467
Belgium-Luxembourg	26 514	24 601	13 364	9 575	...
Denmark	800	802	671	544	450
France	63 672	67 373	35 860	34 600	34 869
Germany, Federal Republic of	15 692	4 431	2 717	708	...
Greece	2 299	2 417	4 595	552	...
Irish Republic	5 533	4 590	3 841	4 463	...
Italy	63 438	58 906	36 205	17 036	...
Netherlands	6 252	6 263	2 663	385	...
Portugal	12 284	10 550	11 278	7 426	...
Spain	39 609	37 112	25 428	23 352	...
Austria	6 167	1 613	3 836	751	0
Croatia	—	—	4 002	3 783	...
Czechoslovakia	32 776	16 974	...	—	—
Hungary	33 375	...	6 777	5 264	5 995
Poland	65 621	658	34 432	...	...
Romania (d)	*3 000	*6 500	*11 300	*12 500	...
Slovakia	—	—	—	1 898	...
Slovenia	—	—	5 489	4 984	...
Sweden	595	420	462	298	...
Switzerland	1 341	576	645	386	75
Turkey	26 259	31 392	25 072	21 622	19 143
Yugoslavia (f)	28 323	(c) 2 0911	454	(d) *3 500	(d) *2 800
Algeria	17 382	15 726	12 247	...	...
Burundi	68	382	279	...	...
Egypt	...	9 566	13 435	5 899	...
Morocco	7 157	7 411	5 310	4 800	...
Senegal	646	509	527	...	...
South Africa	12 354	14 934	9 699	8 984	9 734
Tunisia	7 179	6 695	8 925	8 779	...
Zambia	2 472	29 022	...	...	...
Canada	879	867	1 230	854	960
Cuba (d)	*1 500	...	...	...	...
El Salvador	904	121	3 541	268	...
Honduras	416	...	...	...	...
Mexico	39 316	50 401	32 849	25 639	35 261
Panama	352	279	700	491	...
USA					
Crocidolite	835	282	472	18	242
Chrysotile	34 308	28 807	26 844	27 721	23 116
Other unmanufactured	6 188	5 676	4 286	3 101	2 440
Argentina	6 588	8 984	7 988	9 049	...
Bolivia	1 297	1 691	1 570	1 526	...
Brazil	11 160	12 476	15 837	34 590	...
Chile	7 749	9 567	13 364	10 406	10 151
Colombia	13 437	14 867	19 771	26 811	...
Ecuador	1 151	515	648	542	...
Peru	1 060	3 079	...	2 701	...
Uruguay	1 794	855	905	1 499	1 075
Venezuela	1 418	3 196	978	3 035	...
China	1 083	2 249	5 067	27 998	...
India (e)	93 165	77 773	49 999	73 861	...
Indonesia	28 599	32 213	30 604	39 124	...
Iran (a)	69 446	34 038	39 588	46 321	...
Israel	2 955	3 510	3 867	2 715	...
Japan	287 659	272 088	242 279	209 846	199 836
Korea, Republic of	74 549	88 753	95 476	82 854	83 276
Kuwait	1 140	500	1 000	...	...
Malaysia	...	27 798	25 964	21 215	...
Pakistan (b)	4 525	12 141	6 723	6 885	...
Philippines	1 869	2 070	1 956	2 108	...

**Imports of Unmanufactured Asbestos**

tonnes

Country	1990	1991	1992	1993	1994
Saudi Arabia	2 005	1 599	2 293	...	...
Singapore	4 741	2 035	1 525	1 356	577
Sri Lanka	7 002	1 126	6 498	7 116	35 570
Syria	1 548	...	3 997	...	...
Taiwan	15 165	8 080	10 075	5 003	5 517
Thailand	116 652	271 011	128 126	148 164	...
Australia (b)	1 706	1 342	1 533	2 198	...

- (a) Years ended 20 March following that stated  
 (b) Years ended 30 June of that stated  
 (c) Data for the Federal Republic of Yugoslavia only  
 (d) BGS estimates, based on known exports from certain countries  
 (e) Years ended 31 March following that stated  
 (f) As from 1992 data is for Serbia and Montenegro only

**Production of Barytes**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	67 551	85 505	76 723	32 623	34 000
Belgium	*35 000	*35 000	*30 000	*30 000	*30 000
France	92 600	90 000	96 000	67 200	72 100
Germany, Federal Republic of	147 776	147 219	154 873	147 614	145 223
Greece	1 617	546	812	988	*1 000
Irish Republic	101 000	94 300	70 600	53 000	—
Italy	44 345	86 542	80 709	52 000	61 000
Portugal	1 480	—	378	—	—
Spain	11 285	*9 000	*10 000	*6 000	*5 000
Bosnia & Herzegovina	—	—	*3 000	*2 000	*1 000
Bulgaria	192 881	*180 000	*150 000	*140 000	...
Croatia	—	—	*1 500	*1 500	*1 000
Czechoslovakia	*87 000	*85 000	31 313	—	—
German Democratic Republic	*85 000	—	—	—	—
Georgia	—	—	*40 000	*30 000	*20 000
Poland	25 300	18 300	15 700	14 000	*16 000
Romania	*65 000	*70 000	118 100	*115 000	104 700
Slovakia	—	—	—	*30 000	*25 000
Soviet Union	*500 000	*450 000	—	—	—
Turkey	366 995	248 911	264 300	118 367	*140 000
Yugoslavia (f)	40 329	(a) *30 000	—	—	—
Algeria	52 288	44 361	51 159	47 232	20 584
Egypt	6 197	5 943	7 841	1 125	419
Morocco	363 580	434 660	401 599	325 200	264 526
South Africa	2 490	4 790	3 570	2 000	1 945
Tunisia	33 600	48 000	34 100	*30 000	*30 000
Zimbabwe	320	866	232	120	—
Canada	41 000	50 000	37 000	39 000	55 000
Guatemala	421	...	328	...	...
Mexico	305 716	203 975	443 782	135 891	86 605
USA (b)	430 000	448 000	326 000	315 000	583 000
Argentina	41 091	23 896	10 015	11 267	*11 500
Brazil (d)	55 576	46 784	54 490	32 100	*45 000
Chile	3 038	3 153	2 514	2 035	3 661
Colombia	5 380	9 288	9 380	4 840	*7 000
Peru (e)	39 889	...	...	14 747	...
Afghanistan (c)	*2 000	*2 000	*2 000	*2 000	*2 000
China	1 462 000	*1 500 000	*1 100 000	948 000	*1 500 000
India	633 000	615 000	*458 000	*507 000	*510 000
Iran (c)	77 423	191 238	181 174	226 379	225 000
Japan	18 336	18 944	15 119	11 532	...
Kazakhstan	—	—	*200 000	*200 000	*135 000
Korea, Republic of	2 923	1 014	40	*50	*50
Malaysia	*20 000	16 600	10 525	11 551	17 144
Myanmar	9 468	11 339	13 589	15 628	*17 000
Pakistan	23 329	28 751	32 432	26 336	68 350
Philippines	500	*500	*500	*500	*500
Thailand	139 257	113 534	46 328	42 385	49 248

**Production of Barytes**

tonnes

Country	1990	1991	1992	1993	1994
Australia	*20 000	*20 000	*20 000	*20 000	*20 000
World total	5 700 000	5 500 000	4 600 000	3 800 000	4 500 000

## Note(s):

- (1) This table may include small quantities of witherite
  - (2) In addition to the countries listed, Cuba is believed to produce barytes
- 
- (a) Excluding data from August to December for the Republic of Croatia
  - (b) Sold or used by producers
  - (c) Years ended 20 March following that stated
  - (d) Including beneficiated and directly shipped material
  - (e) Exports
  - (f) As from 1992 data is for Serbia and Montenegro only

**Exports of Barytes**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	25 365	9 057	5 570	13 459	10 780
Belgium-Luxembourg	52 167	49 621	43 083	22 518	...
France	78 032	33	3	79 258	97
Germany, Federal Republic of	36 854	37 353	31 999	16 080	...
Irish Republic	100 772	95 927	54 805	35 013	...
Italy	9 948	8 599	4 070	2 121	...
Netherlands	73 133	87 869	78 364	52 908	...
Spain	2 762	2 705	4 338	7 468	...
Czechoslovakia (b)	*4 200	*9 800	...	—	—
Norway	16 563	8 047	3 992	3 274	308
Turkey	177 017	116 156	42 054	50 873	63 508
Yugoslavia (f)	4 295	(e) —	...	...	...
Algeria	11 636	...	...	...	...
Morocco	373 857	444 939	334 172	...	...
Tunisia	930	20 407	24 057	...	...
Canada	9 945	12 080	17 253	11 058	13 063
Mexico	41 161	35 197	19 898	68 227	89 803
USA	12 511	43 687	12 566	18 928	...
Bolivia	300	1 363	368	—	3 307
Brazil	12 498	6 368	36	37	...
Peru	39 889	...	...	14 747	...
China	1 442 997	1 124 746	626 016	843 486	1 170 000
Hong Kong (c)	4 150	1 967	3 232	4 412	3 585
India (a)	304 150	392 070	38 129	50 337	...
Indonesia	5 246	1 902	7 345	4 907	...
Malaysia	...	278	11	94	...
Singapore	18 562	19 033	12 008	6 214	11 076
of which: Re-exports	8 195	8 679	9 381	3 094	5 851
Thailand	105 232	44 542	39 103	37 661	...
Australia (d)	1 179	275	1 324	184	...

## Note(s):

(1) Trade in barytes is reported under item 278.92 of the Standard International Trade Classification (Revision 3) and is described as 'barytes and witherite'. However, only small quantities of witherite are traded

(a) Years ended 31 March following that stated

(b) BGS estimates, based on known imports into certain countries

(c) Re-exports

(d) Years ended 30 June of that stated

(e) Data for the Federal Republic of Yugoslavia only

(f) As from 1992 data is for Serbia and Montenegro only

## Imports of Barytes

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	217 427	183 430	169 319	158 783	135 467
Belgium-Luxembourg	9 666	10 080	13 025	13 659	...
Denmark	16 917	29 920	26 773	5 196	1 145
France	42 058	53 855	18 740	31 013	26 571
Germany, Federal Republic of	232 327	169 577	200 656	96 066	...
Greece	2 249	1 432	537	3 242	...
Irish Republic	2 668	1 430	1 551	801	...
Italy	74 217	58 242	55 255	32 564	...
Netherlands	94 774	94 482	81 754	109 612	...
Portugal	1 042	2 704	1 562	897	...
Spain	23 121	24 706	17 062	12 790	...
Albania (b)	*8 000	*6 500	...	*7 000	...
Austria	2 948	3 251	4 746	2 048	3 255
Croatia	—	—	4 516	76	...
Finland	1 864	1 407	1 667	1 363	...
Hungary	91	...	4 706	2 576	2 517
Norway	194 465	216 697	104 044	129 235	102 829
Poland	14 053	10 234	...	...	...
Romania (b)	*13 300	*14 200	...	*2 000	...
Soviet Union (b)	*123 300	*119 700	—	—	—
Sweden	3 809	3 215	4 503	4 061	...
Switzerland	1 548	1 289	2 318	1 674	2 727
Yugoslavia (d)	181	(c) 20	—	...	...
Gabon	2 802	...	...	...	...
South Africa	1 542	1 280	1 253	2 892	...
Canada	7 995	12 493	11 908	15 015	14 780
Mexico	36 083	85 601	15 462	48 989	30 682
Trinidad & Tobago	20 687	31 856	...	8 491	...
USA	1 044 301	858 908	353 682	803 929	...
Argentina	32	928	812	307	...
Colombia	3 070	5 125	30 315	12 856	...
Ecuador	1 901	95	601	2 304	...
Venezuela	80 739	134 665	123 160	123 476	...
Abu Dhabi	25 986	46 389	34 965	41 651	...
Hong Kong	4 783	1 939	2 314	1 901	2 801
Indonesia	82 394	67 580	41 396	41 984	...
Japan	115 684	106 038	92 692	116 327	85 124
Korea, Republic of	47 839	39 104	40 557	39 758	54 013
Malaysia	...	1 392	1 485	...	...
Philippines	366	846	1 209	...	...
Saudi Arabia	4 829	3 519	28 368	...	...
Singapore	30 830	30 998	20 855	17 928	14 190
Syria	13 605	...	15 530	...	...
Taiwan	11 960	5 832	11 438	6 899	8 170
Thailand	1 037	4 136	10 152	6 912	...
Australia (a)	10 151	12 832	3 720	14 705	...
New Zealand (a)	1 929	957	2 236	902	845

## Note(s):

(1) Trade in barytes is reported under item 278.92 of the Standard International Trade Classification (Revision 3) and is described as 'barytes and witherite'. However, only small quantities of witherite are traded

(a) Years ended 30 June of that stated

(b) BGS estimates, based on known exports from certain countries

(c) Data for the Federal Republic of Yugoslavia only

(d) As from 1992 data is for Serbia and Montenegro only

**Production of Bentonite and Fuller's Earth**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Fuller's earth (a)	205 000	188 800	189 400	187 100	133 500
France					
Bentonite	*10 000	*10 000	6 000	7 000	*6 000
Germany, Federal Republic of					
Bentonite	223 000	224 000	257 000	245 000	227 000
Fuller's earth	653 000	708 000	673 000	670 000	*650 000
Greece					
Bentonite	592 684	600 286	600 083	677 578	*500 000
Italy					
Bentonite	228 153	402 478	150 503	—	—
Fuller's earth	45 800	23 400	30 000	*30 000	*30 000
Spain					
Bentonite	151 226	*145 000	*150 000	*150 000	*150 000
Attapulгите	*25 000	*25 000	*25 000	*20 000	...
Sepiolite	*392 000	*375 000	*375 000	...	...
Armenia					
Bentonite	—	—	*200 000	*100 000	...
Bosnia & Herzegovina					
Bentonite	—	—	*1 000	*800	*1 000
Croatia					
Bentonite	—	—	*10 000	*10 000	*10 000
Czechoslovakia					
Bentonite	143 130	84 918	...	—	—
Czech Republic					
Bentonite	—	—	—	*130 000	...
Georgia					
Bentonite	—	—	*150 000	*100 000	...
Hungary					
Bentonite	25 000	18 000	23 000	9 400	14 700
Macedonia					
Bentonite	—	—	*40 000	*35 000	*30 000
Poland					
Bentonite	68 692	34 662	17 654	37 000	*40 000
Romania					
Bentonite	*150 000	*150 000	*120 000	*120 000	*110 000
Slovakia					
Bentonite	—	—	—	*25 000	...
Soviet Union (k)					
Bentonite	*2 700 000	*2 400 000	*2 000 000	*1 600 000	...
Turkey					
Bentonite	97 464	123 928	439 126	456 597	*300 000
Yugoslavia (j)					
Bentonite	102 681	(d) *75 000	*5 000	*5 000	*5 000
Algeria					
Bentonite	33 708	25 806	31 019	20 833	20 215
Fuller's earth	7 840	4 526	3 656	3 229	3 250
Egypt (e)					
Bentonite	4 904	5 916	4 185	6 013	2 379
Morocco					
Bentonite	11 000	7 000	7 273	10 212	*10 200
Fuller's earth (f)	45 230	37 552	38 098	38 700	*22 800
Senegal					
Attapulгите	114 610	99 377	148 000	119 409	*112 000
South Africa					
Bentonite	66 059	64 600	43 977	50 441	44 722
Attapulгите	7 628	8 109	8 235	7 032	8 450
Canada					
Bentonite (i)	7 100	1 000	4 900	10 500	...
Guatemala					
Bentonite	*9 000	12 000	7 002	*7 000	4 410
Mexico					
Bentonite	144 895	145 347	135 993	94 584	*100 000
Fuller's earth	29 863	41 078	41 111	36 068	*36 100



**Production of Bentonite and Fuller's Earth**

tonnes

Country	1990	1991	1992	1993	1994
Nicaragua					
Bentonite	2 082	2 055	1 270	980	5 656
USA					
Bentonite (c)	3 473 595	3 431 601	2 954 154	2 870 000	3 290 000
Fuller's earth (c)	2 307 475	2 740 346	2 413 453	2 483 821	2 640 000
Argentina					
Bentonite	107 035	108 782	97 531	93 789	*95 000
Fuller's earth	*2 000	*2 000	*1 500	*1 600	*1 600
Brazil					
Bentonite	105 809	140 051	197 385	...	...
Colombia					
Bentonite	3 100	3 178	3 258	...	...
Peru					
Bentonite	*45 000	*55 300	*14 500	10 250	27 682
Cyprus					
Bentonite	81 800	58 400	58 840	60 000	*50 000
India (h)					
Bentonite	242 000	291 000	296 000	230 000	...
Fuller's earth	20 000	31 000	38 000	87 000	...
Indonesia					
Bentonite	5 914	21 512	17 960	13 707	*14 000
Iran (g)					
Bentonite	51 096	40 452	62 000	53 667	*50 000
Japan					
Bentonite	549 414	554 145	534 445	515 307	*484 000
Korea, Republic of					
Bentonite	28 900	35 100	37 100	46 000	...
Myanmar					
Bentonite	416	684	693	200	...
Pakistan					
Bentonite	4 213	5 106	*6 000	7 991	*8 000
Fuller's earth	16 489	22 075	22 042	*20 900	*21 000
Philippines					
Bentonite	14 607	42 066	31 896	5 050	*25 000
Turkmenistan					
Bentonite	—	—	*70 000	*50 000	...
Australia					
Bentonite (e)	*48 000	*58 000	*60 300	*66 000	*70 000
Fuller's earth	*20 000	*15 000	*15 000	*15 000	*15 000
New Zealand					
Bentonite	1 393	—	—	1 613	*1 500
World total Bentonite	9 530 000	9 380 000	8 930 000	8 130 000	8 190 000
World total Fuller's earth (b)	3 890 000	4 320 000	4 020 000	4 090 000	4 160 000

## Note(s):

- (1) Bentonites consist of montmorillonite (one of the smectite group of clay minerals) and occur in two main varieties, calcium bentonite, the most commonly occurring, and sodium bentonite, industrially the more important
- (2) Calcium bentonite can be converted to sodium bentonite by a sodium-exchange process
- (3) In some countries, such as the United Kingdom, calcium bentonite is known as fuller's earth, a term which is also used to refer to attapulgite, a mineralogically distinct clay mineral but exhibiting similar properties
- (4) In addition to the countries listed, Austria, Bulgaria, China and Tanzania are believed to produce bentonite and France, Iran and Japan may produce fuller's earth
- (a) BGS estimates of saleable production based on data from producing companies
- (b) Including attapulgite and sepiolite
- (c) Sold or used by producers
- (d) Excluding data from August to December for the Republic of Croatia
- (e) Years ended 30 June of that stated
- (f) Smectite
- (g) Years ended 20 March following that stated
- (h) Years ended 31 March following that stated
- (i) Data for Saskatchewan only
- (j) As from 1992 data is for Serbia and Montenegro only
- (k) Dissolved in December 1991. Other than data for Armenia, Georgia and Turkmenistan, no information is available on which to estimate for other countries

**Exports of Bentonite and Fuller's Earth**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Bentonite	62 097	52 093	55 539	57 860	64 497
Fuller's earth	33 747	27 794	32 029	28 996	27 549
Belgium-Luxembourg					
Bentonite	1 498	12 461	4 324	563	...
Fuller's earth	1 758	1 819	678	477	...
France					
Bentonite	23 044	20 517	18 201	16 323	21 405
Fuller's earth	5 425	3 803	4 046	...	1 893
Germany, Federal Republic of					
Bentonite	55 326	63 502	88 375	59 661	...
Fuller's earth	1 421	369	533	1 307	...
Greece					
Bentonite	73 045	100 938	111 980	53 864	...
Italy					
Bentonite	42 954	38 880	19 997	16 278	...
Netherlands					
Bentonite	40 936	35 805	42 822	44 518	...
Fuller's earth	670	1 140	3 192	1 166	...
Spain					
Bentonite	65 850	45 527	60 582	6 793	...
Sepiolite	511 769	541 328	530 567	...	...
Fuller's earth	7 624	7 429	7 746	7 380	...
Austria					
Bentonite	782	1 132	2 136	2 007	2 236
Bulgaria					
Bentonite (c)	...	*8 500	*15 100	*21 900	...
Czechoslovakia					
Bentonite (c)	*8 200	*9 100	*9 500	—	—
Czech Republic					
Bentonite (c)	—	—	—	*9 300	...
Hungary					
Bentonite	912	...	950	3 597	1 653
Turkey					
Bentonite	29 401	29 808	22 915	28 038	53 692
Yugoslavia (h)					
Bentonite	7 521	(e) 229	...	...	...
Morocco					
Bentonite	17 600	4 000	4 000	...	...
Fuller's earth (a)	89 100	58 074	...	...	...
Senegal					
Fuller's earth (b)	13 717	11 104	11 062	...	...
Canada					
Bentonite	1 170	1 139	1 605	949	929
Mexico					
Bentonite	1 126	2 410	3 261	3 817	3 408
USA					
Bentonite	698 904	661 921	606 824	606 440	...
Fuller's earth	46 901	27 488	27 709	63 000	...
Argentina					
Bentonite	6 283	13 248	15 369	21 100	...
Colombia					
Bentonite	455	1 115	1 428	1 534	...
China					
Bentonite	(c) *19 300	(c) *24 300	43 488	40 717	...
Fuller's earth	(c) *1 900	(c) *2 000	1 005	729	...
Cyprus					
Bentonite	12 732	12 088	18 768	29 756	22 573
India (d)					
Bentonite	49 011	76 857	112 543	129 960	...
Fuller's earth	109	357	68	94	...

**Exports of Bentonite and Fuller's Earth**

tonnes

Country	1990	1991	1992	1993	1994
Indonesia					
Bentonite	7 708	14 453	14 288	8 016	...
Fuller's earth	688	850	1 878	2 423	...
Japan					
Bentonite	1 277	885	965	1 589	1 075
Korea, Republic of					
Bentonite	6 119	5 660	5 184	6 625	10 203
Singapore					
Bentonite	23 284	21 503	16 262	14 775	16 943
of which: Re-exports	20 472	15 275	11 368	9 357	9 210
Fuller's earth (f)	2 556	4 556	1 863	50	33
Australia					
Bentonite (g)	21 325	8 609	14 174	7 049	...

Note(s) :

- (1) See notes 1-3 to production table
- (2) The figures in this table refer to natural and sodium-exchanged bentonite, and fuller's earth, Standard International Trade Classification (Revision 3) 278.27
- (3) Activated bentonite and fuller's earth, Standard International Trade Classification (Revision 3) 598.65 are excluded
- (4) Some countries are believed to include sodium-exchanged bentonite, often referred to as activated bentonite, under Standard International Trade Classification (Revision 3) 598.65, e.g. Italy

- (a) Smectite
- (b) Attapulgite
- (c) BGS estimates, based on known imports into certain countries
- (d) Years ended 31 March following that stated
- (e) Data for the Federal Republic of Yugoslavia only
- (f) Re-exports
- (g) Years ended 30 June of that stated
- (h) As from 1992 data is for Serbia and Montenegro only

**Imports of Bentonite and Fuller's Earth**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Bentonite	154 133	137 444	134 444	114 247	186 483
Fuller's earth	6 114	6 379	4 921	18 420	39 110
Belgium-Luxembourg					
Bentonite	31 876	24 040	23 763	10 064	...
Fuller's earth	1 132	884	1 846	1 323	...
Denmark					
Bentonite	12 306	13 214	14 580	18 331	24 968
Fuller's earth	738	3 069	1 500	3 089	1 024
France					
Bentonite	127 278	117 588	104 262	68 361	112 530
Fuller's earth	5 966	2 744	958	...	5 332
Germany, Federal Republic of					
Bentonite	225 056	231 644	291 128	185 056	...
Fuller's earth	13 067	12 657	18 333	28 118	...
Greece					
Bentonite	581	315	377	759	...
Italy					
Bentonite	84 091	76 651	77 254	53 677	...
Fuller's earth	6 801	7 926	6 430	...	...
Netherlands					
Bentonite	108 305	73 327	144 735	142 800	...
Fuller's earth	5 428	5 053	5 650	7 505	...
Portugal					
Bentonite	12 237	9 736	9 668	8 625	...
Fuller's earth	177	...	—	42	...
Spain					
Bentonite	44 776	34 064	20 260	40 584	...
Fuller's earth	27	607	93	0	...
Austria					
Bentonite	12 722	20 662	30 822	22 178	34 165
Fuller's earth	795	627	728	845	184
Croatia					
Bentonite	—	—	1 930	760	...
Finland					
Bentonite	7 841	7 583	6 273	8 808	...
German Democratic Republic					
Bentonite (c)	*10 000	—	—	—	—
Fuller's earth (c)	*1 000	—	—	—	—
Norway					
Bentonite	16 616	16 525	9 660	35 543	18 484
Fuller's earth	544	649	550	108	65
Poland					
Bentonite (c)	*11 900	*6 400	*8 400	*8 500	...
Sweden					
Bentonite	11 810	10 576	10 656	8 284	...
Fuller's earth	6 435	6 717	5 994	10 212	...
Switzerland					
Bentonite	10 668	14 692	18 524	19 486	19 416
Fuller's earth	1 624	1 507	1 987	1 793	1 845
Algeria					
Bentonite (b)	4 023	...	...	...	...
South Africa					
Bentonite	557	942	1 040	930	1 857
Tunisia					
Bentonite	2 226	1 513	3 799	...	...
Canada					
Bentonite	229 959	268 612	255 810	295 356	329 639
Fuller's earth	6 643	6 138	7 576	8 622	9 266
Mexico					
Bentonite	4 670	4 970	4 357	7 829	10 068
USA					
Bentonite	2 045	2 207	2 527	1 994	...
Fuller's earth	69	82	160	101	...

**Imports of Bentonite and Fuller's Earth**

tonnes

Country	1990	1991	1992	1993	1994
Brazil					
Bentonite	30 499	26 676	18 206	34 585	...
Chile					
Bentonite	4 771	5 337	8 007	5 853	6 001
Colombia					
Bentonite	3 745	10 216	1 461	3 286	...
Peru					
Bentonite	703	383	...	501	...
Uruguay					
Bentonite	334	479	388	310	757
Venezuela					
Bentonite	10 790	13 244	14 596	17 213	...
Hong Kong					
Bentonite	...	...	10 241	5 722	11 290
Indonesia					
Bentonite	30 462	12 518	9 951	14 409	...
Japan					
Bentonite	202 908	236 906	169 560	192 543	209 306
Fuller's earth	8 776	8 243	8 233	8 280	7 058
Korea, Republic of					
Bentonite	11 549	15 102	17 238	21 461	15 203
Kuwait					
Bentonite	21 395	...	...	...	...
Malaysia					
Bentonite	...	53 361	80 442	...	...
Fuller's earth	...	7 424	8 250	...	...
Pakistan (a)	2 871	4 783	3 456	728	...
Philippines	8 500	6 206	8 962	...	...
Singapore					
Bentonite	54 723	31 113	34 998	24 411	30 552
Fuller's earth	22 937	4 744	1 432	891	218
Taiwan					
Bentonite	49 133	34 227	35 436	37 955	40 846
Thailand					
Bentonite	32 390	22 407	31 779	31 486	...
Fuller's earth	24	620	1 781	3 083	...
Australia					
Bentonite (a)	28 476	28 348	12 529	21 004	...

## Note(s):

- (1) See notes 1-3 to production table
- (2) The figures in this table refer to natural and sodium-exchanged bentonite, and fuller's earth, Standard International Trade Classification (Revision 3) 278.27
- (3) Activated bentonite and fuller's earth, Standard International Trade Classification (Revision 3) 598.65 are excluded
- (4) Some countries are believed to include sodium-exchanged bentonite, often referred to as activated bentonite, under Standard International Trade Classification (Revision 3) 598.65, e.g. Italy

- (a) Years ended 30 June of that stated
- (b) Including crude kaolin
- (c) BGS estimates, based on known exports from certain countries

**Mine Production of Bismuth**

tonnes (metal content)

Country	1990	1991	1992	1993	1994
France	70	—	—	—	—
Italy	34	45	20	—	*5
Romania	*40	*55	*50	*40	*40
Soviet Union	*80	*70	—	—	...
Yugoslavia (c)	9	(b) 22	10	5	*5
Canada	87	65	224	144	131
Mexico	733	651	807	908	1 055
USA	*100	*100	*100	*100	*100
Bolivia	68	—	—	—	—
Peru (a)	*555	*610	*550	*1 000	*1 000
China	1 058	1 040	820	1 052	*1 000
Japan	442	461	530	497	*500
Kazakhstan	—	—	*55	*50	85
Korea, Republic of	79	42	7	5	—
Tajikistan	—	—	*20	*15	*10
Uzbekistan	—	—	*15	*10	*10
Australia	*400	*400	*400	*400	*400
World total	3 800	3 600	3 600	4 200	4 300

## Note(s):

- (1) The figures in this table are in some instances derived from reported bismuth content of refined and impure metal plus recoverable bismuth in ores and concentrates exported
- (2) Production for some countries may include bismuth produced from imported ores but it is thought that any resulting duplication is insignificant in the countries shown
- (3) In addition to the countries listed, Belgium, Brazil, Bulgaria, former German Democratic Republic and Namibia are believed to produce bismuth

- (a) Including Bi content of bullion and concentrates exported
- (b) Excluding data from August to December for the Republic of Croatia
- (c) As from 1992 data is for Serbia and Montenegro only

**Exports of Bismuth**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Metal	598	473	574	665	727
Belgium-Luxembourg					
Compounds	21	52	136	417	...
France					
Compounds	68	86	160	...	34
Metal	78	18	33	20	61
Germany, Federal Republic of					
Compounds	56	39	70	99	...
Metal	75	107	150	247	...
Italy					
Metal	19	7	18	1	...
Netherlands					
Metal	46	2	8	50	...
Spain					
Compounds	33	30	14	50	...
Canada					
Metal	130	49	41	43	165
Mexico					
Metal	871	1 567	1 783	1 112	1 008
USA					
Metal	123	77	101	75	160
China					
Metal	609	961	1 259	2 020	...
Hong Kong					
Metal (a)	...	...	130	305	118
Japan					
Metal	35	13	21	35	4
Korea, Republic of					
Metal	129	90	49	41	102
Australia					
Metal (b)	176	41	—	—	...

Note(s):

(1) The compounds recorded in this table are bismuth carbonate and/or bismuth nitrate

(a) Re-exports

(b) Years ended 30 June of that stated

**Imports of Bismuth**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Metal	449	572	695	1 128	449
France					
Compounds	13	1	3	...	19
Metal	199	311	307	304	332
Germany, Federal Republic of					
Compounds	5	4	93	420	...
Metal	635	847	912	864	...
Italy					
Compounds	11	9	31	...	...
Metal	144	107	88	92	...
Netherlands					
Compounds	28	136	242	102	...
Metal	41	26	30	207	...
Spain					
Metal	59	55	97	78	...
Sweden					
Metal	15	13	13	15	...
Switzerland					
Metal	15	11	7	10	11
Yugoslavia (a)					
Metal	49	(c) —	...	...	...
USA					
Metal	1 612	1 410	1 621	1 335	1 660
Brazil					
Metal	63	57	65	51	...
Hong Kong					
Metal	...	...	271	336	873
India (b)					
Metal	32	13	36	42	...
Japan					
Metal	180	181	74	41	281

Note(s):

(1) The compounds recorded in this table are bismuth carbonate and/or bismuth nitrate

(a) As from 1992 data is for Serbia and Montenegro only

(b) Years ended 31 March following that stated

(c) Data for the Federal Republic of Yugoslavia only



**Production of Bromine**

kilograms

Country	1990	1991	1992	1993	1994
United Kingdom	26 800 000	29 323 000	29 903 000	27 423 000	33 800 000
France	3 100 000	3 200 000	3 200 000	2 290 000	2 190 000
Germany, Federal Republic of	1 500 000	*1 500 000	*750 000	*750 000	*750 000
Italy	*400 000	*400 000	*300 000	*300 000	*300 000
Spain	*300 000	*300 000	*250 000	*200 000	*200 000
Azerbaijan	—	—	*5 000 000	*4 000 000	*3 000 000
Soviet Union	*25 000 000	*24 000 000	—	—	—
Ukraine	—	—	*7 000 000	*5 000 000	*4 000 000
USA (a)	177 000 000	170 000 000	171 000 000	177 000 000	195 000 000
India	1 505 000	2 047 000	2 039 000	2 320 000	...
Israel	130 000 000	135 000 000	135 000 000	135 000 000	*135 000 000
Japan	*15 000 000	*15 000 000	*15 000 000	*15 000 000	*15 000 000
Turkmenistan	—	—	*12 000 000	*10 000 000	8 000 000
World total	380 600 000	380 800 000	381 400 000	379 300 000	399 600 000

(a) Elemental bromine sold as such or used in the preparation of bromine compounds by primary producers

**Exports of Bromine**

kilograms

Country	1990	1991	1992	1993	1994
United Kingdom	3 161 019	4 386 570	2 765 540	2 756 829	2 703 138
Belgium-Luxembourg	52 800	17 800	—	225 300	...
Germany, Federal Republic of	22 700	132 400	95 200	338 900	...
Italy	25 000	500	17 000	...	...
Netherlands	586 000	550 000	457 000	797 000	...
German Democratic Republic (a)	*1 274 000	—	—	—	—
USA	2 943 290	5 685 761	5 455 675	6 013 000	6 470 000
Israel	31 885 000	44 673 000	(a) *28 977 000	(a) *23 366 000	...

## Note(s):

(1) In general, trade in bromine and bromine compounds is not separately distinguished from other halogens and has therefore not been included in this table

(a) BGS estimates, based on known imports into certain countries

## Imports of Bromine

kilograms

Country	1990	1991	1992	1993	1994
United Kingdom	7 196 864	7 424 357	7 935 040	5 826 164	4 855 387
Belgium-Luxembourg	1 801 800	1 528 100	2 079 000	2 473 900	...
Denmark	24 100	13 100	400	—	400
France	7 514 000	7 626 000	6 722 000	...	6 929 800
Germany, Federal Republic of	5 487 100	4 434 000	3 080 800	3 710 400	...
Irish Republic	280 279	298 741	152 553	...	...
Italy	1 439 000	474 300	377 200	...	...
Netherlands	10 640 000	8 622 000	10 269 000	6 735 000	...
Spain	85 000	58 000	74 000	124 000	...
Hungary	...	...	...	10 000	12 400
Yugoslavia (e)	6 000	(d) —	—	...	...
South Africa	20 930	12 908	...	...	...
Canada	1 505 136	1 386 971	1 328 473	1 562 099	1 652 167
Mexico (c)	*180 000	*190 000	*220 000	...	...
USA	755 631	145 638	855 223	850 446	319 000
Brazil	11 539	45 368	...	...	...
Peru	843	177	...	...	...
India (a)	118 330	203 696	844 595	1 176 192	...
Israel (c)	*98 600	*7 000	—	*17 800	...
Korea, Republic of	195 761	471 900	914 279	940 877	902 281
Pakistan (b)	15 991	330	5 629	12 491	...
Taiwan	20 517	112 647	88 843	141 779	53 172

## Note(s):

(1) In general, trade in bromine and bromine compounds is not separately distinguished from other halogens and has therefore not been included in this table

(a) Years ended 31 March following that stated

(b) Years ended 30 June of that stated

(c) BGS estimates, based on known exports from certain countries

(d) Data for the Federal Republic of Yugoslavia only

(e) As from 1992 data is for Serbia and Montenegro only

**Production of Cadmium**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	438	449	383	458	469
Belgium	1 956	1 807	1 560	1 572	1 556
France (a)	780	1 100	830	585	500
Germany, Federal Republic of (a)	973	1 048	941	1 056	1 145
Italy	691	658	742	517	475
Netherlands	590	539	612	526	307
Spain	355	344	361	365	387
Austria	44	19	—	—	—
Bulgaria	309	232	194	266	286
Finland	484	471	580	332	548
German Democratic Republic	17	—	—	—	—
Macedonia	—	—	230	249	73
Norway	286	237	249	213	288
Poland	373	364	132	149	*155
Russia	—	—	*800	742	582
Soviet Union	*1 970	*1 500	—	—	—
Turkey	46	22	21	31	21
Yugoslavia (c)	362	*300	8	17	3
Algeria	65	78	56	65	*75
Namibia	69	67	29	13	19
Zaire	127	123	84	12	0
Canada (a)	1 470	1 829	1 963	1 888	2 129
Mexico (b)	1 280	1 126	1 146	1 332	1 146
USA (a)	1 678	1 676	1 620	1 094	1 011
Argentina	55	49	37	49	27
Brazil	135	*140	135	*135	162
Peru	378	526	399	472	507
China	1 129	1 222	1 138	1 161	*1 300
India	277	274	311	270	230
Japan	2 451	2 889	2 986	2 832	2 614
Kazakhstan	—	—	*1 000	*1 200	601
Korea, Dem. P.R. of	*180	*200	*200	*200	*200
Korea, Republic of	568	395	789	719	905
Thailand	—	373	635	449	*400
Australia	638	1 076	1 001	951	910
World total	20 200	21 100	21 200	19 900	19 000

Note(s):

(1) Data in this table excludes secondary metal unless otherwise stated

(a) Including cadmium sponge and/or secondary metal

(b) Including oxides

(c) As from 1992 data is for Serbia and Montenegro only

## Exports of Cadmium

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	621	210	308	134	220
Belgium-Luxembourg					
Metal	1 168	1 390	1 445	2 321	...
Sulphide	60	49	30	22	...
France	377	721	841	414	159
Italy	450	686	584	567	...
Netherlands	500	513	436	594	...
Spain	155	318	...	381	...
Austria	35	20	0	14	6
Bulgaria (b)	*40	*190	*250	*140	...
Finland	591	407	586	706	...
Hungary	144	...	...	...	...
Norway	287	232	186	356	346
Poland	140	—	...	...	...
Algeria	58	...	...	...	...
Namibia	45	69	38	10	31
Zaire	*110	...	...	...	...
Canada	1 283	1 452	1 581	1 857	1 904
Mexico	691	521	590	808	617
USA	702	460	213	39	490
China	568	475	125	0	...
Japan	255	13	30	80	15
Korea, Republic of	874	669	804	461	1 198
Australia (a)	311	701	1 076	958	...

(a) Years ended 30 June of that stated

(b) BGS estimates, based on known imports into certain countries

**Imports of Cadmium**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	971	696	828	416	872
Belgium-Luxembourg					
Metal	1 925	2 221	2 188	4 959	...
Sulphide	31	45	174	22	...
France					
Metal	1 750	1 546	1 293	995	1 290
Sulphide	69	41	49	...	32
Germany, Federal Republic of					
Metal	530	482	613	454	...
Italy					
Metal	71	70	88	31	...
Sulphide	4	8	50	6	...
Netherlands					
Metal	32	5	—	206	...
Sulphide	2	28	49	—	...
Spain	69	85	93	104	...
Czechoslovakia	134	...	...	—	—
Finland	1	0	13	230	...
German Democratic Republic (a)	*30	—	—	—	—
Sweden	252	157	242	140	...
USA	1 740	2 037	1 921	1 415	1 150
Brazil					
Metal	56	80	24	6	...
Oxide	82	131	...	...	...
China	9	108	585	1 105	...
India (b)	190	141	279	758	...
Japan	2 199	3 568	2 796	3 098	3 844
Korea, Republic of	61	97	76	63	47
Pakistan (c)					
Sulphide	49	...	...	...	...
Taiwan					
Oxide	254	258	399	369	314
Sulphide	25	17	18	47	6

(a) BGS estimates, based on known exports from certain countries

(b) Years ended 31 March following that stated

(c) Years ended 30 June of that stated

## Production of Chromium Ores and Concentrates

tonnes

Country	1990	1991	1992	1993	1994
Greece	22 400	20 108	—	3 697	*4 000
Albania	1 011 000	586 700	322 000	281 000	223 000
Finland (b)	461 277	458 000	499 325	511 000	573 000
Macedonia	—	—	*6 000	*5 000	*5 000
Russia	—	—	*121 400	*120 000	*120 000
Soviet Union	*3 800 000	*3 800 000	—	—	—
Turkey (a)	1 089 942	1 720 455	758 700	706 250	*700 000
Madagascar	122 276	145 583	150 000	*140 000	*90 200
South Africa	4 618 000	5 100 299	3 363 481	2 826 652	3 599 472
Sudan	35 000	*25 000	*20 000	*13 000	*10 000
Zimbabwe	562 600	566 200	521 600	252 033	516 801
Cuba	*50 000	*50 000	*50 000	*50 000	*50 000
Brazil (a)	171 081	*250 000	*350 000	*200 000	*250 000
India	1 050 000	940 000	1 150 000	1 000 000	909 000
Iran (b) (c)	77 189	90 119	130 265	*114 780	*129 000
Japan	8 075	*8 000	*8 000	*7 000	*7 000
Kazakhstan	—	—	3 452 400	2 968 200	*2 020 000
Oman	...	...	1 764	*10 000	*6 200
Pakistan	18 191	31 474	22 852	22 154	23 000
Philippines (b)	263 382	210 397	113 297	61 464	63 794
Vietnam	4 600	*3 500	*3 500	*3 500	*3 500
New Caledonia	6 223	—	8 169	—	—
World total	13 400 000	14 000 000	11 100 000	9 300 000	9 300 000

## Note(s):

(1) In addition to the countries listed, Bulgaria, China, Democratic P.R. of Korea and Thailand are believed to produce chromite

(a) Including beneficiated and direct shipping ore

(b) Including foundry sand and/or lumpy ore

(c) Years ended 20 March following that stated

**Exports of Chromium**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Ores & concentrates	36	75	442	1 391	5 690
Metal	3 301	3 787	2 575	2 330	3 268
Belgium-Luxembourg					
Ores & concentrates	12 484	16 491	16 104	12 942	...
France					
Ores & concentrates	2 395	4 089	1 980	1 478	1 101
Metal	3 900	2 674	2 065	2 385	2 944
Germany, Federal Republic of					
Ores & concentrates	13 466	18 221	19 064	11 497	...
Metal	1 184	1 798	343	787	...
Greece					
Ores & concentrates	7 967	8 539	3 895	14 525	...
Italy					
Ores & concentrates	3 940	1 960	2 718	1 689	...
Metal	157	69	60	88	...
Netherlands					
Ores & concentrates	37 703	37 183	30 653	16 665	...
Metal	50	44	13	396	...
Albania					
Ores & concentrates	468 800	(b) *201 900	(b) *175 100	(b) *113 900	...
Austria					
Ores & concentrates	131	140	72	37	63
Finland					
Ores & concentrates	9 106	2 008	1 405	1 101	...
Russia					
Metal (b)	—	—	*800	*1 800	...
Soviet Union					
Ores & concentrates	587 000	(c) 350 673	—	—	—
Metal (b)	*1 900	*3 200	—	—	—
Turkey					
Ores & concentrates	676 499	577 358	447 574	321 818	601 100
Madagascar					
Ores & concentrates	125 558	129 342	108 450	...	...
South Africa					
Ores & concentrates	1 200 919	1 010 101	1 175 972	983 656	903 308
USA					
Ores & concentrates	10 373	8 808	7 149	12 279	47 103
of which: Re-exports	4 052	—	85	2 268	...
Metal	345	440	304	477	446
Brazil					
Ores & concentrates	34 995	59 253	52 823	36 130	...
China					
Ores & concentrates	2 448	2 042	6 705	6 940	...
Metal	(b) *2 500	(b) *1 500	6 720	7 078	...
India (a)					
Ores & concentrates	179 580	397 547	395 946	308 267	...
Iran					
Ores & concentrates (b)	*30 700	*67 400	*112 700	*73 600	...
Japan					
Ores & concentrates	495	356	195	359	323
Metal	2 822	2 020	2 315	1 336	1 484
Kazakhstan					
Ores & concentrates	—	—	699 000	373 126	...
Philippines					
Ores & concentrates	198 366	197 764	143 777	...	...
Singapore					
Ores & concentrates (d)	3 364	636	5 516	952	902



**Exports of Chromium**

tonnes

Country	1990	1991	1992	1993	1994
New Caledonia Ores & concentrates	6 782	—	9 624	—	...

Note(s):

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) Years ended 31 March following that stated

(b) BGS estimates, based on known imports into certain countries

(c) Data for the Russian Federation only

(d) Re-exports

**Imports of Chromium**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Ores & concentrates	154 919	80 278	113 521	128 409	151 578
Metal	854	910	987	668	1 314
Belgium-Luxembourg					
Ores & concentrates	19 926	28 515	20 448	24 170	...
Metal	570	465	538	281	...
Denmark					
Ores & concentrates	14 770	2 878	1 035	349	269
France					
Ores & concentrates	88 144	77 035	46 752	18 469	22 742
Metal	1 047	1 557	721	924	1 209
Germany, Federal Republic of					
Ores & concentrates	245 513	276 511	231 151	205 765	...
Metal	3 236	3 207	1 495	1 441	...
Greece					
Ores & concentrates	47 284	39 575	47	162	...
Italy					
Ores & concentrates	179 711	159 914	163 614	143 716	...
Metal	649	478	380	286	...
Netherlands					
Ores & concentrates	54 066	34 378	30 801	29 944	...
Metal	261	175	124	274	...
Portugal					
Ores & concentrates	1 571	1 922	1 589	1 559	...
Spain					
Ores & concentrates	54 695	40 115	11 135	4 758	...
Metal	110	117	127	361	...
Austria					
Ores & concentrates	43 752	47 997	37 190	41 732	26 865
Metal	177	130	78	101	194
Croatia					
Ores & concentrates	—	—	186 086	30 416	...
Czechoslovakia					
Ores & concentrates	170 000	...	(a) *55 500	—	—
Hungary					
Ores & concentrates	16 169	...	79	456	875
Norway					
Ores & concentrates	159 457	338 719	(a) *62 400	(a) *19 900	...
Poland					
Ores & concentrates	147 418	6 808	(a) *2 800	(a) *3 600	...
Romania					
Ores & concentrates	*92 000	...	...	...	...
Slovakia					
Ores & concentrates	—	—	—	83 701	...
Sweden					
Ores & concentrates	190 308	230 352	328 668	254 126	...
Metal	315	253	339	530	...
Switzerland					
Ores & concentrates	2 682	1 568	876	891	936
Metal	184	247	183	130	217
Yugoslavia (b)					
Ores & concentrates	283 601	(d) 19 389	2 356	...	...
Canada					
Ores & concentrates	21 309	20 957	13 775	20 998	20 232
Metal	214	272	194	371	463
Mexico					
Ores & concentrates	29 037	12 207	...	14 379	...
USA					
Ores & concentrates	565 357	212 139	218 770	254 802	201 273
Metal	6 713	5 765	5 276	6 207	6 526
Argentina					
Ores & concentrates	17 160	26 076	19 224	14 583	...
Brazil					
Ores & concentrates	12 290	1 779	25 977	31 897	...

**Imports of Chromium**

tonnes

Country	1990	1991	1992	1993	1994
Chile					
Ores & concentrates	9 148	12 840	14 475	7 023	11 110
Peru					
Ores & concentrates	2 001	...	...	...	...
Venezuela					
Ores & concentrates	3 383	6 144	2 767	2 243	...
China					
Ores & concentrates	641 267	544 648	901 020	618 757	650 000
Metal	...	...	572	613	...
India (e)					
Metal	138	231	127	143	...
Japan					
Ores & concentrates	789 225	755 059	724 983	601 629	664 545
Metal	571	812	1 002	1 572	2 046
Korea, Republic of					
Ores & concentrates	528	501	319	449	537
Metal	108	143	136	216	487
Singapore					
Ores & concentrates	1 073	673	936	1 977	1 036
Taiwan					
Ores & concentrates	4 492	5 595	6 240	6 372	6 991
Thailand					
Ores & concentrates	5 872	2 944	3 831	8 132	...
Australia					
Ores & concentrates (c)	5 302	7 394	5 407	8 286	...
Metal (c)	91	95	128	101	...

## Note(s):

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

- (a) BGS estimates, based on known exports from certain countries
- (b) As from 1992 data is for Serbia and Montenegro only
- (c) Years ended 30 June of that stated
- (d) Data for the Federal Republic of Yugoslavia only
- (e) Years ended 31 March following that stated

**Production of Coal**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Anthracite	1 945 000	1 864 000	2 040 000	1 404 000	...
Bituminous	90 817 000	92 338 000	82 453 000	66 795 000	(g) 48 030 000
Belgium					
Bituminous	1 035 832	634 000	218 000	—	—
France					
Anthracite & bituminous	10 487 000	10 100 000	9 500 000	8 700 000	7 500 000
Lignite	2 333 000	2 000 000	1 600 000	1 700 000	1 600 000
Germany, Federal Republic of					
Anthracite & bituminous	70 159 000	66 438 000	65 906 000	60 288 000	54 344 000
Brown coal	107 525 000	111 676 000	241 751 000	221 748 000	207 131 000
Greece					
Lignite	51 500 678	52 082 570	54 658 236	54 817 062	56 340 000
Irish Republic					
Anthracite & semi-bituminous	25 000	*5 000	*1 000	*1 000	—
Italy					
Bituminous	56 300	170 000	110 000	7 600	—
Lignite	1 492 767	1 563 344	1 135 764	1 052 000	56 000
Portugal					
Anthracite	264 924	245 782	221 436	197 278	147 153
Spain					
Anthracite	5 720 000	5 950 000	6 450 000	6 054 000	...
Bituminous	13 760 000	12 599 000	12 470 000	12 182 000	(g) 18 120 000
Lignite	16 370 000	15 551 000	14 710 000	13 347 000	11 362 000
Albania					
Lignite	2 070 574	1 098 000	216 000	135 000	120 000
Austria					
Brown coal & lignite	2 448 053	2 080 649	1 750 451	1 692 069	1 371 922
Bosnia & Herzegovina					
Lignite	—	—	*2 000 000	*1 500 000	...
Brown coal	—	—	*2 500 000	*1 000 000	...
Bulgaria					
Anthracite & bituminous	143 000	128 000	248 000	200 000	...
Brown coal & lignite	31 532 000	28 323 000	30 088 000	28 800 000	29 600 000
Croatia					
Bituminous	—	—	120 274	104 617	96 205
Czechoslovakia					
Bituminous	22 082 000	19 522 000	18 486 000	—	—
Lignite	3 124 000	2 838 000	...	—	—
Brown coal	82 044 000	79 669 000	(a) 72 500 000	—	—
Czech Republic					
Bituminous	—	—	—	23 100 000	2 135 000
Lignite	—	—	—	1 300 000	...
Brown coal	—	—	—	67 720 000	65 200 000
German Democratic Republic					
Brown coal	249 100 000	—	—	—	—
Georgia					
Lignite	—	—	*181 000	*150 000	50 000
Hungary					
Bituminous	1 735 940	1 694 882	1 296 000	942 000	1 021 115
Lignite	5 469 419	5 326 624	7 020 000	5 052 000	6 719 550
Brown coal	10 372 572	9 952 700	7 627 000	6 598 000	5 721 170
Macedonia					
Lignite	—	—	6 472 920	6 917 774	685 762
Norway					
Spitzbergen (d)					
Bituminous	302 804	329 849	358 878	266 734	366 000
Poland					
Bituminous	147 672 000	140 269 000	131 523 000	130 479 000	133 637 000
Brown coal	67 584 000	69 406 000	66 852 000	68 105 000	66 770 000
Romania					
Anthracite & bituminous	5 950 000	5 411 000	5 623 000	*5 700 000	5 500 000
Lignite	34 220 000	29 149 000	34 993 000	34 944 900	(i) 35 000 000
Brown coal	677 000	645 000	622 000	579 100	...
Russia					
Lignite	—	—	337 000 000	306 000 000	271 000 000

## Production of Coal

tonnes

Country	1990	1991	1992	1993	1994
Slovakia					
Bituminous	—	—	—	960 000	1 020 000
Brown coal	—	—	—	2 300 000	2 600 000
Slovenia					
Lignite	—	—	4 233 339	*4 000 000	3 775 000
Brown coal	—	—	1 316 639	*1 100 000	1 079 000
Soviet Union					
Anthracite & bituminous	543 000 000	487 000 000	—	—	—
Lignite	160 000 000	143 000 000	—	—	—
Turkey					
Bituminous	5 628 747	5 209 481	5 300 000	5 000 000	5 000 000
Lignite	46 892 206	50 768 694	68 725 454	51 359 417	45 000 000
Ukraine					
Bituminous	—	—	97 200 000	*90 000 000	90 900 000
Lignite	—	—	5 300 000	*5 000 000	4 000 000
Yugoslavia (b)					
Bituminous	292 000	(h) 209 000	102 000	*100 000	...
Lignite	64 094 000	(h) 62 453 000	39 300 000	*30 000 000	(i) 37 536 000
Brown coal	12 029 113	(h) 8 613 000	703 000	*700 000	...
Botswana	794 041	783 873	901 452	890 000	900 298
Malawi	41 380	52 347	*45 000	52 752	50 000
Morocco					
Anthracite	526 000	550 840	575 800	603 800	650 400
Mozambique					
Bituminous	40 411	50 832	12 618	8 740	*10 000
Niger	153 913	156 542	133 525	*150 000	150 000
Nigeria					
Sub-bituminous	77 502	100 074	86 657	*100 000	*130 000
South Africa					
Anthracite	3 622 253	2 689 353	3 344 699	3 245 936	2 280 446
Bituminous	171 161 308	175 704 883	171 047 407	178 979 716	193 524 994
Swaziland					
Bituminous	152 705	122 502	100 220	49 644	227 730
Tanzania					
Bituminous	41 900	74 914	21 795	40 248	45 027
Zaire					
Bituminous	*126 000	*60 000	60 600	...	...
Zambia					
Bituminous	381 501	*420 000	421 989	301 496	160 000
Zimbabwe					
Bituminous	5 504 000	5 616 000	5 548 000	5 284 734	5 515 336
Canada					
Bituminous	37 671 686	39 910 597	32 563 000	35 323 442	36 644 455
Sub-bituminous	21 252 402	22 242 244	23 019 899	23 661 046	25 479 193
Lignite	9 406 963	8 981 478	10 026 882	10 044 870	10 684 628
Mexico					
Bituminous	10 013 655	9 401 325	8 699 927	10 215 352	11 432 222
USA					
Anthracite	3 200 000	3 100 000	3 200 000	...	...
Bituminous & lignite	930 400 000	900 400 000	904 200 000	(g) 856 200 000	(g) *935 000 000
Argentina					
Bituminous	270 354	293 946	214 684	172 771	...
Brazil					
Bituminous & lignite (e)	5 218 469	5 200 000	4 684 000	4 565 000	4 337 000
Chile					
Bituminous	1 467 885	1 341 527	977 775	792 681	(a) 1 675 900
Lignite	1 261 404	1 399 034	1 130 310	1 000 385	...
Colombia					
Bituminous	20 400 000	20 200 000	23 700 000	23 800 000	23 500 000
Peru					
Anthracite	*125 000	125 300	79 805	80 901	63 160
Bituminous	*50 000	25 500	14 485	*20 000	*20 000
Venezuela					
Bituminous	2 242 965	2 403 405	2 479 897	3 891 413	4 629 000

**Production of Coal**

tonnes

Country	1990	1991	1992	1993	1994
Afghanistan (c)					
Bituminous	*200 000	*250 000	*300 000	*250 000	*200 000
China					
Anthracite	212 850 000	217 500 000	220 960 000	250 550 800	...
Bituminous	821 530 000	825 120 000	846 320 000	843 310 200	(g) 1 110 000 000
Lignite	45 500 000	44 790 000	47 270 000	*56 810 000	100 000 000
India					
Bituminous	191 000 000	218 000 000	224 400 000	232 000 000	248 000 000
Lignite	9 000 000	15 000 000	12 600 000	17 000 000	19 000 000
Indonesia					
Anthracite & bituminous	10 560 000	1 453 000	*23 150 000	*27 600 000	*32 400 000
Iran (c)					
Bituminous	1 435 318	1 480 091	1 507 697	1 665 164	1 720 000
Japan					
Anthracite & bituminous	8 262 891	8 060 000	7 600 000	7 200 000	6 900 000
Lignite	14 618	46 808	54 226	53 039	...
Kazakhstan					
Bituminous	—	—	122 384 000	107 211 000	101 500 000
Lignite	—	—	4 152 000	4 669 000	2 500 000
Korea, Dem. P.R. of					
Anthracite	40 700 000	43 300 000	43 100 000	43 000 000	...
Lignite	13 000 000	13 000 000	13 000 000	...	...
Korea, Republic of					
Anthracite	17 216 500	15 057 700	11 969 900	8 845 000	7 400 000
Kyrgyzstan	—	—	*2 000 000	*1 700 000	*2 000 000
Malaysia	98 579	64 861	74 483	263 604	173 749
Mongolia					
Lignite (g)	6 367 800	6 354 700	6 247 300	5 608 500	5 012 400
Myanmar	31 396	56 695	37 520	33 384	35 856
Pakistan (a)	2 733 345	3 039 967	2 954 000	3 305 028	3 100 000
Philippines					
Bituminous	1 246 777	1 307 040	1 582 430	1 531 487	1 400 000
Taiwan					
Bituminous	472 050	402 575	334 821	328 124	285 099
Tajikistan	—	—	*220 000	*200 000	*200 000
Thailand					
Lignite	12 421 138	14 688 440	15 618 230	15 592 000	17 100 000
Uzbekistan	—	—	*6 000 000	*4 700 000	4 700 000
Vietnam					
Anthracite	5 197 800	4 895 400	4 938 500	5 500 000	6 100 000
Australia					
Bituminous (f)	162 957 000	167 472 000	179 144 000	180 045 000	182 553 000
Brown coal	47 725 000	52 124 000	50 228 000	48 458 000	48 582 000
New Zealand					
Bituminous	651 927	734 122	907 102	975 109	...
Sub-bituminous	1 762 729	1 779 549	1 897 243	1 932 000	(j) 2 600 000
Lignite	169 596	170 476	179 666	183 613	200 000
World total	4 711 000 000	4 384 000 000	4 491 000 000	4 376 000 000	4 451 000 000

## Note(s):

(1) There is no international agreement as to the separate definition of lignite and brown coal. In some cases they are distinguished. Elsewhere both may be aggregated under one or other term

- (a) Including lignite
- (b) As from 1992 data is for Serbia and Montenegro only
- (c) Years ended 20 March following that stated
- (d) Not including production from mines controlled by the former Soviet Union
- (e) Including beneficiated and directly shipped material
- (f) Including sub-bituminous
- (g) Including anthracite
- (h) Excluding data from August to December for the Republic of Croatia
- (i) Including brown coal
- (j) Including bituminous

## Exports of Coal

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Anthracite	508 720	695 699	396 230	316 790	271 331
Other coal	1 812 866	1 127 964	576 652	796 943	953 479
Briquettes	137 304	107 015	70 459	94 258	105 551
Belgium-Luxembourg					
Anthracite	96 708	254 128	175 764	195 230	...
Other coal	723 999	684 291	574 068	735 009	...
Lignite	5 204	2 398	282	454	...
Briquettes	17 780	12 495	11 932	31 913	...
Denmark (b)	44 394	54 777	36 585	23 725	48 577
of which: Re-exports	44 342	54 649	27 911	...	...
France					
Anthracite	36 793	32 511	18 067	24 447	18 884
Other coal	606 512	651 922	571 416	575 660	561 128
Briquettes	27 705	49 896	47 171	40 090	21 093
Germany, Federal Republic of					
Coal (b)	5 410 412	3 531 584	1 647 834	970 011	...
Brown coal	448 886	441 817	362 187	350 722	...
Briquettes	1 037 618	1 268 700	850 120	608 953	...
Irish Republic (b)	27 785	23 997	30 078	6 638	...
Italy (b)	30 883	72 248	8 042	...	...
Netherlands					
Anthracite	341 242	288 319	206 755	91 794	...
Other coal	1 933 077	2 012 522	1 931 546	1 891 588	...
Briquettes	512	—	11 680	10 058	...
Spain (b)	3 230	759	678	312	...
Albania					
Lignite	*235 000	*100 000	*100 000	...	...
Austria					
Brown coal	3 472	2 562	2 996	659	15
Czechoslovakia					
Coal	1 557 000	2 484 000	2 788 000	—	—
Brown coal	2 515 000	2 722 000	3 147 000	—	—
Czech Republic					
Coal	—	—	—	5 134 000	...
Lignite	—	—	—	5 007 000	...
Estonia (c)	—	—	*131 400	*337 700	...
Norway (b)	254 277	270 980	168 114	227 233	178 624
Poland					
Coal (b)	28 066 000	19 274 000	19 578 411	22 968 000	...
Brown coal	193 000	1 183 000	977 865	(c) *894 200	...
Russia					
Coal (b)	—	17 500 000	18 113 000	19 675 000	...
Lignite	—	—	6 593 000	477 000	...
Slovakia					
Lignite	—	—	—	113 067	...
Slovenia					
Lignite	—	—	81 064	38 233	...
Soviet Union					
Coal (b)	35 438 000	...	—	—	—
Brown coal (c)	*393 400	*345 900	—	—	—
Sweden (b)	2 290	13 065	14 620	105 431	...
Switzerland (b)	4 274	3 104	3 430	18	8
Turkey					
Coal	5 000	43 000	—	1	28
Lignite	3 000	4 000	—	—	—
Ukraine (c)	—	—	*762 100	*589 500	...
Yugoslavia (e)					
Brown coal	72 914	(f) 70 405	...	...	...
South Africa					
Anthracite	3 519 364	3 293 983	2 260 158	2 090 031	2 225 494
Other coal	46 047 056	45 971 140	47 330 271	49 642 941	52 366 594
Swaziland	6 525	...	...	...	...
Zimbabwe (b)	59 369	50 512	42 984	...	...

**Exports of Coal**

tonnes

Country	1990	1991	1992	1993	1994
Canada	31 989 284	32 403 178	25 914 793	28 275 491	31 222 322
Coal					
Lignite	146	2 028	62 306	73 624	62 293
USA					
Anthracite	625 786	503 437	469 580	424 273	...
Other coal	95 391 482	100 071 698	92 453 836	67 238 436	...
Lignite	34 719	40 599	29 438	19 722	...
Briquettes	36 545	26 618	39 480	36 564	...
Colombia	13 504 899	16 379 323	14 612 000	17 616 000	...
Venezuela	1 735 072	2 292 533	2 395 383	4 361 311	...
China					
Anthracite	1 527 221	2 093 491	2 014 976	1 914 475	...
Other coal	15 765 939	17 907 764	17 647 500	17 899 388	(b) 24 300 000
India (a)	411 770	134 957	381 601	515 099	...
Indonesia					
Anthracite	643 386	587 133	1 013 148	1 051 008	...
Other coal	3 707 778	7 019 073	14 798 274	17 568 547	...
Briquettes	96 769	434 562	103 808	116 002	...
Japan	1 987	1 098	2 506	2 388	2 250
Kazakhstan	—	—	581 000	659 000	...
Korea, Dem. P.R. of (c)	*1 701 000	*1 466 000	*1 090 000	*615 000	...
Malaysia (b)	42 000	35 085	30 630	32 062	...
Singapore (b)	12 708	171 057	87 476	73 565	1 257
of which: Re-exports	12 708	165 687	87 170	73 417	1 148
Vietnam	693 000	1 164 000	1 568 000	...	...
Australia	107 682 000	120 828 000	127 038 000	133 077 000	131 228 000
New Zealand (d)	377 775	416 183	731 131	746 915	1 000 429

## Note(s):

(1) This table excludes bunker shipments

(a) Years ended 31 March following that stated

(b) Including anthracite

(c) BGS estimates, based on known imports into certain countries

(d) Years ended 30 June of that stated

(e) As from 1992 data is for Serbia and Montenegro only

(f) Data for the Federal Republic of Yugoslavia only



## Imports of Coal

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Anthracite	633 964	1 133 205	860 286	1 371 121	1 662 281
Other coal	14 156 669	18 477 346	19 479 171	14 624 142	13 379 119
Briquettes	132 484	160 513	153 349	127 493	80 653
Belgium-Luxembourg					
Anthracite	911 275	1 181 064	1 117 927	890 145	...
Other coal	14 182 191	13 597 504	13 896 298	11 254 181	...
Brown coal	260 967	250 191	210 079	208 017	...
Briquettes	85 399	98 517	68 692	155 193	...
Denmark					
Coal (c)	9 953 126	12 879 950	12 145 342	10 468 023	11 805 569
Lignite	4 476	5 943	4 163	8 314	8 998
Briquettes	3 627	4 359	2 548	111	325
France					
Anthracite	1 979 970	2 687 252	2 349 429	1 993 619	2 013 315
Other coal	17 161 598	18 851 045	20 047 859	12 053 000	10 585 090
Lignite	70 793	75 582	68 381	49 258	58 928
Briquettes	174 924	191 201	185 277	181 939	160 422
Germany, Federal Republic of					
Anthracite	76 926	135 426	195 372	169 098	...
Other coal	10 778 573	15 264 936	15 232 654	12 883 376	...
Brown coal	2 408 115	3 424 576	3 640 309	2 990 577	...
Briquettes	467 176	299 022	268 850	436 331	...
Greece (c)	980 147	1 739 792	1 496 000	1 446 000	...
Irish Republic					
Anthracite	139 914	174 255	193 022	135 505	...
Other coal	2 994 684	2 950 728	2 824 278	2 746 000	...
Lignite	26 006	58 278	28 193	37 911	...
Briquettes	14 141	16 801	8 683	6 860	...
Italy					
Anthracite	2 838 619	3 152 616	2 957 935	634 000	...
Other coal	16 860 099	16 998 778	14 978 425	13 264 000	...
Lignite	3 047	754	1 066	...	...
Briquettes	125 489	213 006	89 597	22 000	...
Netherlands					
Anthracite	308 069	274 047	349 758	250 392	...
Other coal	17 196 108	15 533 199	14 602 130	15 159 987	...
Brown coal	73 609	50 945	34 941	32 545	...
Briquettes	4 496	5 562	5 430	45 101	...
Portugal					
Anthracite	...	595 000	675 000	557 451	...
Other coal	(c) 4 555 309	3 553 000	3 813 000	4 141 740	...
Spain					
Anthracite	218 661	522 941	358 092	194 074	...
Other coal	10 292 866	12 628 683	13 649 867	12 454 217	...
Lignite	848	886	578	1 620	...
Briquettes	312 344	4 282	269	2 568	...
Albania (e)	*188 000	*103 000	*21 700	...	...
Austria					
Anthracite	16 265	7 475	10 650	3 138	1 916
Other coal	3 579 750	3 769 821	3 788 446	3 173 276	2 996 596
Brown coal	23 551	22 842	8 547	1 320	18 873
Briquettes	318 977	326 738	265 226	248 910	196 657
Bulgaria (c)	5 682 000	4 528 000	3 674 000	...	...
Croatia					
Anthracite	—	—	34 401	14 878	...
Other coal	—	—	507 069	576 146	...
Lignite	—	—	185 146	147 106	...
Czechoslovakia					
Coal	4 736 000	5 843 000	...	—	—
Briquettes	198 000	1 000	...	—	—
Finland					
Anthracite	17 246	13 070	24 529	4 726	...
Other coal	6 084 368	5 160 032	4 239 787	5 948 331	...

## Imports of Coal

tonnes

Country	1990	1991	1992	1993	1994
Hungary					
Coal (c)	1 039 267	2 262 000	1 750 811	1 242 093	1 961 051
Brown coal	...	...	610 402	985 104	622 434
Briquettes	794 180	189 000	105 910	66 210	54 544
Iceland	64 518	60 493	50 844	53 964	71 007
Latvia	—	—	813 000	...	...
Lithuania	—	—	918 700	...	...
Malta	247 893	237 837	210 441	245 818	...
Norway (a)					
Anthracite	120 549	114 801	77 602	81 191	93 097
Other coal	577 096	475 404	529 380	612 709	673 841
Lignite	6 126	7 562	9 663	21 702	27 563
Briquettes	9 377	3 124	805	650	745
Poland					
Anthracite	20 000	8 000	...	...	...
Other coal	540 000	54 000	(c) 125 215	(c) 129 134	...
Romania	4 981 000	2 901 000	5 244 000	3 163 000	...
Slovakia					
Bituminous	—	—	—	2 666 545	...
Briquettes	—	—	—	721 146	...
Slovenia					
Coal	—	—	14 898	18 769	...
Lignite	—	—	125 137	318 189	...
Soviet Union (e)	*8 637 000	*230 600	—	—	—
Sweden					
Anthracite	50 705	33 058	60 183	24 134	...
Other coal	3 510 958	3 095 351	2 949 191	3 180 865	...
Switzerland					
Coal (c)	484 654	364 363	148 567	124 832	131 449
Briquettes	11 475	17 191	17 290	14 441	13 450
Turkey					
Coal (c)	4 771 000	5 115 000	4 026 000	5 472 825	6 652 514
Lignite	445 000	512 000	486 000	—	—
Ukraine (e)	—	—	*1 335 000	*1 261 000	...
Yugoslavia (h)					
Anthracite	174 121	(g) 9 489	—	...	...
Other coal	3 342 281	(g) 45 803	—	...	...
Brown coal	12 973	(g) 14 347	—	...	...
Briquettes	23 921	(g) —	—	...	...
Algeria	1 008 868	1 000 139	802 849	...	...
Egypt	1 517 639	1 206 793	1 155 373	1 522 015	...
Kenya	113 007	132 000	157 288	...	...
Madagascar	11 473	11 049	11 985	...	...
Malawi	18 000	11 000	*12 000	...	...
Mauritius	80 000	66 000	72 000	...	...
Morocco (c)	1 189 248	1 376 178	1 061 120	978 598	...
Mozambique	*18 000	*20 000	*20 000	...	...
South Africa	483 428	709 642	639 271	343 497	556 968
Tunisia (c)	13 025	3 086	11 138	14 733	...
Zaire	*45 000	*46 000	*42 000	...	...
Zimbabwe	71 173	28 000	*30 000	...	...
Canada					
Anthracite	440 670	312 863	285 593	265 645	343 961
Other coal	14 364 811	11 377 781	13 464 204	8 450 491	8 704 363
Cuba	149 000	111 000	151 000	...	...
Mexico					
Coal	285 993	202 394	...	81 998	...
Lignite	1 631	1 743	1 303	1 630	...
Panama	19 255	32 255	27 317	49 921	...
USA					
Anthracite	104	242	132 798	219 417	...
Other coal	2 384 111	3 002 205	3 253 930	6 336 742	...
Briquettes	69 989	74 611	17 827	54 471	...
Argentina	861 998	659 682	993 042	966 884	...

## Imports of Coal

tonnes

Country	1990	1991	1992	1993	1994
Brazil					
Anthracite	249 187	328 940	457 784	348 521	...
Other coal	9 857 766	11 224 767	11 452 589	12 133 728	...
Chile	1 791 072	1 520 283	963 140	1 688 897	2 343 242
Peru	46 506	181 567	*190 000	262 086	...
Venezuela	35 879	19 391	74 730	23 722	...
China					
Anthracite	1 201 885	968 476	801 922	842 058	...
Other coal	784 161	376 488	400 616	579 031	(c) 1 220 000
Lignite	17 039	23 119	27 869	7 090	...
Cyprus	97 035	72 175	131 050	110 342	152 043
Hong Kong (c)	8 930 667	9 634 464	10 214 003	11 828 277	8 449 610
India (c) (d)	6 047 265	5 276 238	6 493 594	7 331 098	...
Indonesia (c)	620 717	673 050	453 660	511 189	...
Iran (b)	603 307	570 662	343 019	258 810	...
Israel	3 998 000	3 921 000	5 433 000	...	...
Japan					
Anthracite	2 039 845	2 390 381	2 360 510	2 478 369	2 444 482
Other coal	105 477 448	109 563 568	108 926 077	111 417 834	114 688 991
Lignite	10 875	24 566	15 758	23 176	20 782
Korea, Dem. P.R. of (e)	*1 728 000	*1 948 000	*1 441 000	*2 008 000	...
Korea, Republic of					
Anthracite	1 072 492	1 409 952	808 629	783 332	699 176
Other coal	22 846 311	27 849 073	29 767 640	34 958 730	38 507 007
Briquettes	19 717	19 352	16 299	3 269	6 331
Malaysia					
Anthracite	...	19 012	14 019	28 188	...
Other coal	(c) 2 009 000	2 090 647	2 315 960	1 623 000	...
Lignite	28 000	47 781	4	25 927	...
Pakistan (f)	764 981	973 438	1 069 091	1 030 890	...
Philippines (c)	891 901	1 265 657	856 846	925 442	...
Taiwan					
Anthracite	58 573	61 976	47 053	51 026	53 248
Other coal	18 947 445	18 393 435	23 146 730	24 876 728	26 689 095
Briquettes	5 482	31 479	87	—	13 121
Thailand (c)	249 615	442 312	470 241	964 372	...
Australia (f)	166 244	7 139	970	76 379	...
New Caledonia	212 747	195 304	166 734	156 781	206 030

(a) Excludes coal imported from Spitzbergen

(b) Years ended 20 March following that stated

(c) Including anthracite

(d) Years ended 31 March following that stated

(e) BGS estimates, based on known exports from certain countries

(f) Years ended 30 June of that stated

(g) Data for the Federal Republic of Yugoslavia only

(h) As from 1992 data is for Serbia and Montenegro only

**Mine Production of Cobalt**

tonnes (metal content)

Country	1990	1991	1992	1993	1994
Albania	586	500	300	—	—
Finland	273	234	216	167	*200
Russia	—	—	*3 200	*2 500	*3 300
Soviet Union	*6 000	*5 200	—	—	—
Botswana	205	208	208	205	225
Morocco	103	295	425	397	440
South Africa	249	209	234	172	258
Zaire	9 981	8 620	6 625	2 200	3 274
Zambia	4 614	4 817	4 610	4 211	2 639
Zimbabwe	121	118	101	110	126
Canada	5 470	5 274	5 102	5 108	4 333
Cuba	1 743	1 331	1 360	1 258	1 141
Brazil	600	900	1 000	1 300	...
China	325	233	255	189	200
Australia	*1 870	*1 670	*1 270	*1 270	*1 100
New Caledonia	2 551	2 990	3 015	3 018	*1 000
World total	34 700	32 600	27 900	22 100	19 500

## Note(s):

- (1) There is frequently a considerable disparity between the cobalt content of ore raised and cobalt actually recovered
- (2) Figures in this table relate where possible to cobalt recovered. The principal exceptions to this are Australia, Brazil, Canada and New Caledonia, the figures for which relate to cobalt in ore raised

**Production of Cobalt Metal**

tonnes

Country	1990	1991	1992	1993	1994
Belgium (a)	...	...	...	...	...
Germany, Federal Republic of (b)	1 303	975	815	602	856
Albania	*20	*20	—	—	—
Czechoslovakia	59	60	68	—	—
Finland	507	515	742	940	*1 000
Norway	1 830	1 983	2 293	2 414	2 820
Russia	—	—	*4 000	*3 000	*4 000
Soviet Union	*6 650	*6 460	—	—	—
South Africa	249	209	234	172	258
Zaire	10 033	8 790	6 625	2 200	3 300
Zambia	4 614	4 817	4 610	4 211	2 639
Canada (c)	2 063	2 248	2 210	2 695	2 989
Brazil	67	33	88	158	*180
China	325	340	437	404	...
Japan	199	185	105	191	161
World total	27 900	26 600	22 200	17 000	18 600

## Note(s):

(1) In addition to the production listed above, several countries, including the United Kingdom, Finland, France and USA, are known to produce substantial amounts of cobalt compounds

(a) Production not reported. Much of the metal recorded under Zaire is believed to be further processed in Belgium and elsewhere

(b) Sales

(c) Including oxides

**Exports of Cobalt**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Metal	1 385	1 328	1 635	1 729	1 979
Oxides	1 413	1 730	1 282	1 087	2 096
Belgium-Luxembourg (a)					
Metal	*3 400	*3 600	*2 400	*1 900	...
Oxides	*1 900	*1 900	*1 100	*1 500	...
France					
Metal	616	669	860	436	742
Oxides	32	22	48	53	43
Germany, Federal Republic of					
Metal	1 382	1 332	1 666	1 250	...
Oxides	63	41	84	72	...
Italy					
Metal	71	222	600	372	...
Oxides	54	49	78	113	...
Netherlands					
Metal	93	186	167	408	...
Oxides	45	39	38	40	...
Spain	83	32	9	2	...
Austria	8	28	64	181	104
Finland					
Metal	318	396	659	829	...
Oxides	1 112	1 065	1 198	1 283	...
Norway	1 832	2 010	2 103	2 554	2 680
Russia	—	—	1 473	553	...
Soviet Union					
Metal (d)	*300	*1 000	—	—	—
Sweden					
Metal	142	140	820	281	...
Oxides	181	117	841	589	...
Switzerland	130	139	179	151	139
Morocco					
Ore	2 070	3 126	3 000	...	...
South Africa	219	176	211	196	179
Zaire	*17 200	...	...	...	...
Canada					
Metal	3 056	4 910	3 181	3 089	4 142
Oxides	393	463	489	394	204
Cuba					
Oxide, sinter & sulphide (b)	*1 700	*1 300	*1 300	*1 200	...
USA					
Metal	1 059	1 039	959	794	1 722
Oxides	934	1 115	1 002	455	702
Brazil	125	249	97	...	...
China					
Metal	32	100	141	10	...
Oxides	170	143	116	35	...
Hong Kong					
Metal (c)	...	...	1 394	814	1 034
Oxides (c)	50	42	133	44	522
Japan					
Metal	440	335	265	269	401
Oxides	99	50	50	28	41

(a) Exports of cobalt are not separately recorded. Figures shown are BGS estimates based on known imports into certain countries

(b) Co content

(c) Re-exports

(d) BGS estimates, based on known imports into certain countries

## Imports of Cobalt

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Metal	3 857	3 558	3 157	3 344	3 521
Oxides	543	528	671	554	596
Belgium-Luxembourg					
Metal (b)	*440	*460	*600	*300	...
Oxides	191	171	184	202	...
Denmark					
Metal	24	19	13	18	27
France					
Metal	1 632	1 339	1 559	977	1 453
Oxides	290	404	415	554	578
Germany, Federal Republic of					
Metal	2 765	2 163	2 476	1 819	...
Oxides	496	503	447	478	...
Italy					
Metal	632	543	722	602	...
Oxides	591	656	510	608	...
Netherlands					
Metal	127	161	125	254	...
Oxides	329	316	270	211	...
Spain					
Metal	285	189	173	183	...
Oxides	255	209	248	362	...
Austria					
Metal	405	286	304	271	355
Oxides	23	20	21	24	18
German Democratic Republic (b)	*20	—	—	—	—
Norway					
Metal	2	13	78	1 075	922
Oxides	2	41	335	890	912
Sweden	785	576	881	510	...
Switzerland	256	248	249	287	295
Turkey					
Oxides	63	57	72	46	34
Yugoslavia (e)					
Metal	93	(d) 22	9	...	...
Oxides	42	(d) 3	0	...	...
South Africa					
Metal	348	324	114	158	1 202
Oxides	6	14	17	16	10
Canada	812	2 083	1 200	546	950
Mexico					
Metal	31	49	124	40	53
Oxides	182	277	172	160	222
USA					
Metal	6 377	6 894	6 089	6 140	6 935
Oxide	488	584	430	444	763
Brazil					
Metal	496	564	263	355	...
Oxide	48	45	59	73	...
Venezuela					
Oxides	9	238	44	51	...
China	498	437	768	581	...
Hong Kong					
Metal	...	...	1 828	1 207	1 427
Oxide	62	46	64	211	771
India (a)	318	205	197	233	...
Indonesia					
Oxides	41	156	139	60	...
Japan					
Metal	4 807	6 815	4 387	4 107	5 809
Oxide	631	571	336	498	620

**Imports of Cobalt**

tonnes

Country	1990	1991	1992	1993	1994
Korea, Republic of					
Metal	630	654	467	577	717
Oxides	147	168	120	133	121
Malaysia					
Metal	88	25	26	...	...
Oxides	...	29	199	...	...
Saudi Arabia					
Oxides	106	256	52	...	...
Taiwan					
Metal	107	181	175	271	474
Oxides	148	133	102	178	223
Australia					
Metal (c)	47	37	35	43	...
Oxide (c)	71	55	47	54	...

- (a) Years ended 31 March following that stated  
(b) BGS estimates, based on known exports from certain countries  
(c) Years ended 30 June of that stated  
(d) Data for the Federal Republic of Yugoslavia only  
(e) As from 1992 data is for Serbia and Montenegro only



## Mine Production of Copper

tonnes (metal content)

Country	1990	1991	1992	1993	1994
United Kingdom	955	294	—	—	—
France	483	372	149	72	174
Portugal	159 841	158 885	152 300	150 483	130 300
Spain	13 300	7 716	9 818	3 518	4 000
Albania	12 250	8 000	3 400	3 500	2 200
Armenia	—	—	*2 000	*1 000	*1 000
Bulgaria	32 900	47 200	47 400	60 400	75 500
Czechoslovakia	2 884	1 550	1 000	—	—
Finland	17 482	16 224	15 351	13 657	9 500
German Democratic Republic	3 564	—	—	—	—
Georgia	—	—	*6 000	*5 000	*3 000
Macedonia	—	—	7 200	7 000	*6 000
Norway	23 041	19 901	12 734	8 743	7 408
Poland	370 000	382 000	373 000	382 600	378 000
Romania	32 000	27 200	24 700	25 361	25 500
Russia	—	—	680 000	594 000	447 900
Slovakia	—	—	—	*500	3 000
Soviet Union	*900 000	*840 000	—	—	—
Sweden	74 283	81 650	89 145	88 909	79 384
Turkey	39 825	39 422	36 425	39 200	35 000
Yugoslavia (b)	140 145	(a) 121 842	97 811	68 007	90 800
Botswana	20 612	20 576	20 413	20 132	22 780
Morocco	13 901	13 633	12 004	13 746	14 202
Namibia	27 797	31 719	31 313	29 146	26 555
South Africa	188 368	193 642	176 074	166 348	165 213
Zaire	352 400	236 100	147 300	47 500	30 000
Zambia	545 677	423 000	432 600	431 500	384 400
Zimbabwe	14 800	13 811	9 600	8 187	9 350
Canada	793 735	811 134	768 582	732 591	617 265
Cuba	*2 000	*2 000	*1 500	*2 000	*2 000
Honduras	1 388	*1 000	1 600	1 000	1 000
Mexico	298 695	284 174	279 042	303 989	305 487
USA	1 587 742	1 631 078	1 764 756	1 801 382	1 811 000
Argentina	357	409	297	—	—
Brazil	34 441	37 947	39 848	43 568	39 674
Chile	1 588 400	1 814 300	1 932 700	2 055 400	2 219 900
Peru	323 400	382 277	369 365	374 771	359 400
China	557 000	304 000	334 300	345 700	346 000
Cyprus	472	226	200	103	0
India	51 566	50 430	49 036	49 416	45 944
Indonesia	162 366	267 401	369 281	378 000	434 000
Iran	67 000	89 900	96 000	100 800	117 900
Japan	12 927	12 413	12 074	10 277	6 043
Kazakhstan	—	—	*290 000	*260 000	202 300
Korea, Dem. P.R. of	*12 000	*14 000	*12 000	*12 000	*12 000
Malaysia	24 327	25 581	28 556	25 182	25 267
Mongolia	123 893	90 100	105 100	96 900	99 600
Myanmar	4 400	5 700	5 000	5 200	4 800
Oman	13 700	13 500	13 400	8 800	4 300
Philippines	180 459	148 000	123 523	136 258	112 100
Uzbekistan	—	—	*50 000	*50 000	60 000
Australia	330 000	320 000	378 000	411 000	*391 000
Papua New Guinea	170 211	204 459	193 359	203 945	...
World total	9 300 000	9 200 000	9 600 000	9 600 000	9 400 000

(a) Excluding data from August to December for the Republic of Croatia

(b) As from 1992 data is for Serbia and Montenegro only

**Smelter Production of Copper**

tonnes

Country	1990	1991	1992	1993	1994
Belgium	87 800	106 000	102 800	141 700	*145 000
Germany, Federal Republic of	183 600	171 900	179 100	141 300	292 200
Spain	*121 000	*144 000	*137 000	*173 000	188 400
Albania	11 600	4 800	2 300	*2 000	2 100
Armenia	—	—	*10 000	*10 000	10 000
Bulgaria	30 300	27 800	50 600	71 900	89 400
Czechoslovakia	33 000	27 658	25 100	—	—
Finland	112 843	114 284	136 768	136 647	98 200
German Democratic Republic	*14 000	—	—	—	—
Hungary	*4 000	4 900	100	—	—
Norway	36 455	38 447	39 259	37 205	39 500
Poland	430 000	440 000	454 000	381 800	401 900
Romania	28 300	27 800	28 400	26 200	25 300
Russia	—	—	640 000	538 000	506 700
Slovakia	—	—	—	22 400	22 000
Soviet Union	*990 000	*920 000	—	—	—
Sweden	76 385	68 113	77 804	76 298	102 700
Turkey	18 840	28 380	26 088	33 456	39 600
Yugoslavia (b)	105 908	122 200	127 920	57 398	86 600
Namibia	33 190	33 539	37 531	34 411	29 781
South Africa	176 000	164 700	158 700	156 600	158 300
Zaire (a)	338 700	221 100	134 000	48 400	29 300
Zambia (a)	355 352	300 519	380 239	337 771	265 206
Zimbabwe	24 400	23 800	22 400	18 900	19 200
Canada	475 596	505 425	515 028	518 301	514 675
Mexico	209 801	208 339	256 110	300 710	300 791
USA	1 158 462	1 122 926	1 180 305	1 265 200	1 311 108
Brazil	152 117	141 443	156 775	161 700	169 000
Chile	1 328 500	1 146 100	1 176 500	1 237 100	1 260 400
Peru	261 403	341 919	326 617	317 211	333 017
China	358 000	385 000	418 000	443 700	444 000
India	40 667	45 541	45 500	37 000	51 200
Iran	78 500	123 200	120 000	74 844	131 800
Japan	1 040 628	1 085 435	1 174 895	1 184 825	1 121 999
Kazakhstan	—	—	*310 000	*300 000	276 100
Korea, Dem. P.R. of	*25 000	*25 000	*20 000	*19 800	*20 000
Korea, Republic of	160 500	186 000	174 000	141 962	135 200
Oman	15 200	15 100	18 700	27 800	31 800
Philippines	153 462	167 462	168 831	212 446	200 255
Taiwan	11 400	—	—	—	—
Uzbekistan	—	—	*50 000	*50 000	...
Australia	192 000	197 000	200 000	247 000	257 000
World total	8 900 000	8 700 000	9 100 000	9 000 000	9 200 000

## Note(s):

(1) This table shows, where possible, primary metal in the form of blister and anode produced from concentrates, but may include some secondary metal produced from scrap, residues, etc.

(a) Including leach cathodes

(b) As from 1992 data is for Serbia and Montenegro only

## Production of Refined Copper

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	121 634	70 060	42 067	46 578	46 664
Belgium	331 857	297 593	367 300	378 900	371 200
France	44 034	43 570	43 200	44 400	59 700
Germany, Federal Republic of	476 200	521 500	581 400	631 900	591 700
Italy	83 000	83 400	76 000	90 300	84 000
Spain	170 567	189 850	179 117	179 230	188 307
Albania	10 900	4 400	1 200	1 000	2 100
Armenia	—	—	*10 000	*10 000	*10 000
Austria	49 703	52 837	54 680	53 036	51 300
Bulgaria	24 333	27 700	28 000	23 800	26 500
Czechoslovakia	24 606	25 273	25 000	—	—
Finland	69 030	64 908	71 352	73 400	69 200
German Democratic Republic	55 700	—	—	—	—
Hungary	12 817	9 341	4 100	—	—
Norway	33 514	38 447	39 259	37 205	39 500
Poland	346 000	378 500	387 000	404 200	40 500
Romania	*24 700	*25 700	*26 500	25 193	26 700
Russia	—	—	580 000	524 800	551 800
Slovakia	—	—	—	23 200	23 000
Soviet Union	*1 160 000	*1 040 000	—	—	—
Sweden	97 278	96 554	101 634	99 077	102 675
Turkey	85 200	80 700	100 100	92 700	83 000
Yugoslavia (b)	151 395	(a) 122 200	114 763	51 000	72 100
Egypt	*4 000	*4 000	*4 000	*4 000	*3 600
South Africa	133 000	127 200	120 100	127 900	129 600
Zaire	173 175	120 000	57 200	*40 000	29 000
Zambia	426 243	394 900	472 000	407 100	369 500
Zimbabwe	24 400	23 800	22 400	18 900	24 000
Canada	515 835	538 339	539 302	561 580	550 036
Mexico	157 108	171 866	203 006	187 920	216 198
USA	2 017 390	1 995 194	2 143 815	2 252 487	2 220 300
Argentina	*15 000	*15 000	*15 000	*15 000	*16 000
Brazil	152 117	141 443	156 775	161 700	169 000
Chile	1 191 600	1 228 300	1 242 300	1 268 200	1 277 400
Peru	181 790	246 198	251 100	259 700	253 000
China	558 000	560 000	659 200	730 000	684 100
India	46 400	47 222	45 255	36 815	49 034
Iran	47 800	79 700	101 800	101 479	90 200
Japan	1 007 976	1 076 283	1 160 859	1 188 776	1 119 168
Kazakhstan	—	—	*340 000	*330 000	282 900
Korea, Dem. P.R. of	*30 000	*30 000	*28 000	*20 000	*30 000
Korea, Republic of	192 196	200 763	209 757	219 519	224 169
Oman	12 015	11 413	11 383	20 500	24 200
Philippines	125 938	115 471	145 674	165 954	159 079
Taiwan	16 090	—	—	—	*10 000
Uzbekistan	—	—	*110 000	*100 000	60 000
Australia	274 000	272 000	316 000	*332 000	318 000
World total	10 700 000	10 600 000	11 200 000	11 300 000	11 100 000

Note(s):

(1) Figures relate to both primary and secondary refined copper, whether electrolytic or fire refined. Metal recovered from secondary materials by remelting alone is excluded

(a) Excluding data from August to December for the Republic of Croatia

(b) As from 1992 data is for Serbia and Montenegro only

## Exports of Copper

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Ore & matte	5 138	2 041	150	68	416
Unwrought	11 597	16 356	4 908	3 566	20 726
Unwrought alloys	21 055	21 719	24 261	22 863	24 228
Scrap	111 208	126 652	117 398	109 180	145 847
Belgium-Luxembourg					
Unwrought	(h) 231 548	(h) 181 083	186 979	238 067	...
Unwrought alloys	8 275	7 525	8 097	6 821	...
Scrap	55 629	55 978	51 508	53 334	...
Denmark					
Unwrought	279	467	238	99	75
Scrap	22 089	22 681	28 040	39 527	41 510
France					
Ore	1 060	683	539	362	2
Matte & cement	77	61	94	545	5 752
Unwrought					
Unrefined	5 271	3 754	4 964	236	2 237
Refined	7 176	12 389	15 391	23 437	19 514
Alloys	15 169	13 306	11 891	10 225	8 707
Scrap	161 158	169 115	164 269	142 415	160 357
Germany, Federal Republic of					
Ore	4 310	70	8 285	3 127	67
Matte & cement	1 568	1 026	49	225	...
Unwrought					
Unrefined	577	470	99	45	1 104
Refined	94 534	62 995	59 521	89 966	149 066
Alloys	14 383	17 674	26 925	18 751	...
Scrap	156 553	212 555	231 537	195 281	200 343
Greece					
Unwrought	1 003	1 540	1 515	22	...
Scrap	2 620	2 444	3 111	2 928	...
Irish Republic					
Scrap	9 274	9 713	8 554	6 763	...
Italy					
Matte & cement	265	298	542	253	...
Unwrought	20 281	19 519	3 854	3 636	7 568
Unwrought alloys	7 256	6 545	6 189	6 072	8 314
Scrap	22 797	24 655	24 796	20 950	...
Netherlands					
Unwrought	449	717	729	1 108	9 649
Unwrought alloys	8 523	5 970	11 592	7 124	12 256
Scrap	83 437	107 608	138 415	115 262	110 791
Portugal					
Ore	706 115	694 535	696 987	666 408	555 026
Scrap	6 304	11 087	12 994	13 658	...
Spain					
Ore	42 476	19 967	27 604	22 911	...
Matte & cement	4 118	1 181	614	14	...
Unwrought	30 834	83 963	68 165	79 543	68 534
Unwrought alloys	186	1 766	1 961	4 193	...
Scrap	16 859	34 126	43 086	34 165	...
Austria					
Unwrought	39 412	41 927	46 773	56 732	59 859
Unwrought alloys	5 272	6 042	3 885	4 304	5 134
Scrap	13 638	16 583	26 929	17 458	21 289
Belarus					
Unwrought (f)	—	—	*5 000	*6 700	...
Scrap (f)	—	—	*6 100	*4 300	...
Bulgaria					
Ore (f)	*5 000	*15 000	*44 000	*56 000	...
Unwrought (f)	*4 000	*13 000	*34 000	*43 000	...
Scrap (f)	*1 100	*6 400	*9 600	*5 800	...
Croatia					
Scrap	—	—	44 902	3 642	...

## Exports of Copper

tonnes

Country	1990	1991	1992	1993	1994
Czechoslovakia					
Unwrought (f)	*500	*13 700	*18 400	—	—
Scrap (f)	*3 500	*18 000	*36 100	—	—
Czech Republic					
Unwrought (f)	—	—	—	*5 700	...
Scrap (f)	—	—	—	*25 700	...
Estonia					
Scrap (f)	—	—	*41 000	*22 200	...
Finland					
Ore	12 432	18 071	9 759	—	...
Unwrought					
Unrefined	25 413	24 690	37 999	32 524	27 220
Refined	19 509	19 812	19 227	21 913	20 651
Alloys	3 093	1 425	1 223	529	...
Scrap	3 289	6 553	20 382	23 473	...
German Democratic Republic					
Unwrought (f)	*7 900	—	—	—	—
Hungary					
Unwrought	(c) 7 755	...	6 338	3 173	1 800
Scrap	6 537	...	17 420	14 894	17 834
Latvia					
Scrap (f)	—	—	*22 400	*23 500	...
Lithuania					
Unwrought (f)	—	—	*13 800	*7 400	...
Scrap (f)	—	—	*49 000	*14 300	...
Norway					
Ore	90 189	91 627	57 546	44 319	32 413
Unwrought					
Unrefined	19 397	—	25	40	—
Refined	37 682	37 755	40 027	37 092	41 691
Scrap	10 790	11 404	13 337	9 420	8 800
Poland					
Unwrought	176 590	222 820	266 829	(f) *209 900	...
Scrap	4 113	52 294	(f) *59 900	(f) *13 300	...
Russia					
Ore	—	174 531	44 936	90 563	...
Matte & cement	—	—	10 003	2 000	...
Unwrought	—	—	188 216	163 766	...
Scrap	—	—	7 298	15 635	...
Slovakia					
Unwrought (f)	—	—	—	*11 500	...
Soviet Union					
Unwrought (f)	*261 000	*285 600	—	—	—
Scrap (f)	*10 900	*33 500	—	—	—
Sweden					
Ore	93 376	116 722	92 711	102 013	68 270
Unwrought					
Unrefined	5	943	10 605	5 093	1 299
Refined	39 582	32 070	27 848	14 377	12 783
Alloys	4 918	4 463	2 361	4 430	5 187
Scrap	3 019	6 463	32 526	25 340	19 975
Switzerland					
Unwrought					
Refined	3 816	3 131	724	2 028	1 012
Alloys	4 842	7 299	6 972	4 208	4 420
Scrap	18 721	25 786	26 134	31 058	37 760
Turkey					
Ore	30 873	6 100	46 248	81 475	41 233
Unwrought	2 145	4 000	9 181	16 257	5 106
Ukraine					
Unwrought (f)	—	—	*17 200	*8 700	...
Yugoslavia (i)					
Ore	17 479	(k) 1	...	...	...
Matte	9 199	(k) 522	...	...	...
Unwrought	66 224	(k) 65 189	...	...	...
Unwrought alloys	14 778	(k) 7 671	...	...	...
Scrap	2 393	(k) 829	...	...	...

## Exports of Copper

tonnes

Country	1990	1991	1992	1993	1994
Algeria					
Scrap	2 179	9 389	...	...	...
Botswana					
Matte (b)	19 300	20 100	18 100	21 900	17 600
Morocco					
Ore	44 848	43 295	45 867	44 342	...
Matte	2 057	2 562	2 100	1 703	...
Scrap	4 800	7 954	11 120	...	...
Namibia					
Unwrought	29 974	30 218	34 109	30 193	26 200
Senegal					
Scrap	1 139	471	596	...	...
South Africa					
Ores & concentrates (b)	17 283	20 735	21 088	7 603	4 866
Unwrought	86 787	97 963	92 100	88 566	76 361
Scrap (f)	*9 300	*9 300	*12 600	*29 900	...
Tunisia					
Scrap	2 747	2 004	1 370	...	...
Zaire					
Ores & concentrates	*28 000	*23 000	*18 000	...	...
Unwrought					
Unrefined (e)	215 451	117 813	*79 900	...	...
Refined	140 743	*130 000	*62 000	28 300	...
Zambia					
Unwrought, refined	459 924	382 326	411 892	436 522	360 657
Zimbabwe					
Unwrought	11 899	9 422	8 784	...	...
Canada					
Ores & concentrates (b)	359 553	324 584	317 066	295 079	218 347
Matte & cement (b)	14 682	22 211	20 060	10 743	19 205
Unwrought	336 697	378 224	385 849	408 605	388 843
Scrap	104 469	86 407	101 975	115 529	110 673
Cuba					
Concentrates (b)	2 000	2 000	2 000	...	...
Scrap (a)	2 548	3 337	1 585	1 120	...
Mexico					
Concentrates	286 724	212 310	56 537	82 925	...
Matte & cement	17 517	3 615	5 879	10 119	19 023
Unwrought	51 665	62 714	82 816	162 179	139 760
Scrap	11 899	16 972	28 376	36 153	48 044
USA					
Ores & concentrates (b)	258 235	229 467	251 857	238 831	261 000
Unwrought					
Unrefined	6 424	21 212	16 714	11 446	11 900
Refined	212 719	266 424	186 932	216 955	157 000
Alloys	9 272	9 344	9 379	23 854	...
Scrap	325 581	306 070	244 548	261 969	360 000
Brazil					
Unwrought, refined	40 914	63 064	79 716	79 976	55 906
Chile					
Ores & concentrates (b)	258 300	503 100	630 900	654 000	685 100
Unwrought					
Unrefined	151 100	92 500	127 000	139 600	184 200
Refined	1 141 100	1 130 500	1 178 000	1 189 100	1 189 500
Scrap	2 400	1 500	400	600	...
Colombia					
Ore	60	12 398	6 953	5 076	...
Peru					
Ore (f)	*165 000	*127 500	*160 700	*77 200	...
Unwrought					
Unrefined	92 834	100 979	88 717	92 888	98 023
Refined	137 433	207 512	214 506	217 514	218 260
Venezuela					
Scrap	11 501	10 037	10 399	13 543	...

## Exports of Copper

Country	1990	1991	1992	1993	1994
China					
Unwrought	18 002	8 711	12 320	6 439	16 306
Scrap	(f) *20 800	(f) *27 000	23 114	18 037	...
Cyprus					
Cement copper	1 080	500	300	440	—
Scrap (j)	46 484	140 329	92 544	960	399 394
Hong Kong					
Unwrought	5 483	14 382	44 638	40 995	20 036
of which: Re-exports	5 134	14 260	44 523	40 912	19 970
Scrap	80 879	111 755	209 817	181 792	167 528
of which: Re-exports	21 708	38 619	94 781	92 619	89 626
India (g)					
Ores & concentrates	14 322	20	—	7 972	...
Indonesia					
Ores & concentrates	397 648	600 571	965 911	922 508	...
Iran					
Unwrought (f)	*11 400	*13 000	*36 100	*53 300	...
Scrap (f)	*2 100	*3 200	*4 500	*2 500	...
Israel					
Scrap	3 875	3 246	2 696	5 974	...
Japan					
Unwrought	81 710	87 267	111 970	171 376	124 843
Scrap	12 003	9 186	24 451	19 975	39 868
Jordan					
Scrap	1 483	4 918	2 866	2 034	...
of which: Re-exports	282	438	9	87	...
Kazakhstan					
Ores & concentrates	—	—	5 956	5 543	...
Unwrought	—	—	106 000	137 000	...
Korea, Republic of					
Unwrought	1 125	151	13 813	6 599	7 254
Scrap	1 919	2 819	11 262	4 520	8 005
Malaysia					
Ore	105 664	97 068	104 378	108 353	97 623
Scrap	...	20 068	19 488	16 159	...
Myanmar (g)					
Ores & concentrates	24 036	19 576	17 230	...	...
Oman					
Unwrought	12 124	10 811	12 399	20 326	...
Scrap	52 044	67 951	...	...	...
Pakistan (d)					
Scrap	3 772	786	409	36 926	...
Philippines					
Ores & concentrates	421 405	396 962	350 326	370 788	...
Unwrought	109 703	98 047	98 056	136 920	128 600
Scrap	27 999	46 696	26 839	...	...
Saudi Arabia					
Unwrought	1 718	2 629	1 227	...	...
Scrap	23 023	8 540	8 838	...	...
Singapore					
Unwrought	41 937	58 632	94 067	87 778	97 835
of which: Re-exports	39 273	58 464	83 788	87 251	96 354
Scrap	38 762	41 847	43 014	43 107	47 892
Taiwan					
Unwrought	6 655	3 991	7 725	8 436	6 942
Scrap	30 498	15 991	22 614	19 139	27 785
Australia					
Ores & concentrates	232 400	212 000	271 400	396 600	435 000
Matte & cement (d)	120	6 182	3 289	4 127	...
Unwrought					
Unrefined	4 756	3 207	11 328	10 115	5 817
Refined	152 800	173 700	178 100	156 400	176 000
Alloys (d)	676	1 594	1 328	2 357	...
Scrap (d)	3 107	14 676	17 282	16 785	...

**Exports of Copper**

tonnes

Country	1990	1991	1992	1993	1994
New Zealand (d)					
Unwrought	255	243	170	62	628
Scrap	2 406	4 708	2 942	2 148	1 402
Papua New Guinea					
Ores & concentrates (b)	155 624	193 700	171 216	159 895	...

## Note(s):

- (1) In this table the term 'unwrought' copper corresponds to item 682.1 of the Standard International Trade Classification (Revision 3) and includes both unrefined (including blister) and refined copper
  - (2) The term 'unwrought' as used here includes alloys unless these are separately specified. The term 'scrap' includes scrap alloys
- (a) Imports into the Netherlands
  - (b) Cu content
  - (c) Including semi-manufactures
  - (d) Years ended 30 June of that stated
  - (e) Including leach cathodes
  - (f) BGS estimates, based on known imports into certain countries
  - (g) Years ended 31 March following that stated
  - (h) Refined only
  - (i) As from 1992 data is for Serbia and Montenegro only
  - (j) Re-exports
  - (k) Data for the Federal Republic of Yugoslavia only



## Imports of Copper

Country	1990	1991	1992	1993	1994
United Kingdom					
Ore & matte	2 065	2 536	2 123	196	75
Unwrought					
Unrefined	63 905	31 567	8 094	10 273	9 470
Refined	251 031	242 657	278 223	378 614	259 033
Alloys	3 036	2 297	2 195	4 815	1 754
Scrap	22 017	16 356	23 220	27 389	27 555
Belgium-Luxembourg					
Ore	4 968	3 150	322	6 885	...
Unwrought					
Unrefined	191 653	161 730	171 100	163 505	...
Refined	260 877	235 950	194 236	149 604	...
Alloys	8 421	23 440	9 352	8 072	...
Scrap	158 411	201 245	208 722	169 222	...
Denmark					
Unwrought	1 017	146	51	125	64
Unwrought alloys	1 967	2 652	1 481	1 636	1 821
Scrap	19 731	19 650	21 183	26 651	13 363
France					
Ore	50	4 455	45	24	24
Matte & cement	322	369	854	461	1 530
Unwrought					
Unrefined	20 921	12 598	15 707	13 655	5 993
Refined	429 752	436 732	444 410	436 970	462 694
Alloys	9 420	7 951	5 363	6 295	10 524
Scrap	58 396	69 198	75 288	64 003	77 228
Germany, Federal Republic of					
Ore	498 000	523 295	576 813	506 447	647 010
Matte & cement	17 569	19 717	22 787	7 721	9 403
Unwrought					
Unrefined	53 036	59 749	56 048	67 954	82 298
Refined	514 754	556 500	532 522	496 751	522 743
Alloys	64 831	68 003	67 984	33 957	40 003
Scrap	310 643	322 879	452 555	360 125	408 105
Greece					
Unwrought	54 776	48 986	47 671	66 900	...
Unwrought alloys	1 581	1 268	1 310	1 251	...
Scrap	664	689	790	263	...
Irish Republic					
Unwrought	329	334	160	561	...
Scrap	527	483	335	630	...
Italy					
Unwrought					
Unrefined	241	3 165	1 943	2 365	6 312
Refined	412 020	406 596	435 668	402 738	394 255
Alloys	24 179	27 603	30 181	18 868	26 263
Scrap	175 917	175 057	210 634	180 428	234 539
Netherlands					
Unwrought	23 539	18 333	18 835	16 655	25 933
Unwrought alloys	2 121	1 419	1 912	1 056	693
Scrap	78 218	95 818	108 765	94 793	103 734
Portugal					
Unwrought	25 830	27 303	22 889	12 977	6 227
Scrap	939	396	207	649	...
Spain					
Ore	393 745	464 853	412 428	476 001	518 428
Matte & cement	365	111	377	60	...
Unwrought					
Unrefined	3 122	35 649	24 981	30 203	23 636
Refined	21 406	26 403	28 344	34 794	19 208
Alloys	3 629	5 569	3 769	4 794	...
Scrap	42 090	34 430	30 219	42 364	...

**Imports of Copper**

tonnes

Country	1990	1991	1992	1993	1994
<b>Austria</b>					
Unwrought					
Unrefined	746	8 009	6 172	3 443	6 626
Refined	7 598	5 756	8 803	14 066	31 862
Alloys	1 783	2 588	2 890	2 400	2 350
Scrap	24 662	59 836	63 642	42 310	62 053
<b>Bulgaria</b>					
Ores & concentrates (a)	*17 000	*50 500	*85 100	...	...
Unwrought (a)	*1 000	*5 600	*4 100	*6 200	...
<b>Czechoslovakia</b>					
Unwrought	35 000	12 000	13 561	—	—
<b>Czech Republic</b>					
Unwrought	—	—	—	10 895	...
<b>Finland</b>					
Ore	279 755	304 188	318 940	324 384	292 784
Unwrought					
Refined	27 427	19 074	9 656	18 459	34 261
Alloys	1 808	1 000	1 267	2 611	...
Scrap	988	6 379	40 684	29 063	...
<b>German Democratic Republic</b>					
Ores & concentrates (a)	*5 900	—	—	—	—
Unwrought (a)	*64 600	—	—	—	—
Scrap (a)	*20 600	—	—	—	—
<b>Hungary</b>					
Unwrought	(c) 14 958	20 000	15 320	17 533	18 872
Scrap	895	...	3 636	2 805	2 049
<b>Norway</b>					
Unwrought	302	364	97	100	220
Unwrought alloys	2 833	2 771	3 155	2 513	2 412
Scrap	1 578	4 908	3 664	6 290	5 838
<b>Poland</b>					
Unwrought	2 900	112	201	(a) *4 000	...
<b>Romania</b>					
Unwrought	(a) *10 300	(a) *4 000	1 075	...	...
<b>Russia</b>					
Ore	—	—	202 032	116 518	...
<b>Sweden</b>					
Ore	51 012	23 978	62 860	37 501	38 107
Matte & cement	11	2 572	0	—	4
Unwrought	63 387	61 554	49 218	54 615	53 140
Unwrought alloys	4 840	4 325	4 284	3 360	4 511
Scrap	14 605	44 320	22 647	23 800	24 289
<b>Switzerland</b>					
Unwrought					
Refined	7 239	7 450	5 445	5 158	6 235
Alloys	1 598	1 484	1 536	1 764	1 753
Scrap	8 188	8 402	11 003	9 381	11 515
<b>Turkey</b>					
Unwrought	55 915	49 708	38 805	70 802	58 900
Scrap	1 088	227	2 486	1 544	1 630
<b>Yugoslavia (f)</b>					
Unwrought	8 190	(b) 7 899	6 759	...	...
Unwrought alloys	1 714	(b) 686	415	...	...
Scrap	730	(b) 73	20	...	...
<b>Algeria</b>					
Unwrought	1 849	112	1 046	...	...
<b>Morocco</b>					
Unwrought	733	743	661	578	...
Scrap	110	3 978	6 772	...	...
<b>South Africa</b>					
Ores & concentrates	8 099	24	8	742	4 710
Matte & cement	7 405	1 538	8 169	3 095	3 018
Unwrought	21	210	162	391	954
Unwrought alloys	438	283	541	286	237
Scrap	759	1 894	8 583	8 562	4 410

## Imports of Copper

tonnes

Country	1990	1991	1992	1993	1994
Tunisia					
Unwrought	503	1 036	1 212	1 471	...
Zambia					
Ores & concentrates (d)	17 291	13 240	9 450	21 424	13 786
Canada					
Ores & concentrates (d)	30 167	69 809	96 363	132 716	180 882
Unwrought	9 456	16 334	30 098	30 028	34 083
Unwrought alloys	3 274	3 594	3 379	2 474	2 770
Scrap	65 540	47 704	42 182	53 711	98 452
Cuba					
Unwrought	8 100	5 000	3 000	...	...
Mexico					
Unwrought	11 574	31 700	33 634	45 394	...
Scrap	17 662	10 414	3 877	7 463	...
USA					
Ores & concentrates (d)	91 493	60 766	102 122	36 957	81 900
Matte (d)	7 813	1 732	6 116	1 242	...
Unwrought					
Unrefined	44 668	60 750	58 632	99 378	77 300
Refined	261 672	288 586	289 078	344 179	470 000
Alloys	2 289	3 200	12 975	11 887	...
Scrap	134 615	125 855	168 729	199 850	166 700
Argentina					
Unwrought, refined	10 127	27 451	40 667	40 334	40 224
Brazil					
Ores & concentrates	351 892	408 029	414 517	393 605	...
Unwrought	49 265	75 919	80 513	67 239	...
Scrap	4 141	2 920	2 178	3 081	...
Colombia					
Unwrought	581	1 288	858	1 024	...
Venezuela					
Unwrought					
Refined	11 882	20 890	18 643	13 762	...
Alloys	163	306	665	403	...
China					
Ores & concentrates	242 197	309 786	340 093	241 134	250 000
Unwrought	40 251	113 967	378 996	362 396	121 396
Scrap	21 729	78 358	491 411	568 642	...
Hong Kong					
Unwrought	7 097	20 337	56 195	55 046	23 266
Scrap	46 639	92 467	201 487	163 225	158 762
India (e)					
Unwrought	72 049	49 740	52 431	88 960	...
Scrap	80 201	64 154	51 470	97 784	...
Indonesia					
Unwrought	49 456	49 322	51 812	48 432	...
Unwrought alloys	958	527	3 914	1 847	...
Scrap	1 806	3 232	2 634	4 634	...
Japan					
Ores & concentrates	3 522 535	3 786 873	3 469 611	3 740 807	3 457 054
Matte & cement	3 110	438	90	401	1 945
Unwrought	646 210	658 722	400 657	403 463	402 723
Unwrought alloys	6 841	10 893	7 812	12 953	9 662
Scrap	126 662	153 426	97 672	142 887	156 367
Korea, Republic of					
Ore	368 402	429 317	244 173	571 187	426 421
Matte & cement	8 487	3 530	1 972	2 746	2 448
Unwrought	176 006	199 673	222 515	258 871	351 783
Scrap	287 313	220 544	156 562	132 209	123 278
Malaysia					
Unwrought	50 173	67 103	80 187	94 489	...
Pakistan (g)					
Unwrought	1 818	6 230	3 804	4 220	...
Scrap	2 784	3 222	4 679	3 660	...

**Imports of Copper**

tonnes

Country	1990	1991	1992	1993	1994
Philippines					
Concentrates	187 398	272 910	270 552	371 318	...
Unwrought	6 092	4 225	9 958	20 457	...
Saudi Arabia					
Unwrought	50 716	51 335	58 038	...	...
Singapore					
Unwrought	66 018	84 053	135 979	106 684	93 805
Scrap	45 843	14 748	18 720	16 480	16 178
Taiwan					
Ores & concentrates	10 625	301	400	0	—
Unwrought	256 166	404 984	431 270	489 173	558 851
Scrap	15 333	39 596	23 819	16 769	15 424
Thailand					
Unwrought	53 725	68 953	91 319	122 544	...
Scrap	2 450	1 331	5 104	6 106	...
Australia (g)					
Ores & concentrates	5 867	3 366	14 206	45 354	...
Unwrought	6 446	909	2 023	2 307	...
Scrap	3 034	5 362	4 485	3 210	...
New Zealand (g)					
Unwrought	4 416	5 031	3 973	5 234	6 090

## Note(s):

- (1) In this table the term 'unwrought' copper corresponds to item 682.1 of the Standard International Trade Classification (Revision 3) and includes both unrefined (including blister) and refined copper
  - (2) The term 'unwrought' as used here includes alloys unless these are separately specified. The term 'scrap' includes scrap alloys
- (a) BGS estimates, based on known exports from certain countries
  - (b) Data for the Federal Republic of Yugoslavia only
  - (c) Including semi-manufactures
  - (d) Cu content
  - (e) Years ended 31 March following that stated
  - (f) As from 1992 data is for Serbia and Montenegro only
  - (g) Years ended 30 June of that stated

## Production of Diamond

carats

Country	1990	1991	1992	1993	1994
Russia	—	—	*18 000 000	*16 000 000	*17 000 000
Soviet Union	*24 000 000	*20 000 000	—	—	—
Angola	1 280 000	961 000	1 300 000	151 000	126 000
Botswana	17 351 000	16 506 000	15 946 000	14 730 000	15 538 000
Central African Republic	418 667	429 734	414 277	494 922	*495 000
Ghana	636 503	687 736	694 029	590 821	739 969
Guinea	127 286	*97 000	(b) 195 066	(b) 472 049	*500 000
Ivory Coast (a)	*12 000	*15 000	*15 000	*15 000	*15 000
Liberia	*100 000	*100 000	*155 000	*150 000	...
Namibia	762 837	1 186 874	1 549 260	1 141 352	1 312 348
Sierra Leone	78 000	251 534	344 082	200 300	255 000
South Africa	8 708 231	8 431 389	10 177 283	10 324 025	10 853 653
Swaziland	42 488	57 420	50 547	61 686	...
Tanzania	74 480	99 762	67 304	40 847	17 177
Zaire	19 427 551	*18 300 000	13 501 450	15 626 000	16 252 000
Zimbabwe	—	—	40 654	43 850	173 588
Brazil	1 542 241	1 546 800	1 285 402	*1 300 000	...
Guyana	15 279	29 290	45 980	50 004	35 120
Venezuela	336 976	337 022	477 164	337 515	558 400
China	*1 000 000	*1 000 000	*1 000 000	*1 080 000	*1 080 000
India	18 121	17 660	18 000	*19 000	...
Indonesia	*30 000	*32 000	*27 000	*27 000	...
Australia	34 662 000	35 956 000	40 173 000	41 882 000	43 790 000
World total	110 600 000	106 000 000	105 500 000	104 700 000	110 300 000

Note(s):

(1) This table does not show production of synthetic diamond

(a) Excluding artisanal production smuggled out of the country

(b) Including artisanal production

**Exports of Diamond**

carats

Country	1990	1991	1992	1993	1994
United Kingdom					
Rough	34 676 265	42 000 201	33 130 647	58 187 659	38 325 936
Cut	362 307	210 863	135 153	174 052	1 693 999
Industrial	27 054 112	13 675 479	7 594 918	4 123 611	8 178 825
Dust	25 069 200	20 858 820	16 277 700	19 201 420	32 467 050
Belgium-Luxembourg					
Rough	60 624 921	76 041 911	68 624 367	84 245 755	...
Cut	4 425 511	4 743 900	4 661 404	5 267 466	...
Industrial	19 131 379	12 493 222	11 289 033	9 965 023	...
Dust	20 113 060	16 413 585	15 582 490	18 281 675	...
France					
Rough	9 285	6 508	11 448	...	153
Cut	30 106	24 835	24 311	...	35 862
Industrial	53 345	128 957	30 533	...	26 843
Dust	2 324 495	1 490 435	1 751 985	...	22 233 995
Germany, Federal Republic of					
Industrial	337 547	136 038	96 221	188 635	...
Dust	17 840 000	21 520 000	22 855 000	38 515 000	...
Other	130 629	137 392	155 686	136 067	...
Irish Republic					
Industrial	9 860 000	1 075 000	7 865 000	...	...
Italy					
Industrial	404 237	186 613	50 573	290 000	...
Dust	...	3 000 000	1 965 000	...	...
Other	127 179	274 430	635 569	885 000	...
Netherlands					
Rough	211 275	184 059	156 990	82 070	...
Cut	60 478	56 741	61 062	75 500	...
Industrial	526 887	228 287	107 506	171 707	...
Dust	246 130	705 875	281 005	525 735	...
Portugal	£44 636 000	£48 559 000	£40 292 000	£46 044 000	...
Spain					
Industrial	257 189	223 474	108 165	214 143	...
Other	3 087	2 849	920	3 248	...
Austria					
Industrial	285 000	965 000	435 000	100 000	275 000
Other	35 000	150 000	45 000	30 000	95 000
Finland					
Industrial	5 000	10 000	...	80 000	...
Other	30 000	20 000	5 000	25 000	...
Malta	£2 292 000	£1 546 000	£429 000	£30 000	...
Russia	—	—	8 496 000	11 303 000	...
Soviet Union					
Diamond (b)	*563 700	*688 100	—	—	—
Dust (b)	*12 901 400	*6 985 900	—	—	—
Sweden					
Industrial	£86 000	£61 000	£32 000	£53 000	...
Other	£7 028 000	£734 000	£1 200 000	£749 000	...
Switzerland					
Industrial	480 000	285 000	10 000	15 000	1 345 000
Dust	29 115 000	25 865 000	28 560 000	35 840 000	39 265 000
Other	10 025 000	7 355 000	5 650 000	6 350 000	5 095 000
Central African Republic					
Gem	312 438	305 950	311 684	390 137	...
Industrial	104 398	122 141	102 245	104 785	...
Mauritius	£14 055 600	£14 441 800	£12 001 100	...	...
Namibia	779 395	1 134 270	1 326 114	1 314 018	1 130 768
Sierra Leone	89 600	250 170	313 300	155 500	...
South Africa (c)					
Industrial	£25 438 000	£21 817 000	(f) ...	(f) ...	(f) ...
Other	£875 220 000	£769 661 000	£1 175 759 000	£1 932 457 000	£1 763 497 000
Tunisia					
Industrial	145 000	70 000	...	...	...
Other	755 000	455 000	...	...	...

## Exports of Diamond

carats

Country	1990	1991	1992	1993	1994
Canada					
Cut	65 513	29 303	38 460	28 834	43 986
of which: Re-exports	53 584	19 928	26 117	21 551	25 866
Industrial	43 105	82 252	44 890	15 857	62 115
of which: Re-exports	28 122	56 754	25 172	15 745	42 732
Dust	3 720 527	2 887 771	5 878 169	504 994	1 030 164
of which: Re-exports	3 315 615	2 785 047	5 449 978	382 776	835 589
USA					
Rough	1 707 593	2 702 270	3 028 999	...	...
of which: Re-exports	1 543 797	2 239 814	2 361 803	...	...
Cut	1 003 760	1 010 609	916 185	...	...
of which: Re-exports	797 209	839 638	643 264	...	...
Industrial	3 320 638	4 273 235	6 197 790	...	...
of which: Re-exports	2 010 845	2 246 959	3 043 249	...	...
Dust	2 983 475	3 254 850	2 957 464	...	...
of which: Re-exports	489 801	404 524	1 201 707	...	...
Brazil					
Rough	*250 000	*200 000	...	...	...
Gem	51 375	...	...	...	...
China					
Industrial	71 610	40 240	1 436 035	8 096 650	...
Other	228 850	206 060	309 100	409 415	...
Hong Kong					
Rough (e)	573 026	361 343	1 217 168	826 532	2 045 003
Cut	1 322 371	1 461 352	1 607 064	1 664 653	2 017 780
of which: Re-exports	1 312 355	1 456 298	1 597 460	1 643 536	1 997 075
Industrial (e)	193 154	215 606	132 319	35 419	2 199 571
India (d)					
Gem	8 274 607	8 026 725	10 252 715	13 499 544	...
Israel					
Industrial	£2 761 000	£1 932 000	£1 053 000	£928 000	...
Other	£1 965 182 000	£1 883 856 000	£2 070 402 000	£2 689 837 000	...
Japan					
Industrial	120 509	598 841	1 366 694	1 165 273	2 144 122
Dust	13 011 974	6 426 903	6 270 220	9 100 802	8 504 300
Other	2 973	2 905	53 170	51 418	5 720
Korea, Republic of	2 400	2 845	306 140	12 600	50 000
Malaysia					
Cut	...	£40 880 000	£43 372 000	£51 883 000	...
Other	...	£1 206 000	£1 294 000	£696 000	...
Singapore					
Rough	£969 000	£217 000	—	£42 000	£36 000
of which: Re-exports	£969 000	£201 000	—	£42 000	—
Cut	£29 436 000	£55 464 000	£45 626 000	£32 254 000	£32 393 000
of which: Re-exports	£28 952 000	£55 178 000	£44 467 000	£30 861 000	£31 732 000
Industrial	£558 000	£721 000	£11 336 000	£56 302 000	£46 187 000
of which: Re-exports	£483 000	£654 000	£11 259 000	£54 103 000	£46 044 000
Sri Lanka					
Industrial	27 807	8 821	14 981	144 043	18 886
Other	948 674	778 139	288 173	3 002 380	417 783
Taiwan					
Industrial	—	1 610 000	2 185 000	7 725 000	2 115 000
Dust	95 000	1 530 000	43 245 000	18 625 000	11 950 000
Other	60 000	15 395 000	150 000	30 000	165 000
Thailand					
Industrial	72 514	82 138	24 884	275 879	...
Dust	35 807 500	5 455 400	...	...	...
Other	747 744	924 660	3 897 290	12 490 873	...
Australia					
Rough	...	...	...	32 009 000	33 633 000
Gem (a)	911 000	1 485 000	954 000	668 000	3 022 000
Industrial	110 000	127 000	198 000	167 000	174 000

**Exports of Diamond**

carats

Country	1990	1991	1992	1993	1994
New Zealand					
Cut	£536 000	£717 000	£431 000	£704 000	£199 000
of which: Re-exports	£505 000	£593 000	£382 000	£700 000	£199 000

## Note(s):

- (1) Carats have been used as the unit in this table except where the only obtainable figure is the value. In these cases the national currency figure has been converted to £ sterling
  - (2) See explanatory notes at the front of the volume regarding currency conversion
- (a) Excluding unsorted rough diamonds
  - (b) BGS estimates, based on known imports into certain countries
  - (c) Values shown are for the common customs area
  - (d) Years ended 31 March following that stated
  - (e) Re-exports
  - (f) Included with 'other' diamonds



## Imports of Diamond

carats

Country	1990	1991	1992	1993	1994
United Kingdom					
Industrial	£40 786 000	£14 303 092	£10 423 189	£252 033 000	£56 449 830
Other	£2 037 754 000	£1 928 425 927	£1 803 221 578	£2 465 110 000	£2 584 688 955
Belgium-Luxembourg					
Rough	62 928 645	70 841 435	65 094 082	85 548 262	...
Cut	4 270 948	4 577 689	4 247 970	5 058 935	...
Industrial	22 491 771	27 221 175	24 452 829	25 704 141	...
Dust	27 476 800	20 170 745	23 046 525	28 681 045	...
France					
Rough	40 446	36 370	18 591	...	23 970
Cut	314 213	219 165	199 890	...	241 319
Industrial	219 801	268 256	185 234	...	119 955
Dust	7 581 500	7 088 875	8 597 390	...	14 090 090
Germany, Federal Republic of					
Rough	18 339	6 332	4 927	702	...
Cut	577 768	562 680	463 672	426 688	...
Industrial	1 067 101	691 414	936 707	560 512	...
Dust	39 650 000	41 800 000	46 460 000	44 190 000	...
Greece					
Industrial	149 400	80 450	20 000	60 000	...
Dust	3 525 000	3 695 000	...	...	...
Other	113 815	166 077	475 000	960 000	...
Irish Republic					
Industrial	2 725 000	38 770 000	12 835 000	...	...
Dust	6 000 000	5 550 000	4 250 000	4 400 000	...
Other	1 100 000	865 000	2 250 000	...	...
Italy					
Industrial	490 569	367 437	237 651	...	...
Dust	35 416 890	33 330 000	111 325 000	...	...
Other	304 087	337 198	876 095	...	...
Netherlands					
Rough	331 724	124 387	78 790	42 475	...
Cut	158 022	113 429	86 757	41 460	...
Industrial	380 351	274 733	239 973	262 299	...
Dust	1 089 380	1 038 345	1 054 830	1 672 360	...
Portugal	£36 685 000	£30 687 000	£26 750 000	£41 235 000	...
Spain					
Rough	3 438	1 244	55	1 217	...
Industrial	113 482	623 865	964 755	295 606	...
Dust	6 463 575	6 398 625	9 014 630	16 266 410	...
Other	320 395	120 066	571 870	634 377	...
Austria					
Industrial	205 000	130 000	2 010 000	235 000	250 000
Dust	5 940 000	7 315 000	6 965 000	8 070 000	11 975 000
Other	110 000	35 000	625 000	175 000	185 000
Bulgaria (a)	*118 600	*21 700	*13 900	...	...
Czechoslovakia (a)	*32 300	*5 300	*4 300	—	—
Finland					
Industrial	190 000	95 000	140 000	70 000	...
Other	25 000	15 000	5 000	20 000	...
German Democratic Republic (a)	*10 900	—	—	—	—
Hungary					
Industrial	4 103	...	...	...	...
Malta					
Rough	£2 943 000	£2 556 000	£1 568 000	£199 000	...
Industrial	£31 000	£1 000	£114 000	£1 262 000	...
Norway					
Industrial	105 000	30 000	210 000	330 000	205 000
Other	20 000	10 000	20 000	30 000	35 000
Romania (a)	*557 700	*23 500	...	...	...
Sweden					
Industrial	£1 092 000	£632 000	£313 000	£407 000	...
Other	£5 030 000	£3 919 000	£3 267 000	£3 400 000	...

## Diamond

**Imports of Diamond**

carats

Country	1990	1991	1992	1993	1994
Switzerland					
Industrial	270 000	255 000	385 000	410 000	580 000
Dust	38 665 000	38 685 000	38 950 000	47 090 000	55 705 000
Other	9 810 000	8 270 000	6 115 000	5 870 000	5 260 000
Turkey					
Industrial	1 245 000	115 000	50 000	180 000	35 000
Other	585 000	1 275 000	4 100 000	3 440 000	920 000
Yugoslavia (e)					
Industrial	£590 000	(d) £183 000	£145 000	...	...
Other	£63 000	(d) —	£19 000	...	...
Algeria					
Industrial	45 000	...	...	...	...
Mauritius					
Industrial	1 409 200	£432 700	£130 000	...	...
Other	12 473 200	£12 670 900	£11 394 500	...	...
South Africa					
Rough	2 089 930	4 192 565	179 960	834 050	710 830
Cut	19 895	16 825	10 195	5 290	6 370
Industrial	888 270	1 194 635	866 650	1 177 070	965 335
Tunisia					
Industrial	145 000	80 000	...	...	...
Dust	715 000	580 000	...	...	...
Other	610 000	325 000	...	...	...
Zambia					
Industrial	50 000	435 000	...	...	...
Canada					
Cut	197 029	240 826	194 890	181 805	231 605
Industrial	2 016 843	1 023 704	1 088 719	1 030 636	1 516 829
Dust	243 957	226 216	221 625	303 687	356 946
Other	£28 614 000	£25 243 000	£24 747 000	£29 618 000	£21 562 000
Costa Rica					
Industrial	55 000	60 000	25 000	...	...
Mexico					
Industrial	15 200 000	...	1 960 000	...	...
Dust	30 495 000	...	21 830 000	...	...
Panama	...	145 000	290 000	185 000	...
USA					
Rough	1 285 664	1 846 237	1 638 784	1 784 295	1 440 000
Cut	6 304 959	6 691 310	7 724 266	9 734 958	10 680 000
Industrial	12 478 222	8 840 456	11 901 572	7 196 508	...
Dust	12 200 699	10 863 584	10 736 444	8 077 382	11 000 000
Brazil					
Cut	5 000	5 000	...	...	...
Industrial	235 000	85 000	...	...	...
Dust	5 500 000	4 870 000	...	...	...
Chile					
Industrial	197 450	255 835	281 190	222 960	234 825
Colombia					
Industrial	25 000	380 000	...	...	...
Other	50 000	...	...	...	...
Venezuela					
Cut	55 000	410 000	1 910 000	3 700 000	...
Industrial	1 160 000	2 175 000	3 810 000	...	...
Abu Dhabi	80 000	70 000	95 000	210 000	...
China					
Industrial	261 865	430 290	2 104 160	1 425 760	...
Dust	...	...	7 820 000	2 883 250	...
Other	412 970	293 560	1 073 570	947 240	(f) 2 055 000
Cyprus	£1 688 000	£4 622 000	£6 399 000	£6 293 000	£8 890 000
Hong Kong					
Rough	478 921	878 085	563 316	957 167	1 247 478
Cut	2 451 193	2 733 564	3 359 645	4 648 500	5 765 215
Industrial	88 423	217 445	830 160	748 583	2 846 977

## Imports of Diamond

carats

Country	1990	1991	1992	1993	1994
India (c)					
Rough	52 750 651	63 895 598	80 018 535	79 122 151	...
Israel					
Rough	£1 435 621 000	£1 290 261 000	£1 465 266 000	£1 995 587 000	...
Cut	£278 187 000	£240 524 000	£278 226 000	£362 328 000	...
Industrial	£10 990 000	£6 840 000	£6 387 000	£8 921 000	...
Dust	£4 002 000	£4 040 000	£1 707 000	£4 810 000	...
Japan					
Rough	38 348	34 038	37 887	36 976	4 226
Cut	3 266 006	3 044 706	2 869 714	3 261 105	3 714 455
Industrial	691 293	710 149	684 684	1 173 477	500 976
Dust	1 883 547	2 158 125	1 538 584	1 540 643	1 838 027
Korea, Republic of					
Industrial	63 640	15 439 110	11 465 885	461 985	100 000
Dust	111 625	38 940	71 170	1 701 590	40 000
Other	36 005	35 540	47 320	97 005	10 000
Malaysia					
Rough	£34 634 000	£37 190 000	£42 496 000	(g) £76 819 000	...
Cut	£14 264 000	£17 080 000	£26 542 000	...	...
Industrial	...	£294 000	£557 000	£1 274 000	...
Philippines					
Industrial	59 350	55 523	58 950	...	...
Qatar	7 915 000	505 000	18 505	365 945	...
Saudi Arabia					
Industrial	85 000	30 000	...	...	...
Other	85 000	50 000	...	...	...
Singapore					
Rough	£1 515 000	£136 000	£42 000	£81 000	£42 000
Cut	£72 567 000	£118 129 000	£108 548 000	£106 545 000	£156 528 000
Industrial	£7 152 000	£1 688 000	£24 900 000	£93 312 000	£37 700 000
Sri Lanka					
Industrial	532 671	93 776	84 844	140 217	129 631
Other	443 803	655 437	426 407	1 328 759	1 646 553
Taiwan					
Industrial	25 000	290 000	265 000	650 000	235 000
Dust	17 070 000	19 125 000	14 080 000	36 200 000	23 805 000
Other	4 940 000	1 850 000	105 000	175 000	470 000
Thailand					
Rough	1 180 871	429 958	1 065 246	10 923 016	...
Cut	3 501 382	2 403 514	3 885 311	12 087 341	...
Industrial	423 385	305 639	8 933 958	376 843	...
Dust	6 718 070	2 920 930	11 859 920	21 709 740	...
Australia					
Rough	20 000	9 000	10 000	10 000	10 000
Gem	152 000	167 000	144 000	124 000	178 000
Industrial	1 542 000	2 546 000	1 544 000	1 299 000	1 388 000
Dust	823 000	741 000	854 000	924 000	1 131 000
New Zealand (b)					
Industrial	£43 000	£9 000	£25 000	£57 000	£55 000
Other	£5 179 000	£3 591 000	£3 963 000	£4 638 000	£5 663 000

## Note(s):

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  - (2) See explanatory notes at the front of the volume regarding currency conversion
- (a) BGS estimates, based on known exports from certain countries  
(b) Years ended 30 June of that stated  
(c) Years ended 31 March following that stated  
(d) Data for the Federal Republic of Yugoslavia only  
(e) As from 1992 data is for Serbia and Montenegro only  
(f) Including industrial  
(g) Including cut

**Production of Diatomite**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	240	220	120	220	180
Denmark (a)					
Diatomite	*1 000	*1 000	*1 000	*1 000	*1 000
Moler (d)	*97 000	*95 000	*95 000	*95 000	*95 000
France (b)	*250 000	*250 000	*250 000	*250 000	*250 000
Germany, Federal Republic of	49 800	44 300	47 300	*50 000	*52 000
Italy	*25 000	*23 000	*26 000	*25 000	*25 000
Portugal	2 270	2 410	1 850	1 860	2 150
Spain (b)	108 000	*60 000	36 000	*38 000	*36 000
Georgia	—	—	*75 000	*50 000	...
Iceland	24 856	23 016	19 946	*19 000	*20 000
Romania	*40 000	*30 000	14 530	9 972	10 100
Soviet Union (g)	*250 000	*220 000	*190 000	*150 000	*120 000
Yugoslavia (f)	6 119	*4 000	—	—	—
Algeria	4 620	3 629	2 671	3 471	*4 000
Kenya	750	2 395	2 142	*2 000	*2 000
South Africa	2 798	2 352	576	—	—
Canada	4 000	2 500	1 800	600	...
Costa Rica	6 000	*12 000	*12 000	*12 000	*12 000
Mexico	51 084	45 966	46 443	46 077	*46 000
USA (c)	631 000	610 000	595 000	599 000	613 000
Argentina	4 254	6 132	5 363	3 096	*3 000
Brazil (e)	18 565	13 566	17 986	*18 000	*18 000
Chile	3 877	5 557	5 897	5 774	10 129
Colombia	3 100	3 890	4 356	*4 000	...
Peru	*20 000	25 500	*25 000	*25 000	*25 000
Korea, Republic of	55 445	91 126	76 775	*67 000	*70 000
Thailand	4 593	7 328	10 425	*8 000	*9 000
Australia	*10 000	*11 000	*11 000	*11 000	*11 000
World total	1 670 000	1 600 000	1 570 000	1 500 000	1 490 000

## Note(s):

(1) In addition to the countries listed, former Czechoslovakia, Hungary and Japan are believed to produce diatomite

(a) Sales

(b) Including tripoli

(c) Sold or used by producers

(d) Moler is an impure diatomite containing a large proportion of clay

(e) Including beneficiated and directly shipped material

(f) As from 1992 data is for Serbia and Montenegro only

(g) Dissolved in December 1991. Other than data for Georgia, no information is available on which to estimate for other countries

## Exports of Diatomite

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	2 556	539	1 092	543	699
Belgium-Luxembourg	2 202	2 665	3 359	2 630	...
Denmark	85 978	85 424	*87 500	84 270	80 246
France	41 661	35 767	36 595	28 062	30 323
Germany, Federal Republic of	2 509	1 930	2 138	2 178	...
Italy	2 765	1 872	1 343	2 335	...
Netherlands	866	778	1 552	995	...
Spain	4 658	2 250	6 334	4 759	...
Austria	5 780	5 914	6 021	4 701	7 215
Czechoslovakia (a)	*5 100	*4 700	*4 800	—	—
Czech Republic (a)	—	—	—	*5 100	*4 600
Hungary	(a) *400	(a) *100	188	108	102
Iceland	24 251	21 788	19 172	19 555	24 560
Sweden	188	37	152	330	...
Turkey	968	640	—	57	28
Yugoslavia (e)	1 340	(d) —	...	...	...
Algeria	965	452	—	...	...
Mexico	5 106	7 727	9 211	9 650	8 924
USA	144 459	152 599	163 377	164 619	157 000
Chile	1 461	2 205	5 083	2 799	3 739
China	19 528	37 659	85 165	77 093	...
Hong Kong (b)	1 403	1 837	3 013	5 719	6 288
Japan	1 863	2 374	3 534	2 631	2 760
Korea, Republic of	623	183	256	36	7
Singapore (b)	778	412	384	736	608
Taiwan	195	528	482	162	159
Australia (c)	260	154	347	340	...

(a) BGS estimates, based on known imports into certain countries

(b) Re-exports

(c) Years ended 30 June of that stated

(d) Data for the Federal Republic of Yugoslavia only

(e) As from 1992 data is for Serbia and Montenegro only

**Imports of Diatomite**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	35 718	33 471	36 337	12 102	13 814
Belgium-Luxembourg	16 011	19 684	16 527	18 096	...
Denmark	4 505	4 915	4 757	6 105	5 202
France	20 160	17 458	20 483	21 184	11 716
Germany, Federal Republic of	46 043	50 795	50 482	45 762	...
Greece	2 771	2 670	2 307	2 007	...
Irish Republic	214	276	233	392	...
Italy	7 487	7 240	7 798	6 796	...
Netherlands	25 398	22 214	22 484	10 488	...
Portugal	4 528	3 406	3 497	726	...
Spain	4 073	3 702	4 115	3 944	...
Austria	13 657	13 404	14 626	14 621	16 785
Bulgaria (b)	*2 200	*1 600	*1 300	*500	...
Croatia	—	—	387	439	...
Czechoslovakia (b)	*2 000	*1 400	*1 400	—	—
Finland	3 610	2 913	2 782	3 119	...
German Democratic Republic (b)	*1 000	—	—	—	—
Hungary	121	...	1 140	871	2 604
Norway	1 922	1 602	1 663	998	1 396
Poland (b)	*1 900	*2 200	*4 200	*6 700	...
Romania (b)	*1 100	*1 300	*800	*1 400	...
Sweden	2 186	2 351	2 362	3 047	...
Switzerland	6 877	6 073	5 254	5 456	4 838
Turkey	383	380	391	659	703
Yugoslavia (f)	1 422	(e) 841	548	...	...
Algeria	25	100	...	...	...
Cameroon	*287	*383	...	*381	*352
Gabon	212	...	...	...	...
Morocco	697	362	1 034	...	...
South Africa	2 667	2 407	2 592	3 327	3 873
Tunisia	3 183	3 699	909	...	...
Zambia	401	...	...	...	...
Zimbabwe	970	...	...	...	...
Canada	20 951	22 250	21 389	22 265	23 954
Costa Rica	316	143	180	...	...
El Salvador	255	301	390	522	...
Guatemala	296	427	820	...	...
Honduras	571	470	372	...	...
Mexico	519	406	498	1 205	1 311
Panama	748	532	588	643	...
USA	689	436	182	1 822	379
Argentina	1 788	2 637	...	...	...
Brazil	3 320	2 847	2 377	3 186	...
Colombia	2 132	1 061	1 874	1 423	...
Ecuador	245	327	3 579	125	...
Peru	1 796	536	...	1 125	...
Venezuela	2 798	4 010	4 714	3 139	...
China	765	1 847	2 352	4 608	...
Cyprus	239	176	175	217	190
Hong Kong	2 149	2 855	2 960	3 781	3 407
India (d)	1 185	1 210	1 148	1 030	...
Indonesia	2 071	1 591	2 379	3 450	...
Iran (c)	482	5 064	602	396	...
Israel (b)	*1 000	*1 000	*800	*1 300	...
Japan	4 501	5 517	5 128	4 626	5 864
Korea, Republic of	414	159	1 097	3 779	1 761
Malaysia	...	1 716	1 944	...	...
Pakistan (a)	257	70	38	261	...
Philippines	738	211	647	...	...
Saudi Arabia	1 190	2 674	1 693	...	...
Singapore	1 943	2 090	1 541	2 290	2 180

**Imports of Diatomite**

tonnes

Country	1990	1991	1992	1993	1994
Taiwan	6 117	6 920	8 958	13 746	15 371
Thailand	275	243	375	408	...
Australia (a)	6 452	6 623	7 465	7 027	...
New Zealand (a)	2 654	2 002	1 847	1 414	1 571

- (a) Years ended 30 June of that stated  
 (b) BGS estimates, based on known exports from certain countries  
 (c) Years ended 20 March following that stated  
 (d) Years ended 31 March following that stated  
 (e) Data for the Federal Republic of Yugoslavia only  
 (f) As from 1992 data is for Serbia and Montenegro only

**Production of Feldspar**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom (g)	6 257	6 417	8 243	6 956	8 400
France	395 840	386 000	282 000	274 000	390 000
Germany, Federal Republic of	337 600	328 800	324 700	*380 000	390 000
Greece	17 608	11 800	26 600	22 210	...
Italy	1 605 431	1 354 191	1 387 968	1 555 000	1 650 000
Portugal	77 329	93 702	99 645	90 547	*90 000
Spain	214 152	192 000	200 000	239 000	250 000
Austria	8 788	10 429	11 059	8 492	4 883
Czech Republic	—	—	—	*150 000	...
Finland	50 905	47 225	16 396	45 141	41 000
Macedonia	—	—	19 294	13 201	3 282
Norway	63 440	*65 000	*65 000	*65 000	67 500
Poland	*45 000	*40 000	*45 000	34 000	...
Romania	*45 000	*40 000	27 715	*25 000	10 400
Russia	—	—	*100 000	*70 000	*70 000
Slovakia	—	—	—	22 477	...
Soviet Union	*300 000	*250 000	—	—	—
Sweden (e)	41 197	32 945	34 598	*30 000	...
Turkey	182 266	234 831	284 645	519 762	*500 000
Yugoslavia (c)	43 000	*40 000	5 111	*5 000	...
Algeria	4 940	4 499	4 647	6 500	...
Egypt (d)	21 299	21 113	32 326	*16 386	39 745
Kenya	1 290	*1 200	*1 200	*1 200	*1 200
Morocco	*1 000	*1 000	*1 000	*1 000	*1 000
Nigeria	714	*700	*700	*700	0
South Africa	56 124	70 324	49 425	56 761	37 156
Zambia	60	*70	113	*100	...
Zimbabwe	2 197	3 820	2 696	1 553	1 617
Guatemala	11 895	6 961	6 113	7 500	...
Mexico	163 011	151 678	159 718	123 512	133 441
USA	630 000	580 000	725 000	770 000	*740 000
Argentina	28 039	42 270	48 509	55 764	...
Brazil (f)	61 443	*100 000	*100 000	...	...
Chile	2 980	4 006	5 740	4 149	9 667
Colombia	38 675	75 575	78 446	60 458	*70 000
Ecuador	8 127	2 254	5 505	*5 500	...
Peru	*10 000	*3 000	10 021	11 385	13 354
Uruguay	4 311	3 676	8 211	*8 000	...
Venezuela	100 779	138 369	168 689	220 307	...
Hong Kong	3 820	—	—	—	—
India	54 135	65 089	*65 000	*70 000	...
Indonesia	19 779	13 674	16 719	27 835	...
Iran (b)	32 071	64 754	52 120	76 873	...
Japan	528 201	536 588	434 136	421 000	373 000
Jordan	9 200	2 000	2 000	...	...
Korea, Republic of	237 447	247 969	281 553	*290 000	...
Myanmar (a)	2 562	3 737	1 581	5 555	...
Pakistan	10 249	10 210	19 166	17 034	...
Philippines	46 102	47 979	*45 000	24 233	...
Sri Lanka	9 750	9 908	7 524	*8 000	...
Taiwan	7 321	1 339	2 216	1 716	778
Thailand	311 249	402 641	559 806	568 000	528 000
Uzbekistan	—	—	*80 000	*70 000	...



**Production of Feldspar**

tonnes

Country	1990	1991	1992	1993	1994
Australia	*16 000	*16 000	*15 000	*15 000	...
World total	5 900 000	5 800 000	5 900 000	6 600 000	6 500 000

## Note(s):

(1) In addition to the countries listed, China and Namibia are believed to produce feldspar

- (a) Years ended 31 March following that stated
- (b) Years ended 20 March following that stated
- (c) As from 1992 data is for Serbia and Montenegro only
- (d) Years ended 30 June of that stated
- (e) Sold or used by producers
- (f) Including beneficiated and directly shipped material
- (g) China stone

**Exports of Feldspar**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	2 447	1 017	169	442	473
France	123 367	110 846	92 506	74 961	53 560
Germany, Federal Republic of	33 010	36 678	35 614	72 495	...
Italy	29 132	26 308	23 058	...	...
Netherlands	1 840	1 938	2 118	...	...
Portugal	6 999	(a) 3 427	(a) 1 596	462	...
Spain	9 361	10 800	9 193	14 022	...
Czechoslovakia (b)	*6 300	*6 700	*4 700	—	—
Czech Republic (b)	—	—	—	*2 400	...
Finland	32 770	31 401	28 540	30 867	...
Norway	71 265	79 756	65 688	63 552	61 648
Sweden	24 211	19 549	25 075	21 133	...
Turkey	(a) 96 546	(a) 162 910	(a) 234 430	320 819	469 371
Yugoslavia (g)	6 356	(f) 1 590	...	...	...
South Africa	6 029	2 974	3 526	2 965	2 394
Guatemala (a) (c)	4 993	4 210	6 073	...	...
Mexico	10 307	20 143	14 507	8 030	7 111
USA	24 795	8 604	17 734	19 569	17 300
Brazil	6 660	3 179	2 129	2 551	...
China	222 945	318 804	439 908	728 447	...
Hong Kong	(c) 146 487	(c) 177 932	(a) 201 873	(a) 311 010	(a) 220 867
of which: Re-exports	112 687	151 917	201 873	311 010	220 867
India (d)	38 182	47 894	26 355	29 448	...
Japan	31 331	40 412	34 581	36 232	27 630
Korea, Republic of	24 566	20 805	24 049	23 631	15 817
Singapore (a)	7 524	15 173	14 011	16 575	12 279
of which: Re-exports	7 522	14 581	13 966	16 182	12 122
Thailand	333 739	255 423	338 031	436 954	...
Australia (e)	12 548	20 751	14 354	15 288	...

(a) May include some leucite and nepheline

(b) BGS estimates, based on known imports into certain countries

(c) Including some fluorspar

(d) Years ended 31 March following that stated

(e) Years ended 30 June of that stated

(f) Data for the Federal Republic of Yugoslavia only

(g) As from 1992 data is for Serbia and Montenegro only

## Imports of Feldspar

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	49 010	41 200	36 895	30 850	38 158
Belgium-Luxembourg	19 035	15 525	16 385	17 801	...
Denmark	4 083	3 874	3 644	2 991	3 073
France	32 340	40 228	32 953	50 495	20 765
Germany, Federal Republic of	76 606	95 350	83 554	70 493	...
Greece	7 812	6 532	...	(a) 3 361	...
Irish Republic	43	43	—	501	...
Italy	100 470	158 095	246 388	...	...
Netherlands	12 739	19 641	21 028	15 027	...
Portugal	7 340	(a) 13 041	(a) 13 058	15 985	...
Spain	81 353	73 575	96 450	96 672	...
Austria	4 944	4 472	4 800	5 970	4 813
Croatia	—	—	3 947	6 122	...
German Democratic Republic (a) (b)	*6 300	—	—	—	—
Hungary	304	...	747	41 185	20 636
Norway	233	311	383	243	523
Poland	14 275	11 513	(b) *8 700	(b) *11 600	...
Sweden	5 907	8 270	4 565	5 316	...
Switzerland	14 266	12 462	9 929	10 026	13 714
Yugoslavia (f)	1 393	(e) 20	...	...	...
Algeria (a)	2 650	5 201	...	...	...
Morocco (a)	836	766	...	...	...
Tunisia	2 177	2 418	3 026	...	...
Canada	2 589	2 437	1 919	1 422	1 630
Costa Rica (c)	4 621	4 876	6 209	...	...
Mexico	1 431	979	913	...	...
Panama (a) (c)	3 164	185	3 068	2 400	...
USA	11 318	17 876	12 965	7 054	7 360
Venezuela	803	776	1 328	1 032	...
Hong Kong	(c) 178 243	(c) 185 599	(a) 205 010	(a) 344 551	(a) 209 312
Indonesia	16 723	17 930	26 225	37 307	...
Israel (a) (b)	*3 300	*3 300	*3 200	*4 800	...
Japan	12 636	4 440	2 789	7 583	6 705
Jordan (a) (c)	669	721	1 009	305	...
Korea, Republic of	8 728	6 206	9 435	8 560	4 288
Malaysia	...	97 392	120 847	...	...
Philippines	(a) (c) 6 258	4 246	4 751	...	...
Saudi Arabia	(a) (c) 393	701	928	...	...
Singapore (a)	20 889	33 780	33 264	29 579	27 929
Syria (a) (c)	678	...	1 766	...	...
Taiwan	533 896	590 115	694 693	1 006 412	1 175 321
Thailand (a)	1 679	3 115	5 883	3 877	...
New Zealand (d)	146	257	148	304	617

(a) May include some leucite and nepheline

(b) BGS estimates, based on known exports from certain countries

(c) Including some fluorspar

(d) Years ended 30 June of that stated

(e) Data for the Federal Republic of Yugoslavia only

(f) As from 1992 data is for Serbia and Montenegro only

**Production of Fluorspar**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	118 498	77 903	76 129	70 285	58 000
France	257 896	187 500	130 900	130 000	150 000
Germany, Federal Republic of	85 400	60 900	53 100	*40 000	*40 000
Italy	125 467	104 828	86 279	89 000	84 800
Spain	153 691	112 000	96 000	87 000	107 000
Czechoslovakia	46 966	*40 000	*40 000	—	—
Czech Republic	—	—	—	*22 100	*23 000
German Democratic Republic	*80 000	—	—	—	—
Romania	*12 000	*12 000	*15 000	*15 000	15 000
Russia	—	—	*100 000	*70 000	*60 000
Soviet Union	*380 000	*350 000	—	—	—
Turkey	*10 000	*5 000	3 074	*4 000	4 000
Egypt (c)	1 249	1 526	981	521	514
Kenya	78 510	88 158	81 298	78 725	64 000
Morocco	86 500	74 600	85 500	70 050	85 000
Namibia	27 107	27 816	37 680	43 466	52 226
South Africa	311 032	270 341	259 790	217 778	174 258
Tunisia	40 974	37 580	13 750	—	—
Canada	21 400	—	—	—	—
Mexico	633 814	370 297	286 640	282 988	327 378
USA	*63 500	*58 000	*51 000	*56 000	*49 000
Argentina	24 503	16 462	4 587	4 611	*5 000
Brazil (a)	88 418	81 991	83 696	94 350	76 200
China	1 650 000	*1 700 000	*1 900 000	*1 950 000	*1 800 000
India	23 441	24 139	20 600	21 600	*22 000
Iran (b)	4 767	12 260	9 182	*10 000	*10 000
Kazakhstan	—	—	*100 000	*90 000	*80 000
Korea, Dem. P.R. of	*40 000	*41 000	*41 000	*41 000	*40 000
Korea, Republic of	560	290	70	50	*50
Mongolia	884 000	370 000	277 000	*180 000	*180 000
Pakistan	5 312	*5 300	*5 000	*5 100	*5 000
Thailand	94 757	62 067	56 459	*48 400	*24 000
Uzbekistan	—	—	*100 000	*90 000	*80 000
World total	5 300 000	4 200 000	4 000 000	3 800 000	3 600 000

## Note(s):

(1) In addition to the countries listed, Bulgaria is believed to produce fluorspar

(a) Including beneficiated and directly shipped material

(b) Years ended 20 March following that stated

(c) Years ended 30 June of that stated

**Exports of Fluorspar**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	3 983	3 938	3 871	6 001	5 798
Belgium-Luxembourg	4 130	3 753	1 905	—	...
France	40 204	32 045	23 421	20 529	15 763
Germany, Federal Republic of	41 232	33 780	25 667	22 770	...
Italy	4 958	5 955	4 782	936	...
Netherlands	1 704	1 235	864	982	...
Spain	54 787	40 644	15 491	18 845	...
German Democratic Republic (a)	*15 800	—	—	—	—
Sweden	1 514	912	1 100	1 493	...
Kenya	65 041	...	82 000	71 000	...
Morocco	81 748	76 300	78 000	60 000	...
South Africa	245 695	247 338	250 879	224 278	244 190
Tunisia	1 945	1 039	60	...	...
Canada	22 620	1 599	607	483	50
Mexico	379 086	225 218	150 275	110 381	147 502
USA	16 261	74 590	14 277	13 179	23 490
China	1 094 047	933 694	1 187 840	1 375 277	1 220 000
Japan	338	582	578	644	904
Thailand	79 695	84 210	60 078	46 041	...

(a) BGS estimates, based on known imports into certain countries

**Imports of Fluorspar**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom (b)	*17 300	*7 600	*11 900	*23 600	...
Belgium-Luxembourg	20 442	12 725	16 754	11 021	...
Denmark	453	448	469	11 931	11 066
France	18 440	28 571	6 253	15 243	7 427
Germany, Federal Republic of	225 582	205 145	216 202	210 214	...
Greece	20 288	4 482	4 852	13 116	...
Italy	115 071	91 746	95 026	93 635	...
Netherlands	30 520	18 122	22 347	30 732	...
Portugal	1 963	603	1 401	1 469	...
Spain	5 015	4 714	9 123	6 792	...
Austria	19 756	15 994	10 859	6 169	5 213
Bulgaria (b)	*500	...	...	...	...
Finland	8 654	6 709	12 209	6 334	...
Hungary	1 706	...	1 072	2 061	5 177
Norway	47 070	56 994	47 318	36 548	44 865
Poland	9 129	5 250	...	...	...
Romania (b)	*17 200	*16 200	*8 000	*4 200	...
Russia	—	—	149 946	88 968	...
Soviet Union (b)	*165 700	*2 500	—	—	—
Sweden	11 407	9 550	8 143	13 467	...
Switzerland	998	575	597	409	351
Turkey	595	1 003	1 146	1 892	1 515
Ukraine (b)	—	—	*31 200	*17 400	...
Yugoslavia (g)	6 036	(f) 695	929	...	...
Egypt (a) (c)	...	...	5 788	8 183	...
Tunisia	6 575	13 337	34 808	...	...
Canada	151 255	112 093	91 667	80 728	87 370
Costa Rica (c)	4 621	4 876	6 209	...	...
Mexico	33 308	...	...	46 021	31 457
Panama (a) (c)	3 164	185	3 068	2 400	...
USA	502 971	368 197	407 304	390 595	492 959
Brazil	137	9 542	14 141	4 272	...
Chile	1 533	4 460	4 456	543	391
Peru	1 420	284	...	275	...
Venezuela	607	479	431	739	...
Hong Kong	(c) 178 243	(c) 185 599	300	...	—
India (e)	41 266	31 839	26 237	38 537	...
Indonesia	3 602	4 672	2 208	1 391	...
Japan	567 023	565 831	528 656	551 184	544 943
Jordan (a) (c)	669	721	1 009	305	...
Korea, Republic of	52 936	72 030	74 017	80 987	93 198
Malaysia	...	2 224	2 409	...	...
Philippines	(a) (c) 6 258	1 687	765	...	...
Saudi Arabia (a) (c)	393	—	928	...	...
Syria (a) (c)	678	...	...	...	...
Taiwan	25 431	25 956	28 483	27 937	47 447
Australia (d)	28 223	19 681	4 805	7 180	...

(a) May include some leucite and nepheline

(b) BGS estimates, based on known exports from certain countries

(c) Including some feldspar

(d) Years ended 30 June of that stated

(e) Years ended 31 March following that stated

(f) Data for the Federal Republic of Yugoslavia only

(g) As from 1992 data is for Serbia and Montenegro only

## Mine Production of Gold

kilograms (metal content)

Country	1990	1991	1992	1993	1994
France	4 236	4 612	2 907	2 155	4 009
Portugal	276	264	149	*150	400
Spain	6 814	7 420	5 887	6 083	5 892
Armenia	—	—	*500	*500	*500
Finland	1 503	1 818	1 663	304	1 380
Georgia	—	—	*1 500	*1 000	1 000
Hungary	*600	*500	*500	*500	*200
Romania	*5 000	*6 000	3 700	4 000	4 000
Russia	—	—	*146 000	*149 500	*147 000
Soviet Union	302 000	*240 000	—	—	—
Sweden	6 326	6 247	6 164	6 548	6 364
Yugoslavia (d) (g)	8 190	(f) 6 920	7 330	3 504	*4 000
Botswana	46	20	165	192	234
Burkina Faso	2 715	2 579	1 151	1 250	...
Burundi	8	25	32	*20	—
Central African Republic	241	191	155	171	150
Ethiopia (b)	848	3 038	2 224	3 387	*3 300
Gabon	150	*150	70	120	75
Ghana	16 563	26 310	31 038	39 234	44 505
Guinea	6 340	4 453	2 113	*2 100	2 100
Ivory Coast	20	*989	*1 665	*1 500	1 800
Kenya	48	34	20	20	20
Liberia (a)	*600	*600	*700	*700	—
Mali	2 355	2 568	3 227	*5 500	5 500
Mauritania	—	—	702	1 266	*1 500
Mozambique	72	394	296	149	336
Namibia	1 634	1 850	2 025	1 953	2 394
Rwanda	2 163	963	*1 000	*1 000	—
Sierra Leone	32	26	93	157	123
South Africa	605 100	601 013	613 036	619 201	579 295
Sudan	150	*150	973	1 600	2 500
Tanzania	1 643	3 851	4 525	3 370	2 861
Uganda	75	776	118	104	3
Zaire	5 224	6 131	2 525	1 502	780
Zambia (c)	129	124	218	266	200
Zimbabwe	16 921	17 820	18 278	18 565	20 512
Canada	169 412	176 552	161 402	153 299	145 980
Costa Rica (e)	72	564	144	...	...
Dominican Republic	4 354	3 160	2 375	354	1 599
Honduras	156	180	163	111	106
Mexico	8 548	8 937	10 412	11 121	14 642
Nicaragua	1 058	1 014	1 188	1 241	1 045
USA	294 189	294 062	330 212	331 013	326 221
Argentina	1 399	1 725	1 106	937	899
Bolivia	5 198	3 501	4 688	10 423	12 790
Brazil	101 728	89 578	85 862	*80 000	*80 000
Chile	27 503	28 879	34 473	33 638	36 896
Colombia	29 353	34 845	32 117	27 469	20 996
Ecuador	10 710	12 200	1 310	940	1 500
French Guiana	870	1 417	2 140	2 795	*2 800
Guyana	1 204	1 844	2 475	9 635	11 678
Peru	9 097	9 987	10 082	*20 000	*30 000
Venezuela	6 334	6 733	8 547	8 709	9 944
China	*100 000	*120 000	*140 000	*160 000	*160 000
India	1 983	1 973	1 762	2 003	2 244
Indonesia	10 653	11 275	37 978	41 576	44 843
Iran	*500	*800	*1 000	417	723
Japan	7 303	8 299	8 893	9 352	9 551
Kazakhstan	—	—	*24 000	*20 000	19 600
Korea, Dem. P.R. of	*5 000	*5 000	*5 000	*500	500
Korea, Republic of (d)	20 760	20 809	23 263	10 443	12 328
Kyrgyzstan	—	—	*1 200	*1 500	2 000

**Mine Production of Gold**

kilograms (metal content)

Country	1990	1991	1992	1993	1994
Malaysia	2 595	2 778	3 513	4 463	4 085
Mongolia	*1 000	*800	*900	*1 200	*2 000
Myanmar (h)	26	35	31	51	139
Oman	54	58	387	431	137
Philippines	24 591	25 916	22 702	25 826	14 611
Saudi Arabia	3 536	4 808	6 150	7 525	5 122
Taiwan (d)	72	—	—	—	—
Tajikistan	—	—	*500	*400	*400
Uzbekistan	—	—	*75 000	*75 000	*70 000
Australia	242 420	235 990	243 545	247 433	255 233
Fiji	4 116	2 810	3 693	3 815	4 111
New Zealand	4 626	6 758	10 531	*11 161	12 000
Papua New Guinea	34 280	60 782	71 190	60 587	59 346
Solomon Islands	53	50	39	...	...
World total	2 133 000	2 132 000	2 233 000	2 253 000	2 220 000

## Note(s):

- (1) In several countries substantial amounts of gold produced in small operations are not recorded in the official statistics used when compiling this table
- (2) In addition to the countries listed, Bulgaria, Cameroon, former Czechoslovakia, Greece, Morocco, Norway and Thailand are believed to produce gold

- (a) Exports
- (b) Years ended 6 July of that stated
- (c) Contained in blister copper, refinery muds and electrolytic copper
- (d) Metal production
- (e) Central Bank purchases
- (f) Excluding data from August to December for the Republic of Croatia
- (g) As from 1992 data is for Serbia and Montenegro only
- (h) Years ended 31 March following that stated



## Exports of Gold

kilograms

Country	1990	1991	1992	1993	1994
United Kingdom					
Metal					
Refined	632 154	547 699	924 143	...	...
Other	15 034	9 726	75 874	(f) 683 719	(f) 436 209
Waste & scrap	248 638	5 490	2 307	2 638	1 256
Belgium-Luxembourg					
Metal	18 929	19 689	22 691	26 089	...
Waste & scrap	£3 068 000	£2 577 000	£3 826 000	£513 000	...
Denmark					
Metal	1 865	961	878	502	410
of which: Re-exports	1 124	381	455	...	...
Waste & scrap	5 507	6 218	3 327	4 157	4 111
of which: Re-exports	1 575	2 088	547	...	...
France					
Metal	40 916	44 377	44 421	42 200	37 578
Waste & scrap	962 268	1 599 937	695 873	728 400	1 262 100
Germany, Federal Republic of					
Metal	44 493	71 517	58 945	62 317	...
Waste & scrap	108 542	32 567	3 013	26 078	...
Irish Republic					
Metal	£49 000	£32 000	£19 000	...	...
Waste & scrap	£1 350 000	£1 485 000	£1 296 000	...	...
Italy					
Metal	5 500	4 421	25 974	...	...
Netherlands					
Metal	1 643	1 083	1 199	6 772	...
Waste & scrap	21 000	3 000	11 000	20 000	...
Spain					
Metal	2 195	2 763	905	4 776	...
Austria					
Metal	313	638	948	15 272	1 227
Waste & scrap	244	115	1 614	520	747
Finland					
Metal	1 914	1 943	1 124	1 032	...
German Democratic Republic					
Metal (c)	*200	—	—	—	—
Norway					
Metal	776	926	1 133	1 197	1 599
Waste & scrap	154	370	384	181	328
Russia					
Metal (c)	—	—	*22 200	*14 100	...
Soviet Union					
Metal (c)	*41 400	*79 700	—	—	—
Sweden					
Metal	7 000	9 000	7 000	9 000	...
Waste & scrap	42 000	39 000	28 000	46 000	...
Switzerland					
Metal	1 104 637	1 040 647	1 187 660	999 059	909 456
Waste & scrap	35 907	94 401	46 723	78 216	8 080
Yugoslavia (i)					
Metal	2 000	(h) 1 000	1 000	...	...
Mozambique					
Metal	63	390	317	113	262
Namibia					
Metal	1 573	1 873	2 049	2 011	2 319
Sierra Leone					
Metal	10	19	51	...	...
South Africa					
Metal	£4 130 000 000	£3 969 000 000	£3 878 000 000	£4 741 000 000	£4 591 000 000
Zaire					
Metal	*384	...	...	...	...
Zimbabwe					
Metal	18 454	16 089	14 324	...	...

## Gold

**Exports of Gold**

kilograms

Country	1990	1991	1992	1993	1994
Canada					
Ores & concentrates (d)	10 816	8 393	6 565	3 869	3 511
Metal	144 930	162 975	212 478	201 462	210 477
Dominican Republic					
Metal	4 354	3 160	2 375	354	1 599
USA					
Ore (b)	328	10	30	216	462
Metal					
Unrefined	88 275	47 534	51 086	...	...
Refined	142 460	177 920	264 383	(g) 725 617	(g) 394 579
Other	8 957	9 646	9 034	...	...
Waste & scrap	67 003	68 102	80 267	68 847	76 322
Bolivia					
Ores & concentrates (b)	2 229	1 675	1 799	161	1
Metal	3 028	1 682	165	6 414	9 633
Chile					
Metal	68 119	65 780	64 444	20 422	22 502
Colombia					
Ore	359 732	358 271	533 485	364 974	...
Guyana					
Metal	1 156	1 882	2 473	8 667	...
Peru					
Metal	713	12 084	19 586	19 782	27 568
China					
Metal (c)	*2 200	*1 500	*1 500	*1 500	*1 300
Hong Kong					
Metal (a)	15 874	5 826	5 152	9 519	4 493
Waste & scrap (a)	3 044	2 000	2 526	3 259	2 966
Indonesia					
Metal	9 544	12 472	13 656	16 136	...
Japan					
Metal	30 995	12 353	36 349	33 878	23 949
Waste & scrap	316	1 029	1 825	2 241	1 418
Jordan					
Metal (a)	147	2 800	5 282	4 106	...
Korea, Dem. P.R. of					
Metal (c)	*2 500	*1 000	*2 800	*3 600	...
Korea, Republic of					
Ores & concentrates	—	1 772 367	2 168 000	1 895 200	1 881 600
Metal	14 373	16 866	21 455	25 079	48 350
Malaysia					
Metal	1 153	720	1 072	3 443	...
Waste & scrap	900	788	480	...	...
Philippines					
Ores & concentrates (b)	7 515	5 682	11 884	...	...
Singapore					
Metal	20 127	8 258	9 907	13 042	12 191
of which: Re-exports	2 107	2 133	3 449	2 697	1 323
Waste & scrap	1 326	22 234	9 353	1 106	777
Taiwan					
Waste & scrap	42 946	22 361	16 832	15 134	70 730
Thailand					
Metal	383	119	882	1 051	...
Waste & scrap	141	1 987	3 285	26 538	...
Australia					
Ores & concentrates (b)	8 800	5 507	*1 600	*2 500	*1 600
Metal	238 400	253 703	296 312	272 488	275 152
Fiji					
Metal	3 769	2 751	...	...	...
New Zealand (e)					
Metal	5 700	3 508	10 757	22 082	36 588

**Exports of Gold**

kilograms

Country	1990	1991	1992	1993	1994
Papua New Guinea Metal	34 280	60 782	71 190	60 587	...

Note(s):

(1) In this table the term 'metal' includes both unwrought and partly worked gold and alloys but excludes gold coin

- (a) Re-exports
- (b) Au content
- (c) BGS estimates, based on known imports into certain countries
- (d) Au content of all ores and concentrates
- (e) Years ended 30 June of that stated
- (f) Including refined
- (g) Metal; all forms
- (h) Data for the Federal Republic of Yugoslavia only
- (i) As from 1992 data is for Serbia and Montenegro only

## Gold

**Imports of Gold**

kilograms

Country	1990	1991	1992	1993	1994
United Kingdom					
Ores & concentrates	15 913	39 980	68 099	20 292	79 815
Metal					
Unrefined	45 700	55 519	54 835	...	...
Refined	657 427	479 147	445 677	...	...
Other	49 219	25 886	42 516	(h) 870 000	(h) 434 957
Waste & scrap	145 639	82 801	135 730	89 020	112 265
Belgium-Luxembourg					
Metal	26 948	24 003	36 125	22 425	...
Waste & scrap	£1 270 000	£4 452 000	£1 552 000	£1 294 000	...
Denmark					
Metal	1 239	1 159	1 229	1 072	1 362
Waste & scrap	385	494	1 044	499	1 384
France					
Metal	199 052	130 451	164 554	105 600	89 999
Waste & scrap	638 516	542 702	255 544	415 700	427 300
Germany, Federal Republic of					
Metal	118 394	116 945	138 223	119 230	...
Waste & scrap	360 989	347 327	192 353	137 355	...
Greece					
Metal	2 830	2 524	...	...	...
Irish Republic					
Metal	£3 940 000	£3 462 000	£3 972 000	£7 028 000	...
Italy					
Metal	340 478	355 302	388 645	...	...
Waste & scrap	4 000	2 500	2 100	...	...
Netherlands					
Metal	5 770	5 931	8 222	8 908	...
Waste & scrap	...	1 000	1 000	...	...
Portugal					
Metal	6 128	...	...	12 803	...
Spain					
Metal	18 911	20 011	23 751	12 252	...
Waste & scrap	1 000	...	...	...	...
Austria					
Metal	16 646	2 871	3 315	2 766	2 680
Czechoslovakia					
Metal (d)	*600	*800	*1 700	—	—
Czech Republic					
Metal (d)	—	—	—	*1 400	...
Finland					
Metal	962	942	784	786	...
Malta					
Metal	2 060	1 611	2 132	1 186	...
Norway					
Metal	2 363	861	1 122	1 652	1 183
Waste & scrap	423	784	311	277	489
Slovenia					
Metal (d)	—	—	*2 900	*1 200	...
Sweden					
Metal	3 000	3 000	3 000	2 000	...
Waste & scrap	£304 000	£341 000	£108 000	£354 000	...
Switzerland					
Metal	1 403 258	1 198 349	1 457 018	1 273 872	1 042 987
Waste & scrap	66 809	57 175	58 135	43 970	48 594
Yugoslavia (g)					
Metal	£3 973 000	(f) £1 647 000	£1 152 000	...	...
South Africa					
Metal	125	40	554	537	460
Waste & scrap	15 996	15 718	...	—	—
Tunisia					
Metal	268	274	...	...	...

## Imports of Gold

kilograms

Country	1990	1991	1992	1993	1994
Canada					
Ores & concentrates (e)	625	703	4 381	10 590	1 897
Metal	47 906	30 388	43 896	55 360	36 487
USA					
Ore (c)	5 625	3 601	349	1 241	2 244
Metal					
Unrefined (a)	29 955	31 237	40 125	65 807	36 899
Refined	64 755	147 050	141 249	130 001	96 360
Brazil					
Metal	894	98	796	1 329	...
China					
Metal (d)	*4 900	*2 500	*4 400	*7 400	...
Cyprus					
Metal	2 481	2 511	3 132	2 229	2 696
Hong Kong					
Metal	180 779	301 559	339 650	234 056	326 104
Waste & scrap	327	139	377	648	1 055
Israel					
Metal	...	£86 403 000	£83 737 000	£107 171 000	...
Japan					
Metal	302 938	257 913	195 116	176 351	197 349
Waste & scrap	1 926	1 369	1 757	3 223	3 815
Jordan					
Metal	1 201	433	535	502	...
Korea, Republic of					
Ores & concentrates	354 692	593 595	...	62	19
Metal	20 407	22 427	32 283	34 436	58 336
Macao					
Metal	472	70	116	...	...
Malaysia					
Metal	116 544	116 289	60 894	81 733	...
Oman					
Metal	5 866	6 958	8 738	...	...
Philippines					
Metal	433	30	124	...	...
Saudi Arabia					
Metal	128 603	118 509	130 000	...	...
Singapore					
Metal	11 811	10 083	9 798	19 883	23 199
Waste & scrap	467	331	343	432	257
Sri Lanka					
Metal	...	342	210	1 412	1 387
Taiwan					
Metal	101 167	109 153	177 717	134 096	123 233
Thailand					
Metal	51 536	42 277	45 139	187 663	...
Australia					
Metal (b)	£124 416 000	£272 978 000	£431 398 000	£461 499 000	...
New Zealand (b)					
Metal	2 704	309	484	637	638

## Note(s):

(1) In this table the term 'metal' includes both unwrought and partly worked gold and alloys but excludes gold coin

(a) Including waste and scrap

(b) Years ended 30 June of that stated

(c) Au content

(d) BGS estimates, based on known exports from certain countries

(e) Au content of all ores and concentrates

(f) Data for the Federal Republic of Yugoslavia only

(g) As from 1992 data is for Serbia and Montenegro only

(h) Including unrefined and refined

**Production of Graphite**

tonnes

Country	1990	1991	1992	1993	1994
Germany, Federal Republic of	10 400	8 900	6 200	4 437	...
Austria (a)	22 705	19 750	19 547	4 146	12 324
Czechoslovakia	12 171	*15 000	*20 000	—	—
Czech Republic	—	—	—	*27 000	*25 000
Norway	6 930	760	7 000	6 500	5 200
Romania	*6 000	*6 000	2 300	3 162	2 070
Russia	—	—	*15 000	*10 000	*8 000
Soviet Union	*80 000	*75 000	—	—	—
Turkey	18 712	26 570	19 000	*20 000	*20 000
Ukraine	—	—	*50 000	*40 000	*30 000
Madagascar	18 036	14 078	8 910	*8 000	*8 000
Zimbabwe	16 384	12 903	12 346	7 142	7 890
Canada	14 500	10 323	21 714	22 257	*23 000
Mexico	24 916	37 258	48 038	48 532	30 863
Brazil (b)	41 189	36 000	34 000	*35 000	*35 000
China	678 900	*600 000	*600 000	*653 800	*600 000
India	50 000	50 000	*50 000	*64 000	*70 000
Korea, Dem. P.R. of	*35 000	*35 000	*38 000	*38 000	*38 000
Korea, Republic of	99 600	76 791	*83 000	*80 000	*80 000
Sri Lanka	5 558	6 409	3 307	*4 000	*4 000
World total	1 141 000	1 031 000	1 038 000	1 076 000	1 004 000

## Note(s):

- (1) This table includes all forms of amorphous and crystalline graphite but excludes synthetic material
- (2) In addition to the countries listed, Egypt, Namibia and the USA are believed to produce graphite

(a) Crude

(b) Including beneficiated and directly shipped material

## Exports of Graphite

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	2 888	2 681	1 833	2 133	2 106
France	562	473	1 851	281	735
Germany, Federal Republic of	9 101	7 557	7 651	7 267	...
Italy	456	500	355	460	...
Netherlands	1 880	2 082	3 030	471	...
Spain	628	138	491	768	...
Austria	8 376	6 018	5 394	4 165	5 103
Czechoslovakia (a)	*1 500	*400	*300	—	—
Czech Republic (a)	—	—	—	*400	...
Norway	6 686	1 137	3 535	5 131	7 659
Russia (a)	—	—	*2 000	*3 000	*4 800
Madagascar	6 875	13 554	10 671	...	...
South Africa (a)	*1 900	*1 500	*400	*500	...
Zimbabwe	13 930	11 080	11 849	...	...
Canada	10 530	8 535	21 051	21 376	21 717
Mexico	10 016	10 403	9 048	15 710	15 916
USA	11 863	19 574	19 384	17 499	...
Brazil	8 491	7 298	8 956	9 961	...
China	141 234	153 061	154 869	145 426	181 767
Hong Kong (c)	1 576	2 410	2 427	2 111	930
India (b)	2 790	653	504	698	...
Japan	1 314	1 484	1 928	2 047	3 052
Korea, Dem. P.R. of (a)	*10 100	*11 000	*6 900	*2 500	*6 300
Korea, Republic of	48 697	29 925	11 563	7 748	5 623
Sri Lanka	4 654	2 376	2 163	3 560	4 089

Note(s):

(1) This table excludes synthetic graphite

(a) BGS estimates, based on known imports into certain countries

(b) Years ended 31 March following that stated

(c) Re-exports

**Imports of Graphite**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	24 767	15 050	20 895	24 678	28 025
Belgium-Luxembourg	700	879	939	1 516	...
Denmark	1 748	1 579	1 687	1 104	602
France	5 203	4 374	3 820	3 342	19 370
Germany, Federal Republic of	35 828	27 794	35 532	22 969	...
Greece	1 243	354	127	128	...
Italy	12 271	30 281	9 213	7 780	...
Netherlands	4 467	2 305	4 431	4 830	...
Portugal	202	356	489	227	...
Spain	4 413	2 442	3 472	5 642	...
Austria	2 933	5 051	4 022	4 302	5 524
Czechoslovakia (d)	*600	*200	*100	—	—
Finland	188	100	139	66	...
Hungary	1 282	...	591	501	520
Norway	180	626	294	176	340
Poland	1 738	632	(d) *800	(d) *800	...
Sweden	627	701	829	819	...
Switzerland	210	202	237	174	370
Turkey	1 436	2 366	2 608	3 433	6 869
Yugoslavia (f)	1 802	(e) 474	446	...	...
Egypt	...	...	308	290	...
Mauritius	416	229	158	...	...
South Africa	5 094	5 105	5 079	6 240	4 123
Canada	6 278	5 414	8 196	6 539	6 426
Mexico	1 747	1 488	2 681	2 704	...
USA	50 213	33 575	46 780	52 171	...
Argentina	1 202	1 130	507	852	...
Venezuela	1 619	1 946	1 001	772	...
Hong Kong	1 394	2 546	1 569	9 492	732
India (c)	315	206	317	592	...
Indonesia	1 687	1 761	1 205	923	...
Iran (a)	2 666	291	266	945	...
Japan	126 527	122 650	73 258	66 135	84 797
Korea, Republic of	23 692	11 917	57 464	37 086	37 676
Kuwait	365	...	...	...	...
Malaysia	...	705	1 576	...	...
Pakistan (b)	2 627	6 001	2 838	4 086	...
Philippines	231	235	105	...	...
Singapore	1 002	1 240	1 034	1 069	943
Taiwan	7 393	13 429	7 598	8 008	6 998
Thailand	984	838	1 247	1 537	...
Australia (b)	2 086	1 557	2 417	2 444	...

Note(s):

(1) This table excludes synthetic graphite

(a) Years ended 20 March following that stated

(b) Years ended 30 June of that stated

(c) Years ended 31 March following that stated

(d) BGS estimates, based on known exports from certain countries

(e) Data for the Federal Republic of Yugoslavia only

(f) As from 1992 data is for Serbia and Montenegro only



## Production of Gypsum

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	3 100 000	*2 500 000	*2 500 000	2 500 000	*2 000 000
France	5 796 000	5 934 000	5 000 000	*5 000 000	5 000 000
Germany, Federal Republic of					
Gypsum	1 427 500	1 450 600	1 420 800	...	1 700 000
Anhydrite	400 000	300 000	600 000	...	...
Greece	630 243	664 897	658 549	445 600	*400 000
Irish Republic	394 800	342 800	343 000	317 600	367 300
Italy	1 262 228	1 286 674	1 200 000	1 300 000	1 200 000
Portugal	309 260	359 335	471 466	458 512	*450 000
Spain	7 804 000	8 054 000	7 750 000	6 587 000	7 550 000
Austria					
Gypsum	633 054	558 348	714 275	788 865	967 131
Anhydrite	118 591	96 246	78 059	87 476	93 338
Azerbaijan	—	—	*100 000	*75 000	*60 000
Bosnia & Herzegovina	—	—	*54 000	*33 000	...
Bulgaria (a)	494 391	*63 000	*125 000	*100 000	*100 000
Croatia	—	—	*50 000	*50 000	*50 000
Czechoslovakia (a)	744 000	624 000	*700 000	—	—
Czech Republic (a)	—	—	—	*560 000	*591 000
German Democratic Republic	*1 150 000	—	—	—	—
Hungary	189 933	128 175	*130 000	*110 000	...
Latvia	—	—	30 000	69 500	70 380
Macedonia	—	—	37 206	35 702	33 449
Moldova	—	—	*300 000	*250 000	*200 000
Poland (a)	915 000	788 000	843 000	848 000	800 000
Romania	*800 000	*800 000	*800 000	*500 000	—
Russia	—	—	*1 800 000	*1 500 000	*1 200 000
Slovakia (a)	—	—	—	*75 000	*70 000
Slovenia	—	—	*10 000	*10 000	...
Soviet Union	4 500 000	*4 000 000	—	—	—
Switzerland	*230 000	*230 000	*200 000	*200 000	*200 000
Turkey	171 518	323 649	278 000	541 000	*500 000
Yugoslavia (f)	534 650	426 000	47 865	*45 000	...
Algeria	*250 000	152 400	*150 000	*150 000	*150 000
Angola	*57 000	*57 000	*57 000	*50 000	*50 000
Egypt (b)	1 279 000	1 239 000	1 425 383	1 199 068	*1 200 000
Ethiopia	*2 250	*1 750	*2 650	...	...
Kenya	36 000	*36 000	*36 000	*10 000	...
Libya	*180 000	*180 000	*180 000	*180 000	*180 000
Mauritania	3 590	1 650	4 060	3 600	4 230
South Africa	390 765	420 146	333 771	284 389	304 377
Sudan	30 000	...	...	...	...
Tanzania	36 155	8 765	15 031	17 600	19 000
Tunisia	*100 000	*100 000	*100 000	*100 000	*100 000
Canada					
Gypsum	8 639 000	6 697 000	7 413 000	7 710 000	(a) 8 499 000
Anhydrite	150 842	132 809	152 771	168 200	...
Cuba	*130 000	*130 000	*125 000	*125 000	*125 000
Dominican Republic	78 146	117 600	83 306	*85 000	*83 000
El Salvador	*4 500	*5 000	*5 000	*5 000	...
Guatemala	65 560	51 519	72 608	*60 000	89 000
Honduras	*25 000	*27 000	*26 000	*26 000	*26 000
Jamaica	82 210	135 840	144 977	152 185	203 700
Mexico	5 423 804	4 774 130	5 157 950	5 339 746	5 526 637
Nicaragua	13 444	23 100	9 115	10 300	10 800
USA	14 883 120	14 021 000	14 759 000	15 812 000	17 200 000
Argentina	361 865	383 434	514 274	519 141	*520 000
Brazil (e)	749 141	*850 000	*800 000	*700 000	*800 000
Chile	253 744	335 678	423 659	510 515	551 821
Colombia	608 328	638 744	670 681	439 467	*450 000
Ecuador	24 200	24 000	*24 000	*24 000	...
Paraguay	*4 500	*4 500	*4 500	*4 500	...
Peru	*150 000	*160 000	35 300	38 047	14 500

**Production of Gypsum**

tonnes

Country	1990	1991	1992	1993	1994
Uruguay	204 412	239 335	209 057	*210 000	...
Venezuela	248 522	243 998	207 165	224 335	*210 000
Afghanistan	*3 000	*3 000	*3 000	*3 000	*3 000
Bhutan	*22 000	*22 000	*20 000	*20 000	*20 000
China	10 420 000	10 610 000	11 970 000	10 600 000	11 000 000
Cyprus	37 000	18 300	35 470	90 000	180 000
India	1 661 000	1 553 000	1 300 000	*1 800 000	*1 900 000
Iran (c)	7 724 265	8 838 838	8 252 808	7 799 443	8 430 000
Iraq	*380 000	*190 000	*380 000	*450 000	*450 000
Israel	*38 000	25 570	*25 000	...	...
Jordan	92 700	55 300	83 000	195 000	*194 000
Laos	53 000	77 000	80 000	*80 000	*85 000
Lebanon	*2 000	*2 000	*2 000	*2 000	*2 000
Mongolia	*32 000	*25 000	*25 000	*25 000	*25 000
Myanmar	32 982	32 556	30 933	27 835	38 136
Oman	...	...	48 150	112 882	121 446
Pakistan (a)	477 671	521 891	471 000	534 565	*540 000
Philippines	30 000	20 000	25 000	...	...
Saudi Arabia	168 303	176 764	272 641	326 661	*375 000
Syria	175 451	183 000	235 000	303 000	*235 000
Taiwan	1 743	3 723	1 673	3 182	2 876
Tajikistan	—	—	*500 000	*400 000	*300 000
Thailand	5 753 351	7 196 390	7 111 109	7 454 000	*8 140 000
Turkmenistan	—	—	*300 000	*200 000	*150 000
Vietnam	*25 000	*30 000	*30 000	...	...
Yemen, Republic of (d)	66 000	100 000	80 000	80 000	*80 000
Australia	1 885 000	1 810 000	2 000 000	2 087 000	*2 000 000
World total	95 200 000	91 700 000	92 700 000	91 400 000	95 500 000

(a) Including anhydrite

(b) Years ended 30 June of that stated

(c) Years ended 20 March following that stated

(d) Yemen Arab Republic and People's Dem. Rep. of Yemen were unified on 22 May 1990 as the Republic of Yemen

(e) Including beneficiated and directly shipped material

(f) As from 1992 data is for Serbia and Montenegro only

## Exports of Gypsum

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Crude	2 015	7 904	13 545	5 556	4 603
Calcined	14 496	14 066	12 955	16 108	19 352
Belgium-Luxembourg					
Crude	11 053	14 740	20 359	20 325	...
Calcined	116 974	121 005	131 612	152 728	...
Denmark					
Crude & calcined	5 059	36 908	27 719	29 791	50 520
of which: Re-exports	1 737	1 017	20 655	...	...
France					
Crude	759 277	802 935	726 881	527 695	524 429
Calcined	255 497	269 088	283 188	518 826	336 091
Germany, Federal Republic of					
Crude	235 071	279 192	348 173	240 766	...
Calcined	241 219	536 372	519 492	756 330	...
Greece	36 432	23 235	19 680	30 100	...
Irish Republic					
Crude	46 839	41 354	37 552	41 305	...
Calcined	34 707	33 067	36 410	39 618	...
Italy					
Crude	5 563	10 681	44 119	44 715	...
Calcined	15 320	16 093	16 034	15 598	...
Netherlands					
Crude	66 037	52 794	63 132	103 362	...
Calcined	6 658	10 639	12 999	14 790	...
Spain					
Crude	2 647 446	2 357 353	2 208 313	2 179 893	...
Calcined	93 173	111 557	135 132	114 455	...
Austria					
Crude	79 072	67 437	47 606	58 522	69 861
Calcined	80 867	91 937	108 371	101 615	131 354
Poland	1 667	21 379	(a) *16 700	(a) *2 600	...
Soviet Union (a)	*4 500	*9 800	—	—	—
Sweden					
Crude & calcined	814	649	535	4 144	...
Switzerland					
Crude & calcined	13 265	14 692	14 564	13 272	15 409
Turkey					
Crude & calcined	2 127	1 342	3 071	6 554	11 109
Yugoslavia (f)	47 137	(d) 327	13	...	...
Morocco					
Crude	164 202	144 993	166 638	...	...
Calcined	649	2 152	1 782	...	...
South Africa	78	1 015	1 980	2 932	0
Tunisia					
Crude & calcined	1 252	2 451	2 905	...	...
Zimbabwe					
Crude	2 233	...	...	...	...
Canada					
Crude	5 804 951	4 963 732	5 074 804	5 360 459	5 972 862
Calcined	769	9 989	6 586	22 997	1 694
Dominican Republic	42 134	...	...	...	...
Guatemala	11 058	8 824	10 528	...	...
Jamaica	59 473	74 437	115 437	168 034	246 036
Mexico	2 065 277	2 629 636	2 481 371	2 863 916	3 286 424
USA					
Crude	170 926	213 580	260 794	220 394	...
Calcined	85 514	87 048	137 173	156 769	...
Argentina	16 030	14 658	26 588	8 136	...
Colombia	4 255	4 771	10 665	23 240	...
Venezuela	38 058	30 813	19 563	42 151	...

**Exports of Gypsum**

tonnes

Country	1990	1991	1992	1993	1994
Abu Dhabi					
Crude & calcined	430	...	...	1 197	...
China	130 797	153 878	70 675	82 032	...
Cyprus					
Crude & calcined	30 178	12 092	10 050	7 138	130 103
Hong Kong (c)	7 736	16 205	40 579	26 366	230 214
India (b)	8 903	15 006	5 812	14 394	...
Indonesia					
Crude	81 639	89 300	61 607	15 750	...
Japan					
Crude	1 553	2 677	2 247	2 291	2 601
Calcined	4 253	4 896	5 619	5 334	6 413
Korea, Republic of					
Crude	11 032	82	34	1 138	687
Calcined	463	1 305	1 815	2 142	5 237
Philippines					
Crude	53 443	9 750	38 971	...	...
Saudi Arabia					
Crude & calcined	25 175	28 149	47 705	...	...
Singapore					
Crude & calcined	4 968	7 257	6 406	7 394	11 930
of which: Re-exports	4 253	6 230	4 802	4 896	6 807
Syria	59 974	...	86 664	...	...
Taiwan	3 299	6 367	9 801	13 950	24 824
Thailand					
Crude	11 727 007	11 157 399	17 062 990	6 336 123	...
Calcined	31 324	37 147	43 881	52 347	...
Australia					
Crude & calcined (e)	10 072	59 002	166 828	170 182	...

Note(s):

(1) In this table the term 'crude' may include some anhydrite

(a) BGS estimates, based on known imports into certain countries

(b) Years ended 31 March following that stated

(c) Re-exports

(d) Data for the Federal Republic of Yugoslavia only

(e) Years ended 30 June of that stated

(f) As from 1992 data is for Serbia and Montenegro only

## Imports of Gypsum

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Crude	262 557	283 803	371 952	496 278	420 347
Calcined	169 051	254 301	125 246	37 486	40 904
Belgium-Luxembourg					
Crude	489 572	496 249	522 367	733 561	...
Calcined	213 077	233 123	251 693	263 036	...
Denmark					
Crude	272 216	260 548	185 960	361 410	242 511
Calcined	49 253	58 865	122 252	10 329	17 591
France					
Crude	116 614	163 578	104 387	153 272	200 473
Calcined	31 321	21 651	56 336	10 878	47 012
Germany, Federal Republic of					
Crude	416 793	426 183	378 338	230 686	...
Calcined	196 191	201 297	232 647	182 611	...
Greece					
Crude	214	86	48	244	...
Calcined	1 466	1 341	1 901	2 379	...
Irish Republic					
Crude	3 419	799	550	1 092	...
Calcined	6 041	4 625	5 740	3 962	...
Italy					
Crude	27 203	21 941	27 369	1 009	...
Calcined	45 820	51 448	45 154	22 277	...
Netherlands					
Crude	263 521	178 051	210 682	209 292	...
Calcined	245 234	181 372	199 337	171 134	...
Portugal					
Crude	(c) 85 763	59 383	63 465	23 181	...
Calcined	...	38 635	62 135	74 441	...
Spain					
Crude	11 939	4 456	3 730	25 846	...
Calcined	33 189	24 283	27 759	21 865	...
Austria					
Crude	4 853	29 831	6 819	8 999	14 923
Calcined	8 368	19 311	9 731	9 225	21 391
Czechoslovakia (a)	*20 900	*12 100	*23 600	—	—
Czech Republic (a)	—	—	—	*10 400	...
Finland					
Crude	242 744	185 854	157 691	137 283	...
Calcined	6 580	7 748	8 186	8 912	...
Hungary					
Crude	...	...	...	74 133	56 822
Calcined	38 292	...	50 800	2 698	4 298
Iceland	6 408	6 197	5 719	3 599	...
Norway					
Crude	5 853	56 711	43 841	51 953	88 788
Calcined	285 631	253 046	274 885	194 845	208 560
Poland	1 001	18 609	(a) *7 600	(a) *14 200	...
Slovakia					
Crude & calcined	—	—	—	127 171	...
Slovenia (a)	—	—	*27 800	*42 000	...
Sweden					
Crude	500 874	441 707	355 621	304 448	...
Calcined	11 120	8 107	5 599	5 627	...
Switzerland					
Crude	56 594	53 488	48 702	49 642	46 986
Ground & calcined	72 064	68 443	67 061	61 878	73 616
Turkey	23 358	1 999	16 763	27 107	5 935
Reunion					
Crude & calcined	...	13 376	...	...	...
Senegal					
Crude & calcined	14 546	9 782	26 903	...	...
South Africa					
Crude & calcined	22 256	23 365	8 693	6 971	7 762

## Gypsum

**Imports of Gypsum**

tonnes

Country	1990	1991	1992	1993	1994
Togo					
Crude & calcined	23 099	...	...	...	...
Tunisia					
Crude & calcined	562	515	412	...	...
Zaire					
Crude & calcined	*8 800	...	...	...	...
Zambia					
Crude & calcined	5 469	...	...	...	...
Zimbabwe					
Crude & calcined	11	2 392	147	...	...
Canada					
Crude	303 395	255 538	260 505	280 581	292 156
Calcined	33 401	29 353	31 992	34 965	37 185
Costa Rica					
Crude & calcined	28 289	30 225	36 473	...	...
El Salvador					
Crude & calcined	9 761	9 807	16 485	13 724	...
Guadeloupe					
Crude & calcined	15 079	12 660	12 010	...	...
Martinique					
Crude & calcined	16 995	12 318	19 491	11 068	...
Mexico					
Crude	38 123	36 688	18 709	3 815	...
Calcined	4 143	4 411	6 088	18 401	...
Panama					
Crude & calcined	14 899	16 490	23 286	15 442	...
Trinidad & Tobago					
Crude & calcined	19 650	24 689	17 155	28 099	...
USA					
Crude	7 916 468	6 921 348	7 166 122	7 392 972	8 469 779
Ground & calcined	1 324	10 029	6 291	22 526	...
Colombia					
Crude & calcined	66 042	56 134	25 807	118 711	...
Ecuador					
Crude & calcined	8 475	68 702	1 751	4 233	...
Paraguay					
Crude & calcined	5 667	...	...	6 240	...
Uruguay					
Crude & ground	1 118	1 409	1 322	1 953	...
Venezuela					
Crude & ground	34 463	110 844	129 052	141 715	...
Abu Dhabi					
Crude & calcined	9 167	9 498	14 798	19 301	...
Bahrain					
Crude & calcined	...	13 270	...	13 498	...
China					
Crude	703	1 248	12 616	27 477	...
Calcined	659	1 223	5 102	6 904	...
Hong Kong					
Crude & calcined	77 441	90 446	125 712	115 534	124 788
India (d)					
Crude & calcined	4 234	16 934	5 445	8 556	...
Indonesia					
Crude & calcined	248 631	234 464	232 364	193 077	...
Israel (a)					
Crude & calcined	*5 500	*6 500	*6 800	*4 000	...
Japan					
Crude	3 632 538	3 947 570	3 815 987	3 729 621	4 120 149
Calcined	4 735	6 849	5 773	6 467	7 076
Jordan					
Crude & calcined	2 524	3 221	3 231	7 826	...
Korea, Dem. P.R. of (a)					
Crude & calcined	*109 800	*131 100	*110 600	*94 100	...
Korea, Republic of					
Crude & calcined	234 443	402 282	379 713	492 833	646 764
Macao					
Crude & calcined	28 147	22 717	29 612	...	...
Malaysia					
Crude & calcined	...	269 100	273 287	...	...
Oman					
Crude & calcined	1 363	2 366	4 407	4 996	...
Philippines					
Crude	157 634	195 879	178 400	...	...
Calcined	7 978	9 960	12 598	...	...
Qatar					
Crude & calcined	8 150	9 895	9 413	9 491	...
Saudi Arabia					
Crude & calcined	51 876	49 841	26 399	...	...
Singapore					
Crude & calcined	67 949	74 316	113 047	104 341	125 306
Sri Lanka					
Crude & calcined	12 202	10 771	21 856	30 219	36 435

**Imports of Gypsum**

tonnes

Country	1990	1991	1992	1993	1994
Taiwan					
Crude	460 567	536 399	618 876	836 887	735 191
Calcined	2 068	2 970	2 875	4 349	6 010
Thailand					
Crude	18 159	6 058	52 070	100 260	...
Calcined	3 198	5 077	6 108	6 863	...
Australia (b)	1 760	52 469	47 243	117 272	...
New Caledonia					
Crude & calcined	5 122	5 277	6 320	8 117	5 873
New Zealand (b)					
Crude & calcined	127 461	94 377	150 686	95 746	126 817

Note(s):

- (1) In this table the term 'crude' may include some anhydrite
- (a) BGS estimates, based on known exports from certain countries
- (b) Years ended 30 June of that stated
- (c) Including calcined
- (d) Years ended 31 March following that stated

## Iodine

**Production of Iodine**

kilograms

Country	1990	1991	1992	1993	1994
Azerbaijan	—	—	*600 000	*500 000	*400 000
Russia	—	—	*200 000	*180 000	*160 000
Soviet Union	*1 900 000	*1 800 000	—	—	—
USA	1 973 000	1 999 000	1 995 000	1 935 000	1 628 000
Chile	5 000 000	5 700 000	6 308 000	*6 000 000	*6 000 000
China	*500 000	*500 000	*500 000	*500 000	*500 000
Indonesia	59 820	36 353	*35 000	14 180	*15 000
Japan	7 581 000	7 492 000	6 764 000	6 489 000	*6 400 000
Turkmenistan	—	—	*600 000	*500 000	*251 000
World total	17 000 000	17 500 000	17 000 000	16 100 000	15 400 000



**Exports of Iodine**

kilograms

Country	1990	1991	1992	1993	1994
United Kingdom	288 723	90 674	59 284	239 219	169 762
Belgium-Luxembourg	26 100	23 000	3 700	564 500	...
Denmark	300	—	800	—	—
France	37 000	10 000	108 000	...	35 700
Germany, Federal Republic of	295 000	401 900	217 800	282 000	...
Italy	140 000	2 500	1 700	...	...
Netherlands	214 000	...	...	...	...
Spain	8 000	8 000	7 000	8 000	...
Switzerland	7 131	465 816	2 544	1 539	979
USA	1 107 364	1 437 006	1 629 162	1 016 000	...
Chile	3 980 490	5 410 750	5 838 830	4 458 700	4 883 225
Hong Kong (a)	2 076	31 241	...	...	...
Indonesia	18 550	37 000	29 000	11 066	...
Japan	5 192 230	4 792 500	4 324 520	4 868 253	6 225 195
Taiwan	—	3 000	25	60	309

(a) Re-exports

**Imports of Iodine**

kilograms

Country	1990	1991	1992	1993	1994
United Kingdom	1 440 525	1 658 860	1 451 236	1 661 559	1 640 067
Belgium-Luxembourg	32 100	27 200	29 300	249 400	...
Denmark	7 200	10 200	30 200	300	3 500
France	881 000	827 000	882 000	...	1 489 100
Germany, Federal Republic of	1 414 400	1 205 600	1 053 600	1 000 300	...
Greece	1 000	53 000	...	1 000	...
Italy	848 000	878 400	953 400	...	...
Netherlands	502 000	494 000	686 000	679 000	...
Portugal	24 000	...	...	12 100	...
Spain	351 000	572 000	459 000	678 000	...
Austria	3 000	3 800	5 000	11 600	12 700
Finland	3 000	8 000	7 000	5 000	...
Hungary	...	...	—	15 100	6 400
Norway	559 000	680 000	437 000	311 000	539 000
Soviet Union (c)	*38 000	*45 000	—	—	—
Sweden	3 000	5 000	4 000	4 000	...
Switzerland	100 024	84 628	73 316	79 292	84 383
Yugoslavia (e)	7 000	(d) 11 000	9 000	...	...
Algeria	864	...	...	...	...
Morocco	405	138	...	...	...
South Africa	12 35	2 11 713	29 489	...	...
Tunisia	1 446	1 741	...	...	...
Canada	103 699	107 856	141 286	219 120	343 094
Mexico	152 205	...	...	...	...
USA	2 847 621	3 503 729	3 654 772	3 548 544	...
Brazil	135 032	333 562	...	...	...
Colombia	17 859	14 258	...	...	...
Peru	822	3 080	...	...	...
Uruguay	800	4 500	1 900	1 300	...
Venezuela	7 484	5 521	6 637	8 045	...
China	(c) *309 000	(c) *333 000	174 376	9 924	...
Hong Kong	2 780	29 600	...	...	...
India (a)	888 437	664 620	519 060	664 316	...
Indonesia	5 127	5 226	5 207	7 730	...
Japan	289 076	393 970	604 750	115 900	229 100
Korea, Republic of	13 571	13 713	16 571	8 225	21 102
Pakistan (b)	39 465	26 374	27 534	38 391	...
Sri Lanka	231	3 070	20 009	20 053	44
Taiwan	24 545	25 835	22 180	18 961	23 815
Thailand	6 337	7 960	8 296	10 423	...
Australia (b)	18 567	12 034	19 203	27 552	...
New Zealand (b)	12 413	14 495	13 614	14 296	26 221

(a) Years ended 31 March following that stated

(b) Years ended 30 June of that stated

(c) BGS estimates, based on known exports from certain countries

(d) Data for the Federal Republic of Yugoslavia only

(e) As from 1992 data is for Serbia and Montenegro only

## Production of Iron Ore

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	55 300	59 400	30 900	1 068	1 177
France	8 023 000	7 490 000	5 707 000	3 600 000	2 400 000
Germany, Federal Republic of (f)	84 000	120 000	110 000	*100 000	...
Portugal (f)	14 080	16 070	14 545	16 175	...
Spain	3 012 000	3 120 000	2 750 000	*2 475 000	2 086 000
Albania (b)	1 093 000	446 000	21 000	...	...
Austria	2 300 000	2 120 000	1 627 000	1 427 000	1 644 000
Azerbaijan	—	—	*400 000	*300 000	...
Bosnia & Herzegovina	—	—	*500 000	*250 000	...
Bulgaria	1 079 293	594 000	393 000	*440 000	...
Croatia	—	—	*75 000	*70 000	...
Czechoslovakia	1 831 000	1 738 000	1 500 000	—	—
Czech Republic	—	—	—	53 000	40 000
Finland	69 014	32 672	22 836	11 245	...
Macedonia	—	—	*30 000	*30 000	...
Norway	2 235 062	2 360 540	2 258 409	2 286 626	2 459 995
Poland	2 400	100	—	—	—
Romania	2 002 000	1 461 000	1 229 000	903 500	950 800
Russia	—	—	82 100 000	76 100 000	73 308 000
Slovakia	—	—	—	1 092 000	860 000
Soviet Union	236 000 000	199 300 000	—	—	—
Sweden	19 877 000	19 328 000	19 277 000	18 728 000	19 909 000
Turkey	4 924 874	5 334 502	5 579 000	5 070 000	6 684 000
Ukraine	—	—	75 700 000	65 500 000	...
Yugoslavia (h)	4 132 173	(d) 2 574 000	*400 000	*400 000	*400 000
Algeria	2 941 000	2 344 000	2 523 000	2 311 000	2 047 000
Egypt (i)	2 405 000	2 131 000	2 287 000	2 229 000	3 869 000
Liberia	3 981 000	1 200 000	1 710 000	...	...
Mauritania	11 590 000	10 246 000	9 110 000	9 362 000	*11 000 000
Morocco	149 540	98 676	84 679	106 700	63 517
Nigeria	307 528	*350 000	*350 000	*350 000	*350 000
South Africa (c)	30 290 945	29 075 422	28 225 859	29 385 168	32 321 215
Tunisia	290 708	295 000	300 000	298 800	*247 000
Zimbabwe	1 260 000	1 137 000	1 181 000	374 493	3 500
Canada (g)	34 855 000	36 383 000	32 697 000	30 505 000	36 606 000
Mexico	8 073 000	7 540 000	7 809 000	8 480 000	7 535 546
USA	56 408 000	56 761 000	55 593 000	55 661 000	58 215 000
Argentina	775 073	160 684	5 958	*5 000	...
Bolivia	125 264	101 642	34 956	32 108	...
Brazil (a)	152 303 718	151 764 214	146 447 408	159 400 000	165 651 000
Chile	8 247 908	8 414 443	7 224 030	7 379 016	8 643 865
Colombia	628 257	607 329	674 219	544 775	552 121
Peru	3 308 249	3 513 000	2 855 000	5 203 000	6 943 000
Venezuela	20 365 844	20 343 000	18 887 115	16 851 071	18 318 000
China	179 344 000	190 558 000	210 220 000	225 990 700	234 000 000
India	53 702 000	56 915 000	54 870 000	55 818 000	58 000 000
Indonesia	142 143	173 242	287 821	341 335	334 895
Iran (e)	2 611 388	3 888 100	4 193 650	8 652 900	8 690 000
Japan	34 092	31 444	39 791	10 621	3 058
Kazakhstan	—	—	17 671 000	13 128 900	1 345 800
Korea, Dem. P.R. of	*9 500 000	*9 500 000	*9 500 000	*10 000 000	...
Korea, Republic of	298 300	221 525	221 592	218 663	191 313
Malaysia (g)	344 186	375 869	319 919	245 849	243 182
Thailand	128 626	240 075	427 242	204 000	...

**Production of Iron Ore**

tonnes

Country	1990	1991	1992	1993	1994
Australia	110 509 000	117 673 000	112 101 000	120 534 000	128 493 000
New Zealand	2 296 153	2 264 849	2 934 111	2 388 783	2 400 000
World total	984 000 000	960 000 000	931 000 000	947 000 000	975 000 000

## Note(s):

(1) In addition to the countries listed, Vietnam is believed to produce iron ore

- (a) Including beneficiated and direct shipping ore
- (b) Nickeliferous iron ore
- (c) Including by-product magnetite
- (d) Excluding data from August to December for the Republic of Croatia
- (e) Years ended 20 March following that stated
- (f) Including mangiferous iron ore
- (g) Including by-product iron ore
- (h) As from 1992 data is for Serbia and Montenegro only
- (i) Years ended 30 June of that stated

## Exports of Iron Ore

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	2 442	2 071	2 135	5 854	1 841
Belgium-Luxembourg					
Iron ore	15 790	12 612	20 340	9 162	...
Burnt pyrites	101 117	65 065	17 478	5 766	...
Denmark					
Iron ore	4 265	1 122	1 444	—	19
Burnt pyrites	—	—	1 093	—	22
France	3 280 365	3 152 726	2 874 808	2 795 514	2 441 929
Germany, Federal Republic of					
Iron ore	18 752	80 829	76 553	100 275	...
Burnt pyrites	18 883	26 438	9 998	11 104	...
Italy					
Iron ore	375	171	121	6 000	...
Burnt pyrites	27 897	27 151	66 350	10 000	...
Netherlands (b)	82 842	65 318	27 794	1 412 748	...
Spain					
Iron ore	1 632 737	2 219 306	1 879 336	1 505 107	...
Burnt pyrites	70 961	23 996	104 009	131 186	...
Norway					
Iron ore	2 112 730	2 098 540	2 281 251	2 505 979	2 092 396
Burnt pyrites	36 845	58 669	128 995	153 133	172 612
Russia	—	21 957 000	8 210 000	10 570 000	...
Slovenia					
Burnt pyrites	—	—	12 224	(f) *4 100	(f) *4 000
Soviet Union	26 254 000	...	—	—	—
Sweden					
Iron ore	16 398 000	15 226 000	15 435 000	16 418 000	...
Burnt pyrites	—	25 000	146 000	23 000	...
Ukraine (f)	—	—	*9 469 700	*10 357 200	...
Yugoslavia (e)					
Burnt pyrites	73 120	(d) 44 972	2 171	...	...
Algeria	2 375	13 300	...	...	...
Liberia	3 887 000	1 108 000	1 539 000	332 000	...
Mauritania	11 356 000	10 469 000	8 094 000	9 655 000	...
Morocco					
Iron ore	63 266	65 728	58 523	1 977	...
Burnt pyrites	—	1 700	—	48 380	...
South Africa	17 028 950	15 596 411	14 867 545	19 024 024	19 605 138
Tunisia	3 771	7 687	8 685	8 831	...
Canada	27 100 472	29 687 515	25 131 837	26 140 286	30 125 391
USA (b)	3 199 348	4 796 030	5 162 528	5 066 954	4 975 000
Bolivia	61 000	55 600	50 316	39 003	2 500
Brazil	113 496 703	113 622 721	105 011 089	114 375 430	122 801 365
Chile	6 909 717	7 263 904	6 620 645	5 809 386	6 938 960
Peru	3 305 201	2 582 000	3 022 000	4 715 000	6 400 000
Venezuela	13 620 344	13 385 242	10 002 552	10 659 000	10 711 000
India (c)	32 492 902	29 513 463	22 166 619	26 856 590	...
Kazakhstan (f)	—	—	*92 100	*94 800	...
Korea, Dem. P.R. of (f)	*599 000	*830 000	*786 000	*490 000	...
Malaysia	10 559	3 900	197 307	29 868	1 744
Philippines					
Iron ore	4 740 768	4 776 273	3 882 726	...	...
Burnt pyrites	32 214	5 257	16 148	17 506	...

**Exports of Iron Ore**

tonnes

Country	1990	1991	1992	1993	1994
Australia	95 928 000	111 557 000	103 487 000	111 527 000	119 093 000
New Zealand (a)	1 223 284	1 115 922	1 006 369	1 234 766	1 232 504

- (a) Years ended 30 June of that stated
- (b) Including burnt pyrites
- (c) Years ended 31 March following that stated
- (d) Data for the Federal Republic of Yugoslavia only
- (e) As from 1992 data is for Serbia and Montenegro only
- (f) BGS estimates, based on known imports into certain countries

## Imports of Iron Ore

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Iron ore	14 700 130	15 443 012	15 799 744	15 924 591	19 462 888
Burnt pyrites	235 746	137 155	52 316	2 360	2
Belgium-Luxembourg					
Iron ore	20 277 528	19 485 930	17 994 255	15 766 015	...
Burnt pyrites	70 935	3 197	9 636	27	...
Denmark					
Iron ore	2 733	2 544	1 866	8 294	33 586
Burnt pyrites	26 438	25 805	35 534	39 871	37 825
France					
Iron ore	18 692 622	18 215 067	17 368 442	16 521 922	20 098 179
Burnt pyrites	103 193	72 033	43 004	26 521	8 604
Germany, Federal Republic of					
Iron ore	43 729 850	43 288 212	41 316 824	35 264 036	...
Burnt pyrites	160 483	151 422	157 630	240 681	...
Greece					
Burnt pyrites	18 134	52 839	42 000	38 537	...
Italy (a)	17 202 319	17 854 447	15 220 010	16 741 000	...
Netherlands (a)	8 313 443	7 902 383	7 532 106	8 560 427	...
Portugal	449 480	466 000	569 000	486 602	...
Spain	6 704 810	7 596 585	6 951 155	6 664 477	...
Albania	25 500	...	...	...	...
Austria					
Iron ore	3 891 887	3 968 429	3 915 271	3 590 300	3 921 881
Burnt pyrites	16 249	7 593	13 864	6 003	18 257
Bulgaria	1 964 000	710 000	416 000	733 000	...
Czechoslovakia	14 200 000	12 078 000	6 658 000	—	—
Czech Republic	—	—	—	7 548 000	...
Finland	3 058 362	3 085 141	3 363 738	3 360 628	...
German Democratic Republic (b)	*1 500 000	—	—	—	—
Hungary	1 691 551	849 000	1 286 982	818 932	2 179 368
Iceland	18 000	16 844	17 000	22 000	...
Norway	12 296	(a) 28 937	(a) 131 527	(a) 619 405	6 836
Poland	12 066 000	8 700 000	8 025 000	8 776 000	...
Romania	11 341 000	7 290 000	2 346 289	3 560 000	...
Slovakia	—	—	—	5 298 060	...
Sweden	268 000	442 000	355 000	587 000	...
Switzerland (a)	14 130	20 390	14 221	15 434	23 030
Turkey	1 972 000	2 721 000	1 887 000	1 684 986	1 951 329
Yugoslavia (g)	1 285 196	(d) 293 903	1 065 233	...	...
Egypt	*1 065 859	*987 150	1 267 496	1 180 000	...
Libya	643 000	1 422 000	987 000	1 302 000	...
Nigeria (a)	200 000	200 000	160 000	*150 000	...
Tunisia	66 619	74 822	88 066	80 974	...
Canada	4 112 971	4 620 082	5 280 481	5 436 091	5 235 832
Mexico	1 853	57 033	109 968	...	...
Trinidad & Tobago	944 411	586 768	253 343	199 417	...
USA (a)	18 081 628	13 352 531	12 438 198	14 059 221	17 513 000
Argentina	3 140 243	2 310 419	3 574 092	3 204 605	...
Paraguay					
Burnt pyrites	51 176	192 294	130 206	116 563	...
Abu Dhabi	20 956	23 364	26 352	60 262	...
China					
Iron ore	14 342 626	18 458 146	25 171 190	32 675 989	37 340 000
Burnt pyrites	—	91 287	53 083	370 830	...
India (e)	114 584	73 260	26 263	163 828	...
Indonesia					
Iron ore	158 996	158 277	307 194	730 574	...
Burnt pyrites	1 779 175	1 613 101	1 967 824	1 393 536	...
Iran (f)	*324 000	*2 232 000	*1 163 000	*2 291 000	...
Japan	125 290 037	127 186 458	113 742 502	114 483 512	116 089 531

**Imports of Iron Ore**

tonnes

Country	1990	1991	1992	1993	1994
Korea, Republic of					
Iron ore	21 153 918	28 939 547	31 778 699	35 533 540	34 200 227
Burnt pyrites	29 167	9 927	4 985	15 265	49 767
Malaysia	*1 200 000	1 159 980	722 602	1 404 644	...
Oman	2 993	—	4 158	4 039	...
Pakistan (c)	1 308 249	1 418 221	1 587 159	1 572 274	...
Philippines	3 665 202	4 265 051	3 323 938	...	...
Qatar	863 511	743 475	787 205	222 630	...
Saudi Arabia	1 467 556	1 093 554	2 170 398	...	...
Singapore	4 566	1 631	200	264	287
Taiwan	7 761 819	8 433 068	7 250 604	9 019 275	8 341 715
Australia	2 760 000	2 946 000	3 474 000	3 487 000	4 001 000

(a) Including burnt pyrites

(b) Fe content of concentrates

(c) Years ended 30 June of that stated

(d) Data for the Federal Republic of Yugoslavia only

(e) Years ended 31 March following that stated

(f) BGS estimates, based on known exports from certain countries

(g) As from 1992 data is for Serbia and Montenegro only



## Production of Pig Iron

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	12 319 200	11 883 400	11 542 400	11 534 000	11 942 800
Belgium	9 417 000	9 354 000	8 524 000	8 178 000	...
France	14 094 987	13 408 156	*12 750 000	*12 700 000	...
Germany, Federal Republic of	29 585 000	29 497 000	27 399 000	*24 700 000	...
Italy	11 852 303	10 845 232	10 524 000	11 187 000	...
Luxembourg	2 645 200	2 463 000	2 255 200	2 412 000	1 926 890
Netherlands	4 959 900	4 696 500	4 846 600	5 405 200	5 554 400
Portugal	339 000	251 000	402 000	*400 000	...
Spain	5 482 000	5 404 000	5 076 000	*5 000 000	...
Austria	3 452 333	3 441 450	3 074 169	3 070 343	...
Bosnia & Herzegovina	—	—	*150 000	*100 000	...
Bulgaria	1 142 607	960 000	848 000	1 013 000	1 442 000
Croatia	—	—	*40 000	*25 000	...
Czechoslovakia	9 667 000	8 479 000	8 034 000	—	—
Czech Republic	—	—	—	4 655 000	...
Finland	2 283 000	2 332 000	2 452 000	2 535 000	2 597 000
German Democratic Republic	2 163 000	—	—	—	—
Georgia	—	—	*500 000	*400 000	...
Hungary	1 697 000	1 314 000	1 176 000	1 407 000	1 589 910
Macedonia	—	—	*50 000	*50 000	...
Poland	8 423 000	6 355 000	6 359 000	6 175 000	6 802 000
Romania	6 355 000	4 525 000	3 135 000	3 191 000	3 495 000
Russia	—	—	46 100 000	40 900 000	...
Slovakia	—	—	—	3 205 000	3 300 000
Soviet Union	110 167 000	90 953 000	—	—	—
Sweden	2 865 130	3 022 370	3 053 899	2 845 000	...
Switzerland	*70 000	*70 000	*70 000	*70 000	*70 000
Turkey	5 308 726	4 992 563	4 936 021	4 350 000	...
Ukraine	—	—	*35 400 000	*26 900 000	...
Yugoslavia (d)	2 313 000	(b) 1 258 000	512 000	62 000	...
Algeria	1 036 500	877 000	*900 000	*900 000	*900 000
Egypt (c)	108 024	113 156	60 045	91 599	108 738
Nigeria	112 000	108 000	50 000	...	...
South Africa	6 257 000	6 968 000	6 498 000	*6 121 000	...
Tunisia	146 000	161 400	146 600	154 000	...
Zimbabwe	521 131	535 000	507 000	211 000	...
Canada	7 346 127	8 267 542	8 621 236	8 633 301	8 106 000
Mexico	6 189 919	5 424 000	5 724 456	6 160 137	6 723 000
Trinidad & Tobago	681 600	654 000	647 700	714 500	...
USA	50 058 000	44 533 000	47 767 000	48 595 000	49 379 475
Argentina	2 967 771	2 259 028	1 993 047	2 140 226	2 659 100
Brazil	21 401 000	22 920 500	23 382 100	24 231 300	25 395 000
Chile	675 406	703 356	873 032	916 655	888 000
Colombia	322 899	305 431	307 900	238 177	244 000
Paraguay	53 929	67 642	92 136	81 233	90 000
Peru	121 745	231 256	148 036	201 332	213 000
Venezuela	3 031 814	3 475 918	3 919 630	3 226 578	3 823 000
China	62 380 000	67 650 000	75 890 000	87 388 900	95 000 000
India	12 645 000	14 176 000	15 126 000	15 674	...
Iran (a)	1 768 611	2 544 838	2 757 721	...	...
Japan	80 144 351	79 985 000	73 144 000	73 041 000	...
Kazakhstan	—	—	4 666 300	3 551 700	...
Korea, Dem. P.R. of	*5 900 000	*6 000 000	*6 000 000	6 000 000	...
Korea, Republic of	15 333 742	18 546 017	19 238 122	21 869 566	...
Pakistan (c)	1 013 138	1 032 733	1 048 000	1 267 670	1 252 080
Taiwan	59 570	18 487	13 770	21 261	27 039

**Production of Pig Iron**

tonnes

Country	1990	1991	1992	1993	1994
Australia	6 125 000	5 647 000	6 388 000	6 766 000	7 467 000
World total	533 000 000	508 700 000	505 100 000	487 800 000	501 000 000

Note(s):

- (1) The data in this table include sponge iron and direct reduced iron (DRI), where these have been separately identified
- (a) Years ended 20 March following that stated
- (b) Excluding data from August to December for the Republic of Croatia
- (c) Years ended 30 June of that stated
- (d) As from 1992 data is for Serbia and Montenegro only

## Production of Steel Ingots and Castings

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	17 840 700	16 474 400	16 211 900	16 624 700	17 285 800
Belgium	11 719 159	11 334 883	10 337 352	10 172 000	11 319 000
Denmark	610 000	632 000	591 000	603 000	723 000
France	19 015 731	18 434 148	17 960 513	17 106 000	18 028 000
Germany, Federal Republic of	38 434 000	42 169 000	39 711 000	37 625 000	40 833 000
Greece	999 000	980 000	923 510	1 031 000	890 000
Irish Republic	330 000	322 000	265 000	293 000	316 000
Italy	25 466 928	25 112 000	24 835 000	25 717 000	26 144 000
Luxembourg	3 560 290	3 379 440	3 068 463	3 292 942	3 778 869
Netherlands	5 411 800	5 171 300	5 439 000	6 000 100	6 171 200
Portugal	744 000	541 000	768 000	775 000	722 000
Spain	12 936 000	12 932 000	12 254 000	12 960 000	13 547 000
Austria	4 241 448	3 897 392	3 600 380	2 969 501	4 398 887
Azerbaijan	—	—	385 000	228 000	36 000
Belarus	—	—	*544 000	766 000	873 000
Bosnia & Herzegovina	—	—	*135 000	*115 000	...
Bulgaria	2 184 453	1 615 000	1 551 000	1 941 000	2 491 000
Croatia	—	—	101 942	73 815	63 352
Czechoslovakia	14 775 000	12 071 000	11 147 000	—	—
Czech Republic	—	—	—	6 762 000	6 772 000
Finland	1 899 130	1 975 373	1 996 573	3 256 000	3 420 000
German Democratic Republic	5 546 000	—	—	—	—
Georgia	—	—	529 000	215 000	116 000
Hungary	2 963 000	1 930 000	1 541 000	1 736 000	1 944 720
Latvia	—	—	247 800	301 000	...
Macedonia	—	—	140 000	123 000	92 000
Moldova	—	—	619 000	604 000	623 000
Norway	376 416	437 604	446 234	505 318	454 000
Poland	13 625 000	10 432 000	9 866 000	9 939 000	11 064 000
Romania	9 761 000	7 110 000	5 376 000	5 446 000	5 750 000
Russia	—	—	67 000 000	58 236 000	48 762 000
Slovakia	—	—	—	3 922 000	3 792 000
Slovenia	—	—	400 000	347 000	417 000
Soviet Union	154 414 000	132 839 000	—	—	—
Sweden	4 454 000	4 252 000	4 358 000	4 592 000	4 954 000
Switzerland	963 000	955 000	1 050 000	...	...
Turkey	9 412 894	9 397 697	10 342 916	11 414 000	12 041 000
Ukraine	—	—	41 800 000	30 537 000	23 798 000
Yugoslavia (d)	3 608 285	(c) 2 176 000	665 000	183 000	143 000
Algeria	767 000	838 000	*850 000	865 000	808 000
Angola	*10 000	*10 000	*10 000	*10 000	*10 000
Egypt	2 247 000	2 556 000	2 524 000	2 811 000	2 622 000
Libya	492 000	718 000	822 000	960 000	869 000
Nigeria	131 390	137 000	*140 000	*140 000	58 000
South Africa	8 619 000	9 358 000	9 062 000	8 613 000	8 304 000
Tunisia	176 800	193 000	181 500	182 000	183 000
Zimbabwe	580 318	581 000	559 000	222 000	187 000
Canada	12 280 736	12 987 433	13 933 466	14 388 000	13 836 000
Cuba	255 000	180 130	133 900	90 000	124 000
Dominican Republic	36 839	39 299	32 628	...	...
Mexico	8 734 219	7 964 016	8 459 429	9 198 784	10 172 000
Trinidad & Tobago	364 500	439 700	552 800	492 100	631 000
USA	89 726 000	79 738 000	84 322 000	88 793 000	91 200 000
Argentina	3 635 635	2 971 670	2 679 900	2 869 900	3 274 100
Brazil	20 566 600	22 617 300	23 934 000	25 207 000	25 747 000
Chile	771 795	807 069	1 012 758	1 068 828	1 041 000
Colombia	701 406	651 980	656 782	687 432	702 000
Paraguay	47 798	60 862	85 954	76 507	88 000
Peru	269 950	403 766	343 244	417 136	485 000
Uruguay	38 172	41 245	55 153	35 933	36 000
Venezuela	2 997 549	3 304 299	4 263 273	3 352 705	3 411 000

**Production of Steel Ingots and Castings**

tonnes

Country	1990	1991	1992	1993	1994
Bangladesh (b)	75 029	57 520	36 796	7 043	...
China	66 350 000	71 000 000	80 940 000	89 556 400	91 530 000
Hong Kong	*150 000	*150 000	*150 000	*150 000	...
India	14 963 000	17 100 000	18 117 000	18 155 000	18 227 000
Indonesia	2 892 000	3 250 000	3 171 072	1 947 511	...
Iran	1 583 606	2 406 099	3 081 311	4 095 744	*4 500 000
Israel	135 000	120 000	109 000	*120 000	...
Japan	110 331 331	109 649 146	98 132 000	99 623 000	98 294 000
Jordan	179 100	200 300	243 700	181 400	...
Kazakhstan	—	—	5 675 000	4 279 000	...
Korea, Dem. P.R. of	*7 000 000	*7 000 000	*7 000 000	*7 000 000	*6 500 000
Korea, Republic of	23 125 000	26 001 000	28 054 000	33 027 000	33 798 000
Malaysia	*1 100 000	1 130 000	1 559 000	1 807 000	*1 900 000
Pakistan	780 000	870 000	853 000	992 000	...
Philippines	600 000	605 000	497 000	623 000	...
Qatar	564 000	564 000	588 059	620 000	...
Saudi Arabia	1 790 000	1 783 000	1 866 000	2 357 000	*2 400 000
Singapore	489 000	510 000	482 000	520 000	...
Syria	*70 000	*70 000	*70 000	*70 000	...
Taiwan	9 747 000	11 083 000	10 705 000	11 975 000	11 590 000
Thailand	684 678	711 134	929 000	954 000	...
Uzbekistan	—	—	630 000	573 000	...
Vietnam	102 000	183 000	219 000	270 000	...
Australia (a)	6 666 000	6 017 000	6 990 000	7 837 000	8 455 000
New Zealand	791 000	800 000	632 219	670 104	772 296
World total	769 000 000	734 000 000	722 000 000	725 000 000	720 000 000

## Note(s):

(1) The figures in this table refer to crude steel and cast semi-manufactures are not included

(a) Including recovery from scrap

(b) Years ended 30 June of that stated

(c) Excluding data from August to December for the Republic of Croatia

(d) As from 1992 data is for Serbia and Montenegro only

## Production of Ferro-alloys

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Ferro-manganese	143 400	178 400	136 500	45 100	—
Belgium					
Ferro-manganese	*25 000	*25 000	*25 000	*25 000	*25 000
France					
Blast furnace ferro-alloys					
Spiegeleisen & ferro-manganese	319 930	237 679	*280 000	*280 000	*300 000
Electric furnace ferro-alloys (h)					
Ferro-chrome & ferro-silico-chrome	25 000	23 100	6 694	—	—
Ferro-silico-manganese	62 000	63 400	63 100	76 138	66 230
Ferro-silicon	117 490	105 800	98 100	83 663	111 590
Ferro-titanium & Fe-W,Fe-Mo,Fe-V (a)	4 300	3 920	3 900	1 462	*1 400
Other ferro-alloys	*23 200	*42 500	32 000	29 000	19 500
Silicon metal	63 500	63 600	66 000	58 950	66 000
Germany, Federal Republic of					
Blast furnace ferro-alloys					
Spiegeleisen & ferro-manganese (g)	*250 000	*220 000	*130 000	*100 000	—
Electric furnace ferro-alloys					
Ferro-chrome	*37 500	*33 650	26 520	16 400	*17 300
Ferro-manganese & ferro-silico-manganese	*38 000	*40 000	*30 000	*20 000	*20 000
Ferro-silicon	*46 000	*50 000	*20 000	...	...
Other ferro-alloys	*54 000	*40 000	*30 000	...	...
Greece					
Electric furnace ferro-alloys					
Ferro-chrome	30 345	*15 000	—	—	...
Ferro-nickel	*60 500	64 020	*65 000	*50 000	...
Italy					
Blast furnace ferro-alloys					
Ferro-manganese	30 842	10 814	10 716	...	—
Electric furnace ferro-alloys					
Ferro-chrome	53 103	47 192	60 315	53 504	*22 700
Ferro-manganese	10 995	14 145	17 079	*17 000	*16 000
Ferro-silico-manganese	84 000	103 000	101 000	*100 000	*40 000
Ferro-silicon	39 761	12 648	3 350	...	...
Ferro-titanium & ferro-silico-titanium	2 000	1 000	1 000	...	...
Calcium silicide	14 000	9 000	6 000	...	...
Silicon metal	13 000	6 000	10 000	...	...
Portugal					
Electric furnace ferro-alloys					
Ferro-manganese	14 080	16 070	14 545	16 175	*14 330
Spain					
Electric furnace ferro-alloys					
Ferro-chrome	*15 000	*6 000	—	2 390	*2 000
Ferro-manganese	*52 220	*50 000	*50 000	*40 000	*35 000
Ferro-silico-manganese	*38 440	*40 000	*40 000	*40 000	*35 000
Ferro-silicon	*37 500	*40 000	*40 000	...	...
Other ferro-alloys	*5 000	*5 000	*5 000	...	...
Silicon metal	*9 000	*9 000	*10 000	...	...
Albania					
Electric furnace ferro-alloys					
Ferro-chrome	23 000	25 300	24 000	35 000	33 000
Austria					
Electric furnace ferro-alloys	12 000	*12 000	*12 000	...	...
Bosnia & Herzegovina					
Electric furnace ferro-alloys					
Ferro-silicon	—	—	*5 000	*1 000	...
Silicon metal	—	—	*2 000	*200	...
Bulgaria					
Electric furnace ferro-alloys					
Ferro-silicon	*14 000	*14 000	*10 000	...	...
Other ferro-alloys	*1 000	*1 000	*1 000	...	...
Croatia					
Electric furnace ferro-alloys					
Ferro-chrome	—	—	56 456	27 336	*32 000
Ferro-manganese	—	—	*10 000	*10 000	*10 000
Ferro-silico-manganese	—	—	*40 000	*40 000	*40 000

**Production of Ferro-alloys**

tonnes

Country	1990	1991	1992	1993	1994
<b>Czechoslovakia</b>					
Electric furnace ferro-alloys					
Ferro-chrome	31 866	33 860	37 756	—	—
Ferro-manganese	64 205	*60 000	*50 000	—	—
Ferro-silico-manganese	*37 000	*30 000	*30 000	—	—
Ferro-silicon	20 474	*15 000	*15 000	—	—
Other ferro-alloys	*10 000	*10 000	*10 000	—	—
Silicon metal	*5 000	*5 000	*5 000	—	—
<b>Finland</b>					
Electric furnace ferro-alloys					
Ferro-chrome & ferro-silico-chrome	155 495	195 612	196 870	195 063	229 000
<b>German Democratic Republic</b>					
Electric furnace ferro-alloys					
Ferro-chrome	*21 000	—	—	—	—
Ferro-manganese & ferro-silico-manganese	*65 000	—	—	—	—
Ferro-silicon	*24 000	—	—	—	—
Other ferro-alloys	*12 000	—	—	—	—
Silicon metal	*3 000	—	—	—	—
<b>Hungary</b>					
Electric furnace ferro-alloys					
Ferro-silicon	11 270	3 977	*4 000	...	...
Other ferro-alloys	*1 000	*500	*500	...	...
Silicon metal	*2 000	*1 000	*1 000	...	...
<b>Iceland</b>					
Electric furnace ferro-alloys					
Ferro-silicon	62 791	47 872	51 413	...	...
<b>Macedonia</b>					
Electric furnace ferro-alloys					
Ferro-chrome	—	—	3 958	4 376	*3 160
Ferro-silicon	—	—	*30 000	*20 000	...
Silicon metal	—	—	*1 000	*1 000	...
<b>Norway</b>					
Electric furnace ferro-alloys					
Ferro-chrome	*60 000	*83 000	102 000	80 000	*120 000
Ferro-manganese	213 266	173 212	202 680	*200 000	*249 000
Ferro-silico-manganese	193 411	226 737	213 106	*210 000	*197 000
Ferro-silicon	460 431	413 764	376 872	400 769	452 984
Other ferro-alloys	*14 000	*14 000	*14 000	*27 000	*22 000
Silicon metal	76 601	71 530	72 782	81 259	91 714
<b>Poland</b>					
Blast furnace ferro-alloys					
Ferro-manganese	71 000	57 400	43 400	*40 000	*55 000
Electric furnace ferro-alloys					
Ferro-chrome	13 700	1 300	35 300	38 449	*7 000
Ferro-manganese & ferro-silico-manganese	5 400	9 200	4 800	*5 000	*5 000
Ferro-silicon	88 600	60 100	36 100	...	...
Other ferro-alloys	33 100	39 600	30 800	...	...
Silicon metal	*10 000	9 000	*9 000	...	...
<b>Romania</b>					
Electric furnace ferro-alloys					
Ferro-chrome	20 633	20 380	6 977	3 907	*3 900
Ferro-manganese	*80 000	*70 000	27 130	16 390	31 300
Ferro-silico-manganese	*40 000	*20 000	28 159	22 040	35 800
Ferro-silicon	*50 000	*30 000	23 318	23 560	27 900
Silicon metal	*4 000	*4 000	*2 000	...	...
<b>Russia</b>					
Blast furnace ferro-alloys					
Ferro-manganese	—	—	*200 000	*150 000	*125 000
Electric furnace ferro-alloys					
Ferro-chrome	—	—	400 000	*256 000	*266 000
Other ferro-alloys	—	—	*800 000	*600 000	*600 000
<b>Slovakia</b>					
Electric furnace ferro-alloys					
Ferro-chrome	—	—	—	50 600	*48 500
Other ferro-alloys	—	—	—	165 492	*37 000

## Production of Ferro-alloys

tonnes

Country	1990	1991	1992	1993	1994
Slovenia					
Electric furnace ferro-alloys					
Ferro-chrome	—	—	17 104	9 000	*12 600
Ferro-silicon	—	—	*6 000	*4 500	...
Soviet Union					
Blast furnace ferro-alloys					
Spiegeleisen	17 000	*15 000	—	—	—
Ferro-manganese	281 000	235 000	—	—	—
Electric furnace ferro-alloys					
Ferro-chrome	*700 000	*700 000	—	—	—
Ferro-silico-chrome	*100 000	*100 000	—	—	—
Ferro-manganese	*410 000	*370 000	—	—	—
Ferro-silico-manganese	*1 300 000	*1 100 000	—	—	—
Ferro-nickel	*90 000	*85 000	—	—	—
Ferro-phosphorus	30 000	31 000	—	—	—
Ferro-silicon	*1 860 000	*1 600 000	—	—	—
Other ferro-alloys	*160 000	*140 000	—	—	—
Silicon metal	*65 000	*60 000	—	—	—
Sweden					
Electric furnace ferro-alloys					
Ferro-chrome	110 945	117 773	133 076	116 060	133 811
Ferro-silicon	18 670	18 627	15 451	20 381	21 392
Silicon metal	10 258	...	—	—	—
Switzerland					
Electric furnace ferro-alloys					
Ferro-silicon	*3 000	*3 000	*3 000	*3 000	...
Silicon metal	*2 000	*2 000	*2 000	*2 000	...
Turkey					
Electric furnace ferro-alloys					
Ferro-chrome	62 439	85 693	83 170	90 030	97 600
Ferro-silicon	5 225	1 736	1 250	4 680	...
Ukraine					
Blast furnace ferro-alloys					
Ferro-manganese	—	—	*50 000	*50 000	*50 000
Electric furnace ferro-alloys					
Ferro-manganese	—	—	*100 000	*100 000	*100 000
Ferro-silico-manganese	—	—	*1 000 000	*700 000	*700 000
Ferro-silicon	—	—	*500 000	*300 000	277 400
Other ferro-alloys	—	—	*52 000	*50 000	...
Yugoslavia (j)					
Electric furnace ferro-alloys					
Ferro-chrome	82 687	*91 000	—	—	—
Ferro-silico-chrome	4 199	*3 000	—	—	—
Ferro-manganese	31 822	*20 000	—	—	—
Ferro-silico-manganese	60 601	*50 000	—	—	—
Ferro-nickel	11 850	(b) 11 775	*5 000	1 283	...
Ferro-silicon	103 188	*80 000	—	—	—
Other ferro-alloys	10 462	*9 000	—	—	—
Silicon metal	12 661	*10 000	—	—	—
Egypt (i)					
Electric furnace ferro-alloys					
Ferro-silicon	7 922	7 900	*7 900	7 247	6 955
South Africa					
Ferro-chrome (d)	1 022 026	1 149 200	770 600	833 555	*1 100 000
Ferro-manganese	403 559	259 944	269 807	393 372	*568 000
Ferro-silico-manganese	234 000	235 000	242 000	*230 000	*279 000
Ferro-silicon	78 150	68 332	63 892	98 843	...
Other ferro-alloys	*1 000	*1 000	*1 000	...	...
Silicon metal	35 731	39 791	34 528	38 279	...
Zimbabwe					
Electric furnace ferro-alloys					
Ferro-chrome	204 140	186 774	190 994	(d) *130 000	(d) *190 000
Ferro-silico-chrome	16 612	27 755	20 282	...	...
Ferro-manganese	1 100	...	...	...	—
Ferro-silicon	1 640	...	...	2 000	...

**Production of Ferro-alloys**

tonnes

Country	1990	1991	1992	1993	1994
<b>Canada</b>					
Electric furnace ferro-alloys					
Ferro-manganese (f)	*185 000	*45 000	—	—	—
Ferro-silicon	*110 000	*90 000	*80 000	*80 000	*80 000
Silicon metal	*30 000	*30 000	*30 000	*30 000	*30 000
<b>Dominican Republic</b>					
Electric furnace ferro-alloys					
Ferro-nickel	74 009	74 813	71 417	60 774	79 000
<b>Mexico</b>					
Electric furnace ferro-alloys					
Ferro-chrome	275	72	61	—	—
Ferro-manganese	186 329	147 259	131 203	119 016	117 062
Ferro-silico-manganese	70 685	67 090	57 456	62 828	72 094
Ferro-silicon	6 998	5 836	...	...	...
Other ferro-alloys	87	105	107	...	...
<b>USA</b>					
Ferro-chrome (d) (e)	108 932	68 327	60 945	63 018	67 361
Ferro-nickel	7 333	14 251	18 167	9 926	...
Ferro-phosphorus	46 018	36 135	25 098	17 795	...
Ferro-silicon	433 726	338 154	346 290	323 351	310 532
Other ferro-alloys	137 892	175 131	164 403	142 772	...
Silicon metal	140 792	145 275	158 550	158 570	163 529
<b>Argentina</b>					
Electric furnace ferro-alloys					
Ferro-manganese	24 344	26 337	4 524	5 400	(c) ...
Ferro-silico-manganese	21 805	14 564	30 790	18 500	(c) ...
Ferro-silicon	23 641	14 437	8 073	10 600	(c) ...
Other ferro-alloys	6 310	5 400	3 600	6 800	68 800
Silicon metal	*10 000	*10 000	*10 000	*10 000	...
<b>Brazil</b>					
Electric furnace ferro-alloys					
Ferro-calcium-silicon	27 520	21 708	22 756	28 355	23 976
Ferro-chrome	83 753	82 225	91 100	83 892	77 163
Ferro-silico-chrome	4 973	4 524	6 759	4 128	7 735
Ferro-silico-magnesium	10 340	10 168	10 565	10 185	8 412
Ferro-manganese	170 504	169 103	178 937	201 518	199 667
Ferro-silico-manganese	216 779	272 046	299 995	284 147	243 158
Ferro-nickel	34 257	34 069	33 470	36 350	34 157
Ferro-niobium	16 643	18 959	16 303	13 488	17 901
Ferro-phosphorus	1 278	864	32	250	707
Ferro-silicon	229 408	190 864	243 838	238 864	194 720
Ferro-titanium	125	126	4	—	—
Other ferro-alloys	622	191	104	1 941	1 341
Silicon metal	131 614	106 002	93 734	90 379	89 282
<b>Chile</b>					
Electric furnace ferro-alloys					
Ferro-chrome	1 868	2 509	2 110	680	1 580
Ferro-manganese	3 587	6 779	7 460	8 854	*9 000
Ferro-silico-manganese	985	1 676	1 504	1 231	*2 000
Ferro-molybdenum	2 283	2 673	2 310	2 202	...
Ferro-silicon	4 662	5 516	3 830	7 550	...
<b>Colombia</b>					
Ferro-nickel	43 847	50 150	49 814	48 232	*50 000
<b>Venezuela</b>					
Ferro-silico-manganese	30 594	30 590	32 115	42 237	*40 000
Ferro-silicon	53 422	54 327	44 552	47 522	41 032
<b>China</b>					
Ferro-chrome	*340 000	*380 000	*410 000	*372 000	*370 000
Ferro-manganese	*480 000	*680 000	*750 000	*740 000	*760 000
Ferro-silico-manganese	*370 000	*415 000	*420 000	*525 000	*550 000
Ferro-silicon	*900 000	*950 000	*1 000 000	...	...
Other ferro-alloys	*690 000	*800 000	*750 000	...	...



## Production of Ferro-alloys

tonnes

Country	1990	1991	1992	1993	1994
<b>India</b>					
Electric furnace ferro-alloys					
Ferro-chrome	130 041	129 749	*135 000	*130 000	...
Ferro-silico-chrome	7 316	8 614	*9 000	*8 000	...
Ferro-manganese	203 311	200 902	*198 000	*137 000	*150 000
Ferro-silico-manganese	60 426	58 672	*93 000	*85 000	*90 000
Ferro-silicon	64 035	56 940	*60 000	*53 000	...
Other ferro-alloys	314	285	...	...	...
Silicon metal	2 045	747	...	...	...
<b>Indonesia</b>					
Electric furnace ferro-alloys					
Ferro-nickel	26 089	25 025	24 653	*24 000	...
<b>Japan</b>					
Electric furnace ferro-alloys					
Ferro-calcium-silicon	514	410	426	(c) ...	...
Ferro-chrome	303 838	278 522	275 615	211 102	*203 000
Ferro-manganese	452 434	463 722	361 941	382 912	*340 000
Ferro-silico-manganese	77 465	87 229	96 360	64 758	*69 000
Ferro-molybdenum	3 366	3 729	3 261	3 656	...
Ferro-nickel	234 311	295 422	237 350	257 316	...
Ferro-niobium	984	710	919	1 086	...
Ferro-silicon	62 599	62 362	37 656	29 084	...
Ferro-tungsten	46	61	71	80	...
Ferro-vanadium	3 706	3 847	3 005	3 670	...
Other ferro-alloys	3 462	3 560	4 507	5 174	...
<b>Kazakhstan</b>					
Electric furnace ferro-alloys					
Ferro-chrome	—	—	350 000	317 984	326 400
Ferro-silico-chrome	—	—	56 000	36 235	...
Ferro-silicon	—	—	520 000	418 188	207 700
<b>Korea, Dem. P.R. of</b>					
Ferro-manganese	*70 000	*70 000	*70 000	*70 000	*70 000
Ferro-silicon	*30 000	*30 000	*30 000	*30 000	...
Other ferro-alloys	*20 000	*20 000	*20 000	*20 000	...
<b>Korea, Republic of</b>					
Electric furnace ferro-alloys					
Ferro-manganese	83 963	94 893	85 867	101 000	*120 000
Ferro-silicon	2 000	18 912	18 198	*3 000	...
Other ferro-alloys	101 818	74 173	82 582	82 000	*89 000
<b>Philippines</b>					
Electric furnace ferro-alloys					
Ferro-chrome	*55 700	23 730	*27 400	11 900	*16 200
Ferro-silicon	*10 000	*10 000	*10 000	...	...
<b>Taiwan</b>					
Electric furnace ferro-alloys					
Ferro-manganese	43 631	40 110	37 802	13 628	*7 000
Ferro-silico-manganese	20 587	12 801	3 991	—	...
Ferro-silicon	15 501	6 252	2 606	689	...
<b>Thailand</b>					
Electric furnace ferro-alloys					
Ferro-silico-manganese	4 511	3 938	4 275	2 000	*2 000
<b>Australia</b>					
Electric furnace ferro-alloys					
Ferro-manganese	*70 000	*45 000	*55 000	*75 000	*100 000
Ferro-silico-manganese	*65 000	*74 000	*75 000	*75 000	*100 000
Ferro-silicon	*20 000	*20 000	*20 000	*20 000	...
Silicon metal	*33 000	*30 000	*30 000	...	...

**Production of Ferro-alloys**

tonnes

Country	1990	1991	1992	1993	1994
New Caledonia					
Electric furnace ferro-alloys					
Ferro-nickel	117 800	119 808	108 889	128 202	...

- (a) Ti, W, Mo, V content of ferro-titanium, ferro-tungsten, ferro-molybdenum and ferro-vanadium
- (b) Excluding data from August to December for the Republic of Croatia
- (c) Included with 'other ferro-alloys'
- (d) Including ferro-silico -chrome
- (e) Including other chromium alloys and chromium metal
- (f) Including ferro-silico- manganese
- (g) Including ferro-silicon
- (h) Including alumino-thermic ferro-alloys
- (i) Years ended 30 June of that stated
- (j) As from 1992 data is for Serbia and Montenegro only

## Exports of Iron, Steel and Ferro-alloys

Country	1990	1991	1992	1993	1994
United Kingdom					
Pig iron	21 069	16 449	15 678	11 024	1 928
Sponge & powder	3 831	2 712	4 364	2 670	3 159
Ferro-chrome	776	1 607	1 892	2 837	5 756
Ferro-manganese	41 389	70 992	59 640	20 031	1 406
Ferro-silico-manganese	181	801	1 112	624	73
Ferro-molybdenum	5 282	5 083	5 490	4 173	6 342
Ferro-nickel	5	14	18	21	1 647
Ferro-niobium	811	1 040	846	291	23
Ferro-phosphorus	135	236	167	520	759
Ferro-silicon	1 670	3 725	3 748	9 436	6 476
Ferro-titanium & ferro-silico-titanium	11 244	9 241	10 591	13 419	12 825
Ferro-vanadium	231	79	146	102	55
Other ferro-alloys	8 210	10 936	6 472	6 345	5 790
Ingots, blooms, billets	1 309 675	1 401 463	1 220 702	1 252 797	1 206 314
Scrap	3 198 385	3 247 234	2 797 717	3 857 809	3 538 041
Belgium-Luxembourg					
Pig iron	13 167	5 519	13 244	62 075	...
Sponge & powder	2 200	2 120	1 511	1 458	...
Ferro-chrome	2 130	4 117	2 594	16 903	...
Ferro-manganese	22 624	34 671	8 983	12 400	...
Ferro-silico-manganese	3 609	7 934	11 459	12 688	...
Ferro-silicon	2 439	6 641	2 493	7 183	...
Ferro-titanium & ferro-silico-titanium	330	102	60	47	...
Other ferro-alloys	431	833	1 140	1 160	...
Ingots, blooms, billets	834 846	850 993	487 060	1 230 798	...
Scrap	869 401	1 045 097	1 202 135	1 581 155	...
Denmark					
Ingots, blooms, billets	6 109	15 514	16 265	20 818	17 168
Scrap	310 713	290 582	353 767	425 808	330 389
France					
Pig iron	10 350	7 654	19 451	4 841	1 545
Spiegeleisen	678	1 063	774	...	265
Sponge & powder	1 357	2 084	2 135	1 104	1 207
Ferro-chrome	21 658	22 779	7 180	346	315
Ferro-silico-magnesium	7 289	6 894	7 159	(c) ...	9 716
Ferro-manganese	25 657	57 673	57 678	295 206	58 461
Ferro-silico-manganese	51 138	56 408	42 607	44 929	71 915
Ferro-molybdenum	3 272	3 001	3 062	(c) ...	158
Ferro-nickel	3 240	1 801	77	8	38
Ferro-silicon	29 007	40 018	35 881	26 737	26 867
Ferro-titanium & ferro-silico-titanium	776	689	499	(c) ...	1 171
Ferro-vanadium	30	37	6	(c) ...	53
Ferro-silico-zirconium	197	1 111	105	(c) ...	—
Other ferro-alloys	23 949	17 704	19 445	32 787	29 367
Ingots, blooms, billets	1 072 482	1 255 209	1 000 310	1 572 267	1 561 706
Scrap	3 674 956	3 420 340	3 506 595	3 998 172	3 772 256
Germany, Federal Republic of					
Pig iron	599 402	390 561	298 643	221 155	...
Sponge & powder	29 962	21 627	22 397	20 316	...
Ferro-chrome	53 371	46 597	51 909	58 847	...
Ferro-silico-chrome	4 336	2 960	1 450	1 106	...
Ferro-silico-magnesium	5 441	4 433	5 832	5 450	...
Ferro-manganese	79 251	56 031	38 011	22 955	...
Ferro-silico-manganese	8 754	9 352	4 983	4 754	...
Ferro-molybdenum	401	288	297	494	...
Ferro-nickel	1 114	924	1 564	3 146	...
Ferro-niobium	591	769	905	855	...
Ferro-phosphorus	6 586	5 619	4 607	1 573	...
Ferro-silicon	66 481	57 914	54 375	44 917	...
Ferro-titanium & ferro-silico-titanium	1 011	1 575	1 757	2 135	...
Ferro-tungsten & ferro-silico-tungsten	41	86	36	38	...
Ferro-vanadium	2 498	2 181	2 054	1 851	...
Other ferro-alloys	2 620	6 483	8 695	10 849	...
Silicon metal	5 740	4 763	7 047	6 319	...
Ingots, blooms, billets	1 080 407	1 318 948	1 447 789	1 927 875	...
Scrap	5 198 929	7 251 020	8 441 147	8 519 683	...

## Exports of Iron, Steel and Ferro-alloys

tonnes

Country	1990	1991	1992	1993	1994
Greece					
Ferro-chrome	25 120	16 484	8 368	2 285	...
Ferro-nickel	—	203	—	...	...
Ingots, blooms, billets	49 228	38 713	24 186	65 223	...
Irish Republic					
Scrap	26 045	18 048	16 069	54 091	...
Italy					
Pig iron	37 895	46 336	37 310	16 714	...
Sponge & powder	9 551	9 573	10 589	10 918	...
Ferro-chrome	15 681	4 015	9 827	1 253	...
Ferro-silico-chrome	1 089	558	936	9	...
Ferro-silico-magnesium	(c) ...	283	140	(c) ...	...
Ferro-manganese	3 974	7 904	9 598	6 788	...
Ferro-silico-manganese	13 541	26 816	13 800	16 113	...
Ferro-silicon	6 427	3 457	3 959	3 549	...
Ferro-titanium & ferro-silico-titanium	1 222	965	318	(c) ...	...
Other ferro-alloys	12 347	3 414	1 188	470	...
Silicon metal	4 348	2 875	6 975	1 892	...
Ingots, blooms, billets	484 524	253 036	371 980	1 384 467	...
Scrap	19 496	11 538	13 319	13 354	...
Netherlands					
Pig iron	828	2 719	1 387	53 150	...
Sponge & powder	452	722	208	916	...
Ferro-chrome	3 355	1 299	197	39 785	...
Ferro-manganese	132	272	470	4 356	...
Ferro-silico-manganese	—	—	545	3 549	...
Ferro-molybdenum	464	389	189	1 258	...
Ferro-silicon	325	342	269	44 493	...
Ferro-titanium & ferro-silico-titanium	208	424	—	256	...
Ferro-vanadium	—	—	—	356	...
Other ferro-alloys	203	339	249	2 029	...
Silicon metal	4 884	5 108	5 568	8 314	...
Ingots, blooms, billets	1 152 225	1 025 923	1 067 400	1 571 517	...
Scrap	2 620 517	3 530 954	3 249 515	5 532 317	...
Portugal					
Ferro-silicon	8 139	3 916	913	3	...
Other ferro-alloys	825	371	—	101	...
Scrap	14 776	32 980	17 714	58 003	...
Spain					
Pig iron	8 559	133	13	56 764	...
Ferro-chrome	2 620	1 895	128	153	...
Ferro-manganese	20 441	16 248	23 812	7 084	...
Ferro-silico-manganese	21 074	12 650	10 008	18 301	...
Ferro-silicon	9 826	7 425	3 722	5 786	...
Other ferro-alloys	215	231	177	278	...
Silicon metal	213	298	465	1 225	...
Ingots, blooms, billets	81 121	222 950	283 523	226 016	...
Scrap	22 644	25 486	25 753	18 530	...
Albania					
Ferro-chrome	31 300	(f) *15 400	(f) *8 500	(f) *24 800	...
Austria					
Pig iron	6 904	13 346	7 613	6 952	181
Ferro-alloys	22 049	19 808	22 211	20 084	19 080
Ingots & blooms	13 957	9 394	18 644	51 225	97 357
Scrap	342 438	503 860	399 936	460 329	467 015
Belarus					
Scrap (f)	—	—	*6 700	*12 700	...
Bulgaria					
Pig iron	7 300	4 000	5 700	9 800	...
Ferro-alloys	13 300	6 300	2 300	3 100	...
Ingots, blooms, billets	75 000	63 000	183 200	334 600	...
Scrap (f)	*18 900	*27 300	*118 800	*167 700	...
Croatia					
Ferro-chrome	—	—	53 685	21 395	...
Ferro-silico-manganese	—	—	20 536	9 315	...
Scrap	—	—	51 891	45 354	...

## Exports of Iron, Steel and Ferro-alloys

tonnes

Country	1990	1991	1992	1993	1994
Czechoslovakia					
Pig iron (f)	*33 600	...	*25 700	—	—
Ferro-chrome (f)	*2 300	*16 700	*44 500	—	—
Ferro-manganese (f)	*17 000	*38 000	*5 600	—	—
Other ferro-alloys (f)	*7 000	*4 800	*2 600	—	—
Blooms	664 000	731 500	613 000	—	—
Scrap	(f) *427 300	(f) *346 000	699 000	—	—
Czech Republic					
Ferro-chrome (f)	—	—	—	*25 300	...
Other ferro-alloys (f)	—	—	—	*3 200	...
Estonia					
Scrap	—	—	42 000	203 000	...
Finland					
Ferro-chrome & ferro-silico-chrome	105 199	118 172	103 236	93 799	...
Ingots, blooms, billets	117 487	110 225	110 579	136 265	...
Scrap	1 765	57 090	39 397	46 281	...
German Democratic Republic					
Pig iron	*5 000	—	—	—	—
Ferro-silicon (f)	*18 100	—	—	—	—
Other ferro-alloys (f)	*8 300	—	—	—	—
Ingots, blooms, billets (f)	*792 400	—	—	—	—
Scrap (f)	*108 300	—	—	—	—
Hungary					
Pig iron	18 329	3 200	4 174	—	—
Ferro-alloys	11 964	5 100	5 220	4 222	5 081
Ingots, blooms, billets	51 617	82 000	23 401	21 131	15 717
Scrap	220 356	382 000	455 239	552 541	652 817
Iceland					
Ferro-silicon	67 150	53 452	56 898	64 457	70 798
Scrap	4 435	86	4 649	15 624	...
Latvia					
Scrap	—	—	8 000	8 000	...
Malta					
Scrap	...	...	9 412	...	...
Norway					
Pig iron	50 132	58 633	(f) *56 900	(f) *54 100	...
Ferro-chrome	55 126	85 645	(f) *104 800	(f) *70 400	...
Ferro-manganese	173 402	145 128	(f) *158 700	(f) *150 100	...
Ferro-silico-manganese	197 615	205 186	195 630	196 062	165 544
Ferro-silicon	400 627	371 616	351 646	377 035	404 071
Other ferro-alloys	14 598	12 559	13 242	12 684	23 574
Silicon metal	73 841	60 827	65 610	76 530	91 793
Ingots, blooms, billets	10 184	22 782	62 362	68 937	39 140
Scrap	12 146	15 662	12 058	10 360	63 189
Poland					
Pig iron & ferro-alloys	800 040	196 938	92 799	67 802	...
Ingots, blooms, billets	1 423 000	22 932	1 639 723	1 080 000	...
Scrap	424 572	181 207	1 240 000	1 012 000	...
Romania					
Ingots, blooms, billets	(f) *6 600	(f) *1 000	9 714	69 128	...
Scrap	(f) *9 400	(f) *18 300	134 095	17 385	...
Russia					
Pig iron	—	3 198 000	1 930 900	2 268 400	...
Ferro-alloys	—	490 000	202 870	294 946	...
Ingots, blooms, billets	—	—	4 603 812	6 830 049	...
Scrap	—	368 000	432 549	484 862	...
Slovakia					
Pig iron	—	—	—	127 000	...
Ferro-chrome & ferro-silico-chrome (f)	—	—	—	*9 300	...
Ferro-manganese & ferro-silico-manganese (f)	—	—	—	*3 200	...
Ferro-silicon (f)	—	—	—	*8 900	...
Ingots, blooms, billets	—	—	—	908 000	...
Scrap	—	—	—	233 000	...
Slovenia					
Scrap	—	—	32 926	50 064	...

## Exports of Iron, Steel and Ferro-alloys

tonnes

Country	1990	1991	1992	1993	1994
Soviet Union					
Pig iron	6 276 170	...	—	—	—
Sponge & powder (f)	*345 400	*318 100	—	—	—
Ferro-alloys	837 389	...	—	—	—
Ingots, blooms, billets (f)	*1 620 300	*1 579 400	—	—	—
Scrap	1 302 000	...	—	—	—
Sweden					
Pig iron	5 270	9 487	31 728	44 664	...
Sponge & powder	124 929	121 354	128 564	129 516	...
Ferro-chrome	93 305	18 879	91 386	76 272	...
Ferro-manganese	792	538	984	1 406	...
Ferro-silico-manganese	91	60	109	257	...
Ferro-molybdenum	90	112	112	65	...
Ferro-niobium	59	74	85	141	...
Ferro-silicon	13 301	11 648	10 171	14 780	...
Ferro-titanium & ferro-silico-titanium	17	121	33	76	...
Ferro-vanadium	55	17	20	35	...
Other ferro-alloys	163	255	657	901	...
Silicon metal	8 391	1 464	353	...	...
Ingots, blooms, billets	239 482	338 092	289 282	288 278	...
Scrap	122 257	236 760	66 484	231 083	...
Switzerland					
Sponge & powder	515	556	640	425	470
Ferro-alloys	242	387	75	605	614
Ingots, blooms, billets	16 234	38 922	47 177	39 746	10 632
Scrap	66 058	70 198	66 809	67 592	86 515
Turkey					
Pig iron	179 091	192 918	88 142	83 913	92 249
Ferro-chrome	64 488	78 469	74 205	92 301	102 678
Ingots, blooms, billets	1 229 900	984 698	1 648 568	1 765 330	2 144 591
Scrap	6 586	9 749	12 378	15 436	36 226
Ukraine					
Pig iron (f)	—	—	*429 500	*1 329 300	...
Ferro-manganese & ferro-silico-manganese (f)	—	—	*56 500	*178 500	...
Ingots, blooms, billets (f)	—	—	*245 000	*1 857 700	...
Scrap (f)	—	—	*31 000	*84 000	...
Yugoslavia (h)					
Pig iron	35 941	(g) —	12 818	...	...
Ferro-chrome	78 409	(g) —	—	...	...
Ferro-manganese	14 604	(g) —	—	...	...
Ferro-silico-manganese	54 834	(g) —	—	...	...
Ferro-nickel	11 479	(g) 11 622	5 616	...	...
Ferro-silicon	74 991	(g) —	—	...	...
Other ferro-alloys	4 158	(g) 59	34	...	...
Silicon metal	8 687	(g) —	—	...	...
Ingots, blooms, billets	111 971	(g) 15 898	2 980	...	...
Scrap	253 691	(g) 34 910	19 544	...	...
Algeria					
Pig iron	302 690	273 625	157 850	...	...
Scrap	10 293	30 889	17 943	...	...
Morocco					
Scrap	84 052	52 628	39 126	153 150	...
Senegal					
Scrap	19 273	7 361	4 845	...	...
South Africa					
Pig iron (f)	*144 100	*164 000	*299 900	*376 900	...
Ferro-chrome	907 100	978 100	736 600	589 547	...
Ferro-manganese	504 927	*400 000	*430 000	*610 000	...
Ferro-silicon	26 376	17 409	25 488	31 921	...
Silicon metal	30 241	32 204	38 078	38 849	...
Ingots, blooms, billets (f)	*499 800	*409 400	*755 200	*632 300	...
Scrap (f)	*31 500	*78 300	*121 600	*170 300	...
Tunisia					
Scrap	5 220	5 217	2 731	225	...

## Exports of Iron, Steel and Ferro-alloys

tonnes

Country	1990	1991	1992	1993	1994
Zimbabwe					
Ferro-chrome	195 699	(a) 182 477	(a) 157 943	...	...
Ferro-silico-chrome	22 084	22 060	19 181	...	...
Ingots, blooms, billets	210 814	237 583	215 627	...	...
Scrap	3 755	24 410	16 149	...	...
Canada					
Pig iron	215 177	84 254	55 013	61 889	64 125
Sponge & powder	39 445	33 542	45 394	132 970	71 057
Ferro-chrome	573	343	150	188	768
Ferro-manganese	15 041	13 657	373	665	274
Ferro-silico-manganese	7 734	17 530	147	187	385
Ferro-silicon	53 532	34 047	30 003	29 335	32 975
Other ferro-alloys	587	600	1 032	1 133	1 337
Silicon metal	14 811	13 072	20 893	22 562	24 534
Ingots, blooms, billets	327 343	306 994	268 615	324 040	297 994
Scrap	1 371 712	1 076 549	1 118 548	1 293 930	1 634 224
Cuba					
Scrap	*90 000	...	...	...	...
Dominican Republic					
Ferro-nickel	78 094	75 028	70 348	65 313	80 450
Mexico					
Ferro-manganese	51 598	(c) ...	(c) ...	38 896	36 772
Ferro-silico-manganese	24 976	(c) ...	(c) ...	24 889	18 508
Other ferro-alloys	218	69 861	58 761	137	111
Ingots, blooms, billets	569 764	430 926	872 808	1 301 767	1 264 047
Scrap	41 139	42 382	47 059	134 591	185 183
Nicaragua					
Scrap	20 429	18 863	14 466	29 433	...
Trinidad & Tobago					
Sponge	442 035	159 997	128 182	155 533	...
Ingots, blooms, billets	9 976	5 265	4 840	14 669	...
USA					
Pig iron	16 767	18 748	35 611	28 948	56 403
Sponge & powder	62 875	21 917	34 000	42 939	48 360
Ferro-chrome & ferro-silico-chrome	10 414	12 393	13 056	12 656	12 030
Ferro-manganese	8 105	15 334	16 802	24 065	10 979
Ferro-silico-manganese	2 707	3 861	10 813	8 834	6 841
Ferro-molybdenum	328	405	573	374	798
Ferro-nickel	2 295	1 903	4 055	1 019	53
Ferro-niobium	851	916	919	815	...
Ferro-phosphorus	6 003	2 934	2 136	1 806	...
Ferro-silicon	52 109	52 621	59 661	39 506	37 962
Ferro-vanadium	350	193	374	291	374
Other ferro-alloys	4 818	3 776	3 169	3 067	...
Silicon metal	9 478	9 190	9 536	11 280	12 117
Ingots, blooms, billets	452 642	640 504	392 713	519 087	...
Scrap	11 610 081	9 342 023	9 219 692	9 871 716	8 827 201
Argentina					
Ferro-silicon	12 784	7 823	1 400	2 835	(c) ...
Other ferro-alloys	19 259	9 716	13 103	2 205	14 066
Ingots, blooms, billets	228 835	115 109	1 166	15 203	...
Brazil					
Pig iron	3 490 235	2 497 476	2 454 236	1 858 952	2 631 114
Ferro-chrome	16 477	27 100	23 936	11 803	7 133
Ferro-manganese	65 292	61 190	47 337	64 778	79 611
Ferro-nickel	15 960	21 678	15 363	17 226	12 969
Ferro-niobium	13 539	13 557	16 467	13 643	17 631
Fe-silico-spiegeleisen & silico-manganese	91 975	128 393	155 836	162 266	81 977
Ferro-silicon	199 899	157 711	191 863	228 539	183 907
Other ferro-alloys	27 283	19 055	23 084	28 676	27 640
Silicon metal	116 773	84 750	73 071	84 709	85 158
Ingots, blooms, billets	3 522 523	4 438 689	4 640 251	5 309 251	4 827 147

**Exports of Iron, Steel and Ferro-alloys**

tonnes

Country	1990	1991	1992	1993	1994
Chile					
Ferro-alloys	5 881	6 505	5 972	5 177	6 045
Ingots, blooms, billets	68 282	72 202	98 156	32 381	27 545
Scrap	28 857	12 964	458	11 401	27 160
Colombia					
Ferro-nickel	46 372	48 084	48 049	49 379	...
Venezuela					
Sponge & powder	705 681	551 085	714 102	1 023 694	...
Ferro-silico-manganese	9 476	5 967	13 597	26 164	...
Ferro-silicon	56 004	54 544	30 271	35 445	...
Ingots, blooms, billets	374 970	655 730	751 030	978 975	...
Scrap	14 903	77 029	114 652	128 291	...
Bahrain					
Scrap	57 916	27 458	...	45 973	...
China					
Pig iron	375 897	624 210	619 035	336 436	1 540 000
Ferro-chrome	11 463	29 768	60 544	129 721	...
Ferro-silico-chrome	(c) ...	(c) ...	9 868	7 370	...
Ferro-manganese	70 497	73 722	79 582	99 265	...
Ferro-silico-manganese	97 303	165 847	170 748	253 913	...
Ferro-molybdenum	6 629	4 957	4 409	11 966	...
Ferro-silicon	244 286	319 997	278 561	335 308	300 000
Ferro-titanium & ferro-silico-titanium	749	125	51	16	...
Ferro-tungsten & ferro-silico-tungsten	6 031	3 589	2 068	3 974	...
Ferro-vanadium	548	100	39	150	...
Other ferro-alloys	10 822	24 309	17 258	32 198	...
Silicon metal	...	...	155 735	171 210	...
Ingots, blooms, billets	520 982	851 312	594 958	136 084	660 000
Scrap	112 469	81 324	72 947	48 750	...
Cyprus					
Scrap (b)	14 644	12 988	17 038	18 980	22 165
Hong Kong					
Pig iron (b)	1 651	225	447	9 108	921
Ferro-manganese (b)	10 340	14 791	2 813	7 805	9 857
Ferro-silico-manganese (b)	(c) ...	(c) ...	23 775	28 635	17 849
Ferro-silicon (b)	42 066	64 630	26 758	29 142	21 307
Other ferro-alloys (b)	33 079	47 787	2 850	2 246	1 766
Ingots, blooms, billets	1 643	3 123	1 638	6 100	10 363
of which: Re-exports	1 643	3 103	1 638	6 100	10 363
Scrap	479 971	489 570	582 143	631 293	640 834
India (d)					
Pig iron	719	579	17 148	689 435	...
Ferro-chrome	63 619	107 856	133 167	128 681	...
Ferro-manganese	19 574	19 656	11 181	752	...
Ferro-silico-manganese	(c) ...	2 564	14 229	29 077	...
Other ferro-alloys	1 975	54 445	11 572	20 396	...
Ingots, blooms, billets	879 841	13 609	105 504	473 691	...
Scrap	87 124	62 555	35 845	25 494	...
Indonesia					
Sponge & powder	67 990	86 588	93 152	65 928	...
Ferro-nickel	27 709	20 846	25 689	24 311	...
Ferro-silicon	2 646	180	29	3	...
Ingots, blooms, billets	55 531	229 374	203 996	118 337	...
Scrap	847	2 166	5 064	9 323	...
Iran					
Pig iron (f)	*66 600	*111 900	*20 000	...	...
Israel					
Scrap (f)	*10 700	*2 200	*1 300	*1 500	...



## Exports of Iron, Steel and Ferro-alloys

tonnes

Country	1990	1991	1992	1993	1994
Japan					
Pig iron	702	36	264 266	283 694	1 201 402
Sponge & powder	18 917	17 281	15 656	14 769	18 291
Ferro-chrome	2 811	1 928	1 367	1 227	1 168
Ferro-manganese	5 631	5 025	8 388	11 458	23 634
Ferro-silico-manganese	1 069	65	86	73	110
Ferro-silicon	3 780	4 676	4 662	6 140	7 754
Ferro-vanadium	145	2	8	0	14
Other ferro-alloys	4 605	5 292	5 368	4 373	5 800
Ingots, blooms, billets	42 728	64 541	325 737	367 612	1 559 436
Scrap	396 403	361 704	1 720 465	1 177 570	967 160
Kazakhstan					
Ferro-chrome & ferro-silico-chrome (f)	—	—	*19 600	*113 000	...
Ferro-silicon (f)	—	—	*32 500	*68 200	...
Korea, Dem. P.R. of					
Pig iron (f)	*24 800	*28 100	*33 400	*22 600	...
Ferro-alloys (f)	*4 000	*8 200	*6 800	*7 400	...
Ingots, blooms, billets (f)	*59 100	*11 700	*35 600	*77 400	...
Scrap (f)	*20 000	*16 100	*36 200	*57 700	...
Korea, Republic of					
Pig iron	827	6 073	118	360	157
Ferro-manganese	1 429	6	—	13	0
Ferro-silico-manganese	940	—	—	12	—
Other ferro-alloys	752	...	21	166	157
Ingots, blooms, billets	331 064	435 773	469 998	278 360	185 539
Scrap	39 576	20 328	16 187	10 184	10 780
Kuwait					
Scrap	87 714	3 678	76 311	302 156	...
Macao					
Scrap	6 806	10 072	15 081	...	...
Malaysia					
Sponge & powder	754 394	515 961	729 000	655 860	...
Ingots, blooms, billets	20 920	19 591	251 411	260 512	...
Scrap	*62 737	78 090	101 973	33 303	...
Pakistan (e)					
Pig iron	...	1 500	—	—	...
Scrap	2 091	55 471	968	505	...
Philippines					
Ferro-chrome	—	13 504	8 278	(c) ...	...
Ferro-silicon	2 384	4 390	260	(c) ...	...
Other ferro-alloys	61 183	7 354	1 278	23 337	...
Scrap	2 538	1 713	2 027	11 852	...
Saudi Arabia					
Scrap	166 379	24 486	11 771	...	...
Singapore					
Pig iron	5 934	4 609	4 708	4 322	1 849
of which: Re-exports	5 641	4 589	4 588	4 284	1 846
Ferro-alloys	9 379	9 518	5 431	10 477	3 913
of which: Re-exports	9 377	8 485	3 721	8 538	3 729
Ingots & blooms	3 099	3 443	10 540	11 384	3 190
of which: Re-exports	2 586	821	5 878	1 588	1 189
Scrap	299 875	237 813	251 001	172 023	248 089
Sri Lanka					
Scrap	60 719	24 204	25 689	39 826	47 857
Taiwan					
Pig iron	851	290	447	6 425	6 502
Ferro-chrome	2 460	67	0	138	65
Ferro-silicon	751	1 756	1 691	2 171	2 331
Other ferro-alloys	118	772	1 159	1 534	1 277
Ingots, blooms, billets	204 667	46 069	31 275	3 025	10 982
Scrap	68 731	68 745	64 214	107 098	89 087
Thailand					
Scrap	7 000	10 434	14 306	33 174	...

**Exports of Iron, Steel and Ferro-alloys**

tonnes

Country	1990	1991	1992	1993	1994
Australia					
Ferro-manganese	43 000	20 000	46 000	59 000	(c) ...
Other ferro-alloys	57 000	61 000	77 000	77 000	158 000
Ingots, blooms, billets	710 000	747 000	841 000	975 000	...
Scrap	1 173 000	1 410 000	955 000	759 000	398 000
New Caledonia					
Ferro-nickel	126 479	112 700	110 600	127 200	...
New Zealand (e)					
Ingots, blooms, billets	2 057	16 036	350	16 703	142
Scrap	10 000	68 833	38 651	40 539	28 676

## Note(s):

(1) In this table the term 'ingots, blooms, billets' corresponds to items 672.4,6,7 and 8 of the Standard International Trade Classification (Revision 3) which includes those of alloy and high carbon steel

- (a) Including ferro-silico- chrome
- (b) Re-exports
- (c) Included with 'other ferro-alloys'
- (d) Years ended 31 March following that stated
- (e) Years ended 30 June of that stated
- (f) BGS estimates, based on known imports into certain countries
- (g) Data for the Federal Republic of Yugoslavia only
- (h) As from 1992 data is for Serbia and Montenegro only

## Imports of Iron, Steel and Ferro-alloys

Country	1990	1991	1992	1993	1994
United Kingdom					
Pig iron	207 495	110 866	149 631	...	...
Sponge & powder	16 927	16 890	16 990	16 957	19 010
Ferro-chrome & ferro-silico-chrome	69 764	76 381	78 478	93 596	129 298
Ferro-silico-magnesium (d) ...		7 584	9 479	6 498	9 098
Ferro-manganese	45 685	31 717	35 160	93 758	119 141
Ferro-silico-manganese	35 809	31 156	32 297	35 046	32 051
Ferro-molybdenum	502	227	286	920	1 135
Ferro-nickel	19 439	17 710	17 611	18 018	42 620
Ferro-niobium	472	511	603	543	857
Ferro-phosphorus	2 945	3 456	3 212	3 004	2 810
Ferro-silicon	99 511	82 864	77 609	76 333	80 444
Ferro-titanium & ferro-silico-titanium	1 464	1 122	5 190	6 203	7 026
Ferro-tungsten & ferro-silico-tungsten	189	95	182	95	59
Ferro-vanadium	631	674	801	493	532
Other ferro-alloys	7 244	2 029	1 929	2 829	2 390
Silicon metal	44 337	39 258	41 887	38 693	40 693
Ingots, blooms, billets	341 848	285 842	233 601	230 260	282 167
Scrap	81 876	95 803	69 395	22 594	89 230
Belgium-Luxembourg					
Pig iron	106 529	89 511	111 888	125 737	...
Sponge & powder	8 742	7 290	5 969	3 254	...
Ferro-chrome	95 093	92 456	93 212	355 814	...
Ferro-silico-chrome	2 806	4 153	2 121	2 150	...
Ferro-manganese	47 496	64 373	53 594	57 239	...
Ferro-silico-manganese	44 363	46 312	45 400	49 027	...
Ferro-molybdenum	2 882	1 408	957	1 560	...
Ferro-nickel	20 934	23 235	38 134	26 733	...
Ferro-niobium	530	604	564	10 437	...
Ferro-phosphorus	518	1 082	1 687	153	...
Ferro-silicon	36 955	36 944	38 880	40 908	...
Ferro-titanium & ferro-silico-titanium	402	424	347	193	...
Ferro-vanadium	487	398	248	890	...
Other ferro-alloys	5 354	4 799	2 301	2 374	...
Ingots, blooms, billets	909 382	1 146 454	1 019 594	822 788	...
Scrap	1 885 114	2 003 383	2 082 995	2 429 355	...
Denmark					
Pig iron	109 313	107 625	74 119	85 511	90 163
Sponge & powder	2 624	2 261	2 411	1 810	2 871
Ferro-chrome & ferro-silico-chrome	113	50	68	87	111
Ferro-manganese	2 523	2 474	2 453	2 362	3 766
Ferro-silico-manganese	2 807	4 601	4 706	4 534	4 781
Ferro-silicon	3 629	3 725	3 105	2 443	2 880
Other ferro-alloys	1 155	984	768	1 220	1 592
Ingots, blooms, billets	40 542	10 055	8 689	4 027	20 080
Scrap	74 306	124 708	96 494	147 270	140 683
France					
Pig iron	313 103	355 682	327 131	159 584	186 339
Sponge & powder	13 811	14 031	36 538	10 599	13 838
Ferro-chrome	210 925	191 798	189 945	138 991	236 227
Ferro-silico-chrome	205	196	57	202	354
Ferro-silico-magnesium	4 357	3 462	3 479	(d) ...	2 848
Ferro-manganese	83 503	78 707	44 033	39 932	38 803
Ferro-silico-manganese	43 734	60 285	48 550	31 278	33 717
Ferro-molybdenum	2 704	2 213	2 037	(d) ...	4 228
Ferro-nickel	46 932	38 403	33 728	30 100	36 972
Ferro-niobium	1 025	1 163	1 245	(d) ...	1 291
Ferro-phosphorus	3 244	2 861	2 586	(d) ...	2 321
Ferro-silicon	70 176	69 861	78 070	60 741	60 893
Ferro-titanium & ferro-silico-titanium	3 554	4 028	3 441	(d) ...	4 810
Ferro-tungsten & ferro-silico-tungsten	335	332	305	(d) ...	217
Ferro-vanadium	725	672	745	(d) ...	1 134
Other ferro-alloys	6 516	5 360	9 207	17 580	7 389
Silicon metal	13 619	13 825	14 386	10 896	14 778
Ingots, blooms, billets	477 143	521 444	357 345	561 719	929 868
Scrap	998 821	1 115 033	1 217 225	1 101 561	1 395 930

**Imports of Iron, Steel and Ferro-alloys**

tonnes

Country	1990	1991	1992	1993	1994
Germany, Federal Republic of					
Pig iron	286 490	329 215	285 769	233 589	...
Sponge & powder	27 751	32 985	41 603	24 145	...
Ferro-chrome	327 314	328 189	328 645	278 633	...
Ferro-silico-chrome	12 002	16 716	14 985	9 591	...
Ferro-silico-magnesium	4 121	2 885	2 157	2 415	...
Ferro-manganese	126 247	130 868	130 186	112 232	...
Ferro-silico-manganese	104 628	129 579	140 259	112 302	...
Ferro-molybdenum	7 934	8 205	8 255	5 728	...
Ferro-nickel	89 529	78 848	65 132	51 792	...
Ferro-niobium	2 158	2 628	2 412	2 271	...
Ferro-phosphorus	11 673	15 722	8 544	10 542	...
Ferro-silicon	224 201	192 881	189 382	176 965	...
Ferro-titanium & ferro-silico-titanium	5 120	5 459	6 181	4 783	...
Ferro-tungsten & ferro-silico-tungsten	1 479	657	617	445	...
Ferro-vanadium	2 720	2 385	2 527	1 994	...
Other ferro-alloys	6 365	6 295	9 893	11 717	...
Silicon metal	83 578	82 842	73 447	71 922	...
Ingots, blooms, billets	1 870 893	1 355 829	1 204 752	805 198	...
Scrap	1 117 563	835 073	811 502	910 196	...
Greece					
Pig iron	95 474	65 636	40 356	27 180	...
Ferro-manganese	4 991	4 298	2 931	5 354	...
Ferro-silico-manganese	8 261	6 509	2 295	2 083	...
Ferro-silicon	3 502	3 662	1 675	2 292	...
Other ferro-alloys	625	2 140	498	434	...
Ingots, blooms, billets	684 166	989 162	855 774	415 841	...
Scrap	525 948	928 733	280 312	366 337	...
Irish Republic					
Pig iron	553	189	1 519	376	...
Ferro-alloys	4 513	4 051	9 335	3 800	...
Ingots, blooms, billets	2 813	4 372	5 226	2 214	...
Scrap	217 004	199 033	158 181	379 887	...
Italy					
Pig iron	1 025 362	831 180	941 098	812 836	...
Spiegeleisen	351	547	200	...	...
Sponge & powder	305 122	224 995	116 298	113 213	...
Ferro-chrome	96 745	90 005	108 716	112 558	...
Ferro-silico-chrome	977	61	39	151	...
Ferro-silico-magnesium	(d) ...	5 851	5 558	(d) ...	...
Ferro-manganese	78 210	77 901	91 461	66 275	...
Ferro-silico-manganese	51 761	73 414	85 781	76 488	...
Ferro-molybdenum	2 953	2 901	3 113	(d) ...	...
Ferro-nickel	16 078	18 109	24 945	25 136	...
Ferro-niobium	761	1 069	984	(d) ...	...
Ferro-silicon	65 562	70 089	96 154	104 332	...
Ferro-titanium & ferro-silico-titanium	1 010	1 940	2 166	(d) ...	...
Ferro-tungsten & ferro-silico-tungsten	259	299	108	(d) ...	...
Ferro-vanadium	887	865	1 259	(d) ...	...
Other ferro-alloys	11 359	4 354	4 649	19 604	...
Silicon metal	19 144	16 781	15 499	17 690	...
Ingots, blooms, billets	1 788 367	1 513 236	1 297 968	704 604	...
Scrap	5 809 352	6 037 965	6 259 036	5 904 361	...

## Imports of Iron, Steel and Ferro-alloys

Country	1990	1991	1992	1993	1994
<b>Netherlands</b>					
Pig iron	61 336	58 484	55 959	122 577	...
Sponge & powder	4 691	2 586	1 606	6 011	...
Ferro-chrome	8 084	2 015	4 777	72 792	...
Ferro-manganese	17 450	17 100	18 394	24 596	...
Ferro-silico-manganese	7 050	2 794	2 478	25 392	...
Ferro-molybdenum	544	483	274	2 074	...
Ferro-nickel	100	19	527	2 366	...
Ferro-niobium	104	48	65	1 124	...
Ferro-phosphorus	254	896	467	1 940	...
Ferro-silicon	8 085	7 642	5 761	92 707	...
Ferro-titanium & ferro-silico-titanium	288	543	496	184	...
Ferro-vanadium	62	56	48	360	...
Other ferro-alloys	1 440	2 380	2 138	3 582	...
Silicon metal	8 824	8 880	8 674	15 618	...
Ingots, blooms, billets	77 461	72 363	41 233	97 675	...
Scrap	1 173 659	2 023 223	2 038 355	3 744 856	...
<b>Portugal</b>					
Pig iron	16 967	14 811	25 395	4 753	...
Ferro-manganese	5 851	5 300	2 002	1 965	...
Ferro-silico-manganese	3 058	56	3 560	5 496	...
Ferro-silicon	6 328	6 637	4 793	3 192	...
Other ferro-alloys	2 181	1 376	1 422	942	...
Ingots, blooms, billets	14 450	6 398	10 939	2 496	...
Scrap	82 398	63 764	23 061	22 645	...
<b>Spain</b>					
Pig iron	204 566	200 898	140 126	145 605	...
Sponge & powder	60 077	109 465	126 812	145 862	...
Ferro-chrome	100 362	93 510	85 031	101 559	...
Ferro-silico-chrome	1 184	1 612	2 529	3 841	...
Ferro-manganese	15 893	19 462	24 840	23 277	...
Ferro-silico-manganese	19 450	31 231	33 601	35 353	...
Ferro-molybdenum	1 362	1 371	1 019	1 431	...
Ferro-nickel	32 041	29 916	21 910	21 920	...
Ferro-niobium	145	141	115	257	...
Ferro-phosphorus	1 398	1 486	1 440	1 027	...
Ferro-silicon	16 234	25 727	33 169	23 314	...
Ferro-titanium & ferro-silico-titanium	699	477	286	178	...
Ferro-tungsten & ferro-silico-tungsten	29	66	28	37	...
Ferro-vanadium	283	307	305	364	...
Other ferro-alloys	4 728	5 077	4 605	3 176	...
Silicon metal	1 903	3 813	1 870	4 478	...
Ingots, blooms, billets	94 572	130 305	106 545	51 366	...
Scrap	4 332 121	4 315 796	4 259 542	4 064 935	...
<b>Austria</b>					
Pig iron	49 187	34 710	25 984	26 026	24 045
Sponge & powder	6 909	6 380	6 606	4 759	7 421
Ferro-chrome	19 428	13 073	15 013	14 553	22 695
Ferro-silico-chrome	401	187	417	311	421
Ferro-manganese	22 182	16 651	13 917	15 567	19 260
Ferro-silico-manganese	5 419	11 475	10 153	12 010	13 493
Ferro-molybdenum	354	130	270	529	610
Ferro-nickel	1 456	7	—	89	85
Ferro-niobium & ferro-niobium-tantalum	46	120	192	151	197
Ferro-silicon	19 642	13 928	11 204	12 356	26 859
Ferro-titanium & ferro-silico-titanium	311	344	295	277	478
Ferro-tungsten & ferro-silico-tungsten	795	203	175	293	528
Ferro-vanadium	137	168	118	173	372
Other ferro-alloys	1 733	1 755	1 871	2 111	2 671
Silicon metal	4 924	4 585	5 871	3 890	13 271
Ingots & blooms	328 694	309 605	329 314	110 106	123 303
Scrap	54 561	49 791	165 043	417 507	408 011
<b>Belarus</b>					
Scrap	—	—	46 000	32 000	...

**Imports of Iron, Steel and Ferro-alloys**

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Country	1990	1991	1992	1993	1994
<b>Bulgaria</b>					
Pig iron	309 000	35 300	20 500	11 900	...
Ferro-manganese	8 200	4 600	3 400	3 700	...
Other ferro-alloys	28 400	3 400	1 500	6 900	...
Ingots, blooms, billets	46 000	20 000	49 400	107 200	...
<b>Croatia</b>					
Pig iron	—	—	14 278	8 346	...
Ferro-alloys	—	—	1 332	1 470	...
Ingots, blooms, billets	—	—	91 773	95 319	...
Scrap	—	—	12 979	5 589	...
<b>Czechoslovakia</b>					
Pig iron	668 000	101 000	95 000	—	—
Ferro-chrome & ferro-silico-chrome (g)	*500	*3 200	*2 100	—	—
Ferro-titanium & ferro-silico-titanium (g)	*400	*50	*200	—	—
Other ferro-alloys (g)	*121 200	*101 300	*52 300	—	—
Ingots, blooms, billets	2 000	1 000	127 600	—	—
Scrap (g)	*10 900	*152 400	*401 400	—	—
<b>Czech Republic</b>					
Pig iron	—	—	—	187 000	...
Ferro-chrome & ferro-silico-chrome (g)	—	—	—	*9 100	...
Other ferro-alloys (g)	—	—	—	*7 700	...
Scrap (g)	—	—	—	*307 500	...
<b>Finland</b>					
Pig iron	52 285	8 414	7 272	19 292	...
Sponge & powder	638	446	220	120	...
Ferro-chrome & ferro-silico-chrome	2 163	2 013	2 425	3 110	...
Ferro-manganese	10 802	8 827	5 399	6 722	...
Ferro-silico-manganese	20 023	15 000	22 587	23 523	...
Ferro-molybdenum	844	820	1 086	956	...
Ferro-nickel	30 718	29 154	56 265	60 255	64 425
Ferro-silicon	13 123	11 612	14 961	14 235	...
Ferro-titanium & ferro-silico-titanium	419	205	374	373	...
Ferro-vanadium	289	98	164	254	...
Other ferro-alloys	1 025	1 047	1 302	1 903	...
Ingots, blooms, billets	150 928	129 438	107 937	149 636	...
Scrap	45 774	45 641	53 111	139 680	...
<b>German Democratic Republic</b>					
Pig iron	*1 300 000	—	—	—	—
Sponge & powder (g)	*6 500	—	—	—	—
Scrap	*900 000	—	—	—	—
<b>Hungary</b>					
Pig iron	213 605	79 800	35 497	22 406	21 481
Ferro-chrome	10 409	(d) ...	534	918	2 279
Ferro-manganese	30 675	(d) ...	5 843	2 394	8 058
Ferro-molybdenum	52	(d) ...	62	61	(d) ...
Ferro-silicon	13 257	(d) ...	6 284	6 090	6 516
Other ferro-alloys	*10 000	20 300	2 212	2 257	4 051
Ingots, blooms, billets	197 400	205 200	130 361	133 266	147 869
Scrap	602 886	121 000	3 628	3 731	5 739
<b>Latvia</b>					
Pig iron	—	—	30 000	14 000	...
Scrap	—	—	17 000	29 600	...
<b>Lithuania</b>					
Pig iron	—	—	11 957	...	...
<b>Norway</b>					
Pig iron	5 601	5 363	3 637	6 275	8 323
Sponge & powder	696	19 292	25 695	30 818	9 161
Ferro-chrome	854	639	485	518	655
Ferro-manganese	3 704	9 463	6 196	1 490	7 323
Ferro-silico-manganese	309	2 643	4 908	1 166	562
Ferro-silicon	1 625	5 357	1 954	3 833	7 512
Other ferro-alloys	578	976	397	592	509
Silicon metal	...	576	1 720	3 732	8 962
Ingots, blooms, billets	170 550	135 533	149 969	131 923	166 937
Scrap	22 605	95 326	133 373	222 712	200 118

## Imports of Iron, Steel and Ferro-alloys

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Country	1990	1991	1992	1993	1994
Poland					
Pig iron & ferro-alloys	1 361 234	129 891	107 876	142 214	...
Ingots, blooms, billets	11 400	1 482	3 232	84 267	...
Scrap	4 350	775	...	81 300	...
Romania					
Pig iron	95 000	4 900	2 987	18 892	...
Ferro-alloys	123 200	15 100	33 095	37 880	...
Ingots, blooms, billets	205 700	79 400	116 725	131 940	...
Slovakia					
Pig iron	—	—	—	12 303	...
Slovenia					
Pig iron	—	—	13 152	11 169	...
Ferro-alloys	—	—	14 603	10 660	...
Ingots, blooms, billets	—	—	42 364	20 448	...
Scrap	—	—	285 605	196 268	...
Soviet Union					
Pig iron	4 120	...	—	—	—
Ferro-alloys	3 001	...	—	—	—
Scrap (g)	*40 000	*41 200	—	—	—
Sweden					
Pig iron	43 400	28 544	16 171	24 953	...
Sponge & powder	3 511	2 486	3 231	2 253	...
Ferro-chrome	46 069	38 772	46 342	49 356	...
Ferro-silico-chrome	1 379	1 369	2 392	1 845	...
Ferro-manganese	25 012	19 907	20 403	22 852	...
Ferro-silico-manganese	11 478	12 298	14 748	13 120	...
Ferro-molybdenum	3 292	2 513	2 412	2 824	...
Ferro-nickel	12 863	10 927	13 330	15 581	...
Ferro-niobium	368	342	514	431	...
Ferro-silicon	22 838	19 521	18 391	20 702	...
Ferro-titanium & ferro-silico-titanium	1 634	1 140	1 549	1 713	...
Ferro-tungsten & ferro-silico-tungsten	705	241	177	242	...
Ferro-vanadium	1 040	892	1 131	1 266	...
Other ferro-alloys	2 949	2 331	2 333	5 084	...
Silicon metal	1 346	1 420	1 805	1 948	...
Ingots, blooms, billets	87 180	53 551	50 190	96 623	...
Scrap	246 894	165 652	281 514	467 967	...
Switzerland					
Pig iron	46 886	34 712	35 709	25 830	25 825
Sponge & powder	5 313	4 884	4 645	4 099	4 964
Ferro-aluminium	806	682	662	670	999
Ferro-chrome	1 307	1 040	1 035	1 280	692
Ferro-manganese	5 372	3 820	3 800	3 044	1 989
Ferro-silico-manganese	7 318	8 828	9 112	9 047	8 204
Ferro-silicon	6 071	5 329	6 231	5 412	5 090
Other ferro-alloys	1 386	1 077	1 029	928	772
Silicon metal	4 421	4 301	1 608	760	1 505
Ingots, blooms, billets	124 340	88 912	90 098	93 408	172 287
Scrap	135 922	227 043	348 521	434 960	110 249
Turkey					
Pig iron	148 094	240 761	449 490	697 594	563 512
Sponge & powder	19 894	39 462	42 800	4 952	1 106
Ferro-manganese	32 047	30 099	40 187	24 988	37 455
Ferro-silico-manganese	48 830	49 750	61 041	72 943	89 472
Ferro-silicon	32 409	26 950	20 566	37 387	33 107
Other ferro-alloys	4 718	3 159	4 154	6 037	3 509
Ingots, blooms, billets	521 941	791 694	987 784	2 518 255	1 620 437
Scrap	3 649 790	4 442 548	4 989 316	6 372 843	5 917 326

**Imports of Iron, Steel and Ferro-alloys**

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Country	1990	1991	1992	1993	1994
Yugoslavia (c)					
Pig iron	93 256	(b) 13 516	2 417	...	...
Sponge & powder	1 584	(b) 382	148	...	...
Ferro-chrome	2 970	(b) 987	717	...	...
Ferro-silico-chrome	3 963	(b) -	—	...	...
Ferro-manganese	6 856	(b) 1 078	3 931	...	...
Ferro-silicon	5 013	(b) 1 662	1 412	...	...
Other ferro-alloys	2 527	(b) 175	344	...	...
Ingots, blooms, billets	720 305	(b) 137 112	157 687	...	...
Scrap	412 800	(b) 53 055	112 106	...	...
Algeria					
Pig iron	3 768	7 454	2 801	...	...
Ferro-chrome	200	(d) ...	(d) ...	...	...
Ferro-manganese	464	(d) ...	1 598	...	...
Ferro-silico-manganese	29	(d) ...	(d) ...	...	...
Ferro-silicon	6 861	4 323	(d) ...	...	...
Ferro-vanadium	18	(d) ...	(d) ...	...	...
Other ferro-alloys	144	1 853	2 428	...	...
Ingots, blooms, billets	2 588	23 379	18 633	28 000	...
Egypt					
Ferro-alloys	17 800	15 000	17 293	24 152	...
Ingots & billets	161 030	223 336	236 686	...	...
Scrap	196 652	115 507	109 818	...	...
Kenya					
Ingots & blooms	47 994	...	57 406	...	...
Mauritius					
Pig iron & ingots	...	23 614	24 556	...	...
Morocco					
Pig iron	3 339	5 200	15 958	3 507	...
Ferro-alloys	349	427	347	272	...
Ingots, blooms, billets	412 117	418 095	341 550	315 451	...
Scrap	2 320	1 856	3 169	5 835	...
Nigeria					
Ferro-manganese	4 000	2 000	1 000	...	...
Rwanda					
Ingots	21 022	...	...	...	...
South Africa					
Ferro-chrome	...	...	3 106	1 953	...
Ferro-silico-magnesium	...	...	743	946	...
Ferro-molybdenum	...	...	710	633	...
Ferro-silicon	...	...	4 944	2 478	...
Other ferro-alloys	...	...	1 245	382	...
Silicon metal	564	1 176	1 177	1 319	747
Scrap	...	...	11 542	30 884	...
Togo					
Ingots, blooms, billets	4 618	81	...	...	...
Tunisia					
Pig iron	5 640	2 567	1 565	2 634	...
Ferro-alloys	1 778	1 617	1 925	1 864	...
Ingots, blooms, billets	46 601	54 435	57 949	62 894	...
Scrap	2 183	1 880	3 526	...	...
Zimbabwe					
Ferro-manganese	546	552	326	...	...
Other ferro-alloys	90	369	350	...	...



## Imports of Iron, Steel and Ferro-alloys

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Country	1990	1991	1992	1993	1994
Canada					
Pig iron	3 673	23 199	26 565	30 328	59 368
Sponge & powder	5 752	6 225	13 752	26 403	10 443
Ferro-calcium-silicon	1 707	1 896	1 714	2 039	1 900
Ferro-chrome	43 202	46 255	34 855	45 268	55 144
Ferro-silico-chrome	1 192	895	546	1 020	1 473
Ferro-manganese	29 358	46 087	49 920	61 322	67 500
Ferro-silico-manganese	17 143	15 525	24 137	38 905	34 005
Ferro-molybdenum	581	544	493	699	886
Ferro-nickel	2 524	1 521	1 437	606	9
Ferro-niobium	1 108	1 466	1 120	1 570	1 594
Ferro-phosphorus	576	1 208	672	980	1 151
Ferro-silicon	20 504	21 944	30 169	24 848	25 264
Ferro-titanium & ferro-silico-titanium	533	302	328	361	855
Ferro-vanadium	300	187	362	336	631
Other ferro-alloys	2 340	1 705	1 578	1 744	1 963
Ingots, blooms, billets	277 327	147 468	270 890	1 271 687	1 064 085
Scrap	1 002 519	809 349	1 231 467	1 456 809	1 725 588
Costa Rica					
Ingots, blooms, billets	71 324	45 824	74 275	...	...
Cuba					
Scrap	*75 000	...	...	...	...
El Salvador					
Ingots, blooms, billets	13 047	17 632	22 226	15 905	...
Scrap	14 129	11 017	21 423	...	...
Guatemala					
Ingots, blooms, billets	33 884	37 260	92 821	...	...
Jamaica					
Ingots, blooms, billets	12 086	31 997	17 926	...	...
Mexico					
Pig iron	51 707	23 544	15 230	18 505	49 850
Sponge & powder	305 300	223 656	3 773	761 614	...
Ferro-chrome	6 219	6 025	6 073	4 763	4 891
Ferro-silicon	14 078	16 584	14 337	15 806	25 394
Other ferro-alloys	3 996	3 116	12 804	19 324	42 856
Ingots, blooms, billets	19 314	192 987	154 753	202 156	...
Scrap	737 234	561 675	514 369	858 480	...
Panama					
Ingots, blooms, billets	8 700	25 313	35 620	35 356	...
USA					
Pig iron	347 384	434 453	496 761	828 405	2 491 737
Sponge & powder	384 483	476 386	572 398	1 033 367	1 214 041
Ferro-chrome	415 882	402 767	408 733	385 739	317 479
Ferro-silico-chrome	3 801	5 301	9 379	8 648	...
Ferro-manganese	379 728	314 764	306 163	345 366	335 723
Ferro-silico-manganese	222 742	260 317	257 577	316 091	272 816
Ferro-molybdenum	1 401	1 454	1 722	3 480	4 591
Ferro-nickel	41 767	39 857	35 122	37 281	41 500
Ferro-niobium	2 919	3 282	3 767	3 367	4 600
Ferro-silicon	237 757	177 617	246 828	200 174	204 348
Ferro-titanium & ferro-silico-titanium	1 960	1 186	1 356	4 843	...
Ferro-tungsten & ferro-silico-tungsten	659	690	575	860	690
Ferro-vanadium	305	524	767	2 773	2 700
Ferro-zirconium	—	288	1	247	...
Other ferro-alloys	2 878	23 162	24 208	26 498	...
Silicon metal	66 344	43 206	32 801	72 517	100 370
Ingots, blooms, billets	2 146 494	1 872 859	2 126 841	4 536 324	...
Scrap	1 291 535	1 072 164	1 302 702	1 545 617	1 733 799
Argentina					
Pig iron	250	20 031	8 678	11 970	...
Ferro-chrome	(d) ...	(d) ...	2 746	2 702	(d) ...
Ferro-manganese	2 109	985	1 881	2 230 (d)	...
Ferro-silicon	62	64	417	237 (d)	...
Other ferro-alloys	2 466	3 287	1 360	1 116	9 009
Blooms & billets	...	45 860	170 382	181 100	...
Scrap	19 286	25 126	23 525	7 524	...

**Imports of Iron, Steel and Ferro-alloys**

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Country	1990	1991	1992	1993	1994
<b>Brazil</b>					
Sponge & powder	2 799	1 694	3 191	3 556	...
Ferro-chrome	11 210	10 170	9 131	11 336	15 512
Other ferro-alloys	4 761	14 841	7 599	2 573	6 451
Scrap	113 236	88 553	211 000	114 259	149 000
<b>Colombia</b>					
Ferro-chrome	520	655	1 531	809	...
Ferro-manganese	4 973	3 726	3 866	5 130	...
Ferro-silico-manganese	468	1 444	2 947	2 528	...
Ferro-silicon	1 747	2 324	2 452	2 251	...
Other ferro-alloys	779	989	1 045	701	...
Ingots, blooms, billets	28 407	9 858	65 025	120 518	...
Scrap	73 161	104 474	187 258	205 091	...
<b>Ecuador</b>					
Ingots, blooms, billets	126 214	142 925	...	98 115	...
<b>Peru</b>					
Ferro-chrome	475	360	...	286	...
Ferro-manganese	1 660	493	500	2 845	...
Ferro-silico-manganese	458	347	...	...	...
Ferro-silicon	544	717	...	1 250	...
Scrap	67 400	...	...	49 926	...
<b>Suriname</b>					
Ferro-alloys	7 637	*7 000	...	...	...
Ingots, blooms, billets	3 564	6 518	...	...	...
Scrap	6 680	*3 000	...	...	...
<b>Uruguay</b>					
Ferro-alloys	632	512	765	624	850
Ingots, blooms, billets	2 520	2 599	6 566	5 925	3 021
<b>Venezuela</b>					
Sponge & powder	280 594	69 983	24 377	3 223	...
Ferro-chrome	405	530	349	745	...
Ferro-manganese	26 476	16 028	11 135	18 538	...
Ferro-vanadium	462	239	11	1	...
Other ferro-alloys	1 955	2 311	5 623	2 557	...
Silicon metal	2 524	1 164	856	1 222	...
Ingots, blooms, billets	68 159	109 978	4 480	891	...
Scrap	45 353	...	65 482	73 072	...
<b>Abu Dhabi</b>					
Scrap	7 600	2 021	5 673	10 861	...
<b>Bahrain</b>					
Blooms & billets	42 772	52 490	...	74 586	...
<b>Bangladesh (a)</b>					
Pig iron	79 222	25 565	13 687	24 022	...
Ferro-alloys	28 272	12 403	1 190	902	...
Scrap	76 111	...	12 808	9 483	...
<b>China</b>					
Pig iron	1 307 132	363 037	153 501	810 367	310 000
Sponge & powder	316	501	39 908	152 703	...
Ferro-alloys	373	6 890	8 710	36 077	...
Ingots, blooms, billets	446 694	324 768	1 808 986	6 379 277	1 910 000
Scrap	183 353	238 924	1 243 143	2 980 288	...
<b>Cyprus</b>					
Pig iron	1 077	137	1 243	1 091	—
<b>Hong Kong</b>					
Pig iron	2 332	6 723	15 247	6 728	9 142
Ferro-manganese	12 189	14 089	5 711	13 318	9 935
Ferro-silico-manganese	...	...	24 645	32 992	15 587
Ferro-silicon	39 514	60 641	21 172	25 253	18 112
Other ferro-alloys	36 455	49 435	3 716	2 686	1 484
Silicon metal	...	...	17 228	16 924	10 848
Ingots, blooms, billets	139 318	143 112	60 153	192 185	245 467
Scrap	81 961	140 641	208 026	366 032	202 770

## Imports of Iron, Steel and Ferro-alloys

Country	1990	1991	1992	1993	1994
<b>India (e)</b>					
Pig iron	244 744	205 126	102 451	3 681	...
Sponge & powder	56 426	3 053	1 068	1 551	...
Ferro-chrome & ferro-silico-chrome	207	194	689	1 375	...
Ferro-manganese & ferro-silico-manganese	273	88	59	31	...
Ferro-molybdenum	505	667	1 260	815	...
Ferro-nickel	16 119	14 928	12 517	13 482	...
Ferro-silicon	1 930	954	433	1 550	...
Other ferro-alloys	475	1 043	368	520	...
Silicon metal	3 897	2 018	4 360	7 069	...
Ingots, blooms, billets	32 913	18 400	20 860	134 613	...
Scrap	3 152 368	1 515 437	3 039 920	1 178 643	...
<b>Indonesia</b>					
Pig iron	168 259	106 456	255 178	233 678	...
Sponge & powder	158 786	184 477	184 873	22 630	...
Ferro-manganese	17 719	27 531	15 590	8 951	...
Ferro-silico-manganese	13 841	21 403	26 561	33 547	...
Ferro-silicon	7 879	8 991	6 959	8 126	...
Other ferro-alloys	810	1 290	1 245	1 417	...
Ingots, blooms, billets	756 620	517 136	338 191	790 960	...
Scrap	1 177 669	1 187 093	1 244 041	1 886 823	...
<b>Iran (f)</b>					
Ingots, blooms, billets	37 985	736 714	286 655	160 506	...
<b>Israel</b>					
Ingots, blooms, billets	253 872	253 000	...	110 000	...
Scrap (g)	*1 300	*5 600	*700	*300	...
<b>Japan</b>					
Pig iron	3 184 495	3 226 332	1 296 109	1 385 930	1 600 992
Sponge & powder	81 140	141 856	171 358	227 704	197 327
Ferro-chrome	441 672	578 073	459 608	548 581	610 163
Ferro-silico-chrome	6 690	10 622	8 863	5 652	11 165
Ferro-manganese	43 268	32 563	25 525	55 377	85 703
Ferro-silico-manganese	195 282	241 271	193 746	210 900	204 342
Ferro-molybdenum	1 600	1 975	1 854	1 818	2 298
Ferro-nickel	41 941	45 925	32 626	44 342	48 394
Ferro-niobium	3 516	4 526	4 187	4 361	3 642
Ferro-phosphorus	6 591	9 262	7 962	5 863	6 709
Ferro-silicon	476 482	484 772	437 554	542 110	484 591
Ferro-titanium & ferro-silico-titanium	2 260	2 498	2 703	4 527	5 487
Ferro-tungsten & ferro-silico-tungsten	835	416	509	565	750
Ferro-vanadium	431	807	1 014	1 132	1 021
Other ferro-alloys	12 130	14 031	11 269	12 420	10 121
Silicon metal	131 310	138 206	146 962	151 970	151 956
Ingots, blooms, billets	1 022 601	1 307 894	615 128	322 477	310 368
Scrap	1 048 189	820 643	328 113	912 703	1 067 871
<b>Jordan</b>					
Ingots, blooms, billets	185 433	189 525	257 046	164 178	...
Scrap	9 961	4 948	5 034	8 803	...
<b>Korea, Dem. P.R. of</b>					
Ferro-manganese (g)	*12 000	*10 400	*11 700	*14 600	...
Other ferro-alloys (g)	*9 100	*15 600	*6 200	*15 200	...
<b>Korea, Republic of</b>					
Pig iron	980 970	773 336	1 068 769	1 482 457	1 764 211
Sponge & powder	101 305	247 328	283 370	449 892	562 002
Ferro-chrome	76 931	90 148	110 026	167 396	175 056
Ferro-silico-chrome	1 820	6 060	8 300	5 400	10 305
Ferro-manganese	7 868	9 046	26 630	32 595	23 747
Ferro-silico-manganese	4 420	9 424	16 657	39 099	60 511
Ferro-molybdenum	919	879	530	893	1 328
Ferro-nickel	18 541	23 617	31 500	38 848	41 701
Ferro-phosphorus	1 347	2 064	2 889	3 190	3 791
Ferro-silicon	67 781	82 533	86 481	102 763	105 908
Ferro-vanadium	377	444	516	539	905
Other ferro-alloys	2 187	2 735	3 273	3 139	3 877
Silicon metal	6 921	7 320	7 916	11 511	15 365
Ingots & blooms	1 135 774	2 162 806	2 011 357	2 347 533	3 032 724
Scrap	3 875 997	3 261 377	3 136 886	4 916 003	4 970 144

**Imports of Iron, Steel and Ferro-alloys**

tonnes

Country	1990	1991	1992	1993	1994
Malaysia					
Pig iron	110 283	100 109	162 967	101 063	...
Spiegeleisen	1 082	3 346	2 154	...	...
Ferro-manganese	15 873	9 007	14 269	12 636	...
Ferro-silico-manganese	4 999	5 277	10 098	(d) ...	...
Ferro-silicon	6 419	5 553	7 832	(d) ...	...
Other ferro-alloys	1 447	3 392	3 219	27 186	...
Ingots, blooms, billets	224 662	345 665	420 707	688 394	...
Scrap	734 297	1 010 549	704 920	1 417 511	...
Pakistan (a)					
Pig iron	3 321	1 152	984	4 417	...
Ferro-manganese	15 464	16 921	8 387	12 805	...
Ferro-silicon	8 664	8 075	11 776	5 752	...
Other ferro-alloys	1 869	7 759	1 760	1 605	...
Ingots, blooms, billets	35 031	58 836	28 622	29 954	...
Scrap	321 846	482 991	763 805	433 034	...
Philippines					
Pig iron	63 759	47 876	13 700	91 340	...
Ferro-manganese	2 524	2 072	2 780	4 530	...
Ferro-silico-manganese	918	796	104	(d) ...	...
Ferro-silicon	1 037	316	2 390	(d) ...	...
Other ferro-alloys	590	389	495	5 600	...
Ingots, blooms, billets	669 499	549 314	1 045 641	1 273 000	...
Scrap	64 679	127 771	52 270	53 469	...
Qatar					
Scrap	3 242	5 453	979	12 995	...
Saudi Arabia					
Pig iron	4 687	19 730	28 817	...	...
Ingots, blooms, billets	45 249	18 748	51 584	...	...
Scrap	312 970	488 290	4 818	...	...
Singapore					
Pig iron	72 838	131 320	94 524	133 443	87 009
Sponge & powder	19 313	7 292	149	63	260
Ferro-manganese	2 403	3 135	3 220	1 878	513
Ferro-silicon	9 618	11 181	9 693	15 225	5 353
Other ferro-alloys	384	458	437	1 073	496
Ingots & blooms	164 955	244 252	133 522	380 207	333 535
Scrap	220 910	148 592	147 334	147 894	123 609
Sri Lanka					
Ingots, blooms, billets	39 685	45 490	48 880	294 118	87 370
Syria					
Ingots, blooms, billets	38 725	...	20 612	...	...
Scrap	12 881	...	79 433	...	...
Taiwan					
Pig iron	578 375	853 410	817 656	958 372	1 197 794
Sponge & powder	114 042	47 225	72 570	19 871	38 979
Ferro-chrome	35 182	57 246	48 045	58 947	93 548
Ferro-manganese	21 120	19 348	29 411	47 169	37 306
Ferro-silico-manganese	12 430	31 272	42 222	42 802	43 564
Ferro-molybdenum	434	433	291	679	750
Ferro-niobium	431	324	205	149	187
Ferro-silicon	36 207	41 412	41 504	52 096	46 028
Ferro-vanadium	330	396	378	383	523
Other ferro-alloys	1 059	2 162	1 689	1 776	5 116
Silicon metal	11 266	18 017	12 566	19 356	17 809
Ingots, blooms, billets	2 461 379	3 837 135	5 443 382	7 508 179	7 680 156
Scrap	1 286 723	2 262 211	1 845 489	1 736 356	1 069 912
Thailand					
Pig iron	103 869	78 381	149 113	113 322	...
Sponge & powder	14 304	522	5 524	9 330	...
Ferro-chrome	505	472	363	661	...
Ferro-manganese	6 783	5 484	9 376	9 944	...
Ferro-silico-manganese	901	1 411	2 426	3 308	...
Ferro-silicon	6 452	7 634	10 306	16 532	...
Other ferro-alloys	380	305	1 396	909	...
Ingots, blooms, billets	979 645	891 557	1 223 831	1 167 081	...
Scrap	1 101 356	501 015	865 435	1 457 660	...

**Imports of Iron, Steel and Ferro-alloys**

tonnes

Country	1990	1991	1992	1993	1994
Australia					
Pig iron (a)	26 571	...	4 576	3 213	...
Sponge & powder (a)	4 702	3 352	3 631	3 682	...
Ferro-chrome (a)	4 748	5 446	6 692	7 280	...
Ferro-manganese (a)	5 058	4 611	7 054	12 268	...
Ferro-silico-manganese (a)	205	232	914	931	...
Ferro-molybdenum (a)	18 453	228	318	157	...
Ferro-silicon (a)	21 508	19 331	13 232	24 737	...
Other ferro-alloys (a)	2 022	1 457	1 371	5 057	...
Ingots & billets	94 000	241 000	16 000	6 000	...
Scrap (a)	2 019	2 208	1 382	1 781	...
Fiji					
Ingots, blooms, billets	...	3 128	...	...	...
New Zealand (a)					
Pig iron	5 473	157	64	21	80
Ferro-manganese	1 749	1 934	2 121	2 279	2 330
Ferro-silicon	2 213	3 003	3 161	2 828	2 295
Other ferro-alloys	2 012	1 555	1 451	2 355	2 989
Ingots, blooms, billets	17 170	2 309	3 955	43	39

## Note(s):

(1) In this table the term 'ingots, blooms, billets' corresponds to items 672.4,6,7 and 8 of the Standard International Trade Classification (Revision 3) which includes those of alloy and high carbon steel

- (a) Years ended 30 June of that stated
- (b) Data for the Federal Republic of Yugoslavia only
- (c) As from 1992 data is for Serbia and Montenegro only
- (d) Included with 'other ferro-alloys'
- (e) Years ended 31 March following that stated
- (f) Years ended 20 March following that stated
- (g) BGS estimates, based on known exports from certain countries

**Production of Kaolin**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom (a)	3 037 486	2 911 484	(l) 2 502 224	(l) 2 577 160	2 653 918
Belgium	*175 000	*260 000	*325 000	*300 000	*300 000
Denmark	17 423	17 057	3 503	*3 500	*3 500
France	370 130	343 800	334 000	295 000	330 000
Germany, Federal Republic of (g)	601 000	598 000	578 000	544 000	...
Greece	169 986	189 235	201 705	89 473	...
Italy	67 321	57 871	33 017	—	—
Portugal	108 392	149 788	194 090	*110 000	...
Spain (c)	423 357	*413 000	*350 000	*148 000	290 000
Albania	8 256	2 000	*500	...	...
Austria	81 265	72 361	64 733	64 381	*87 000
Bosnia & Herzegovina	—	—	*3 000	*3 000	*3 000
Bulgaria	186 467	106 000	104 000	*110 000	*110 000
Czechoslovakia (h)	533 000	526 000	598 000	—	—
Czech Republic (h)	—	—	—	*578 000	...
Finland	7 026	6 879	6 700	8 156	...
German Democratic Republic	*115 000	—	—	—	—
Hungary (c)	22 000	19 000	7 000	15 000	*15 000
Poland	48 100	44 100	42 400	*44 000	*44 000
Romania	*250 000	*250 000	*150 000	*200 000	*200 000
Slovenia	—	—	*15 000	*10 000	*10 000
Soviet Union (n)	*1 800 000	*1 600 000	*1 300 000	*1 000 000	*800 000
Turkey	251 182	219 211	185 675	138 989	*150 000
Yugoslavia (m)	198 513	(k) *190 000	111 782	37 627	*50 000
Algeria	17 993	21 460	20 844	21 500	*21 500
Burundi	5 281	6 567	9 668	*5 318	*5 000
Egypt (d)	149 000	151 548	95 693	78 107	54 175
Madagascar	485	496	756	*700	*700
South Africa	132 421	134 485	131 765	147 349	131 863
Tanzania	2 021	1 738	1 360	477	541
Mexico	156 140	167 238	144 121	215 510	*215 000
USA (e)	9 143 000	9 574 900	8 735 204	8 830 000	8 770 000
Argentina	33 684	47 115	43 722	42 052	*43 000
Brazil (b)	765 826	*850 000	*900 000	*950 000	*1 000 000
Chile	32 416	63 083	59 083	66 939	67 616
Colombia (j)	*540 000	*900 000	*900 000	*900 000	...
Ecuador	7 883	12 015	18 395	...	...
Paraguay	*74 000	*74 000	*74 000	*74 000	*74 000
Peru	*8 000	7 100	5 500	5 100	5 800
Venezuela	14 636	38 882	40 811	21 620	*25 000
Bangladesh (d)	7 223	7 338	2 317	1 637	...
China	*600 000	*700 000	*700 000	*700 000	*700 000
India (i)	104 000	113 000	110 000	*129 000	*150 000
Indonesia	160 098	139 915	230 550	42 365	*45 000
Iran	*150 000	150 473	264 083	254 413	...
Israel	42 212	53 000	*53 000	*53 000	*53 000
Japan	164 802	129 942	122 948	110 000	*114 000
Jordan	38 800	46 200	34 446	47 174	...
Korea, Republic of	1 446 598	1 755 225	1 856 157	2 330 000	2 600 000
Malaysia	152 972	186 699	244 573	249 852	252 628
Pakistan	46 947	44 738	42 180	37 179	*38 000
Sri Lanka	7 734	7 622	6 759	*7 000	*7 500
Taiwan	105 084	92 970	103 071	126 752	102 822
Thailand (h)	208 348	256 276	304 480	397 000	*415 000

**Production of Kaolin**

tonnes

Country	1990	1991	1992	1993	1994
Australia (c) (d) (f)	363 000	376 000	*250 000	241 000	*250 000
New Zealand	25 435	21 338	27 520	26 543	*28 000
World total	23 200 000	24 100 000	22 600 000	22 400 000	22 800 000

## Note(s):

- (1) In addition to the countries listed, Lebanon and Vietnam are believed to produce kaolin
- (a) Sales  
 (b) Including beneficiated and directly shipped material  
 (c) Including beneficiated material  
 (d) Years ended 30 June of that stated  
 (e) Sold or used by producers  
 (f) White clays; including kaolin and ball clay  
 (g) Washed and dried  
 (h) Beneficiated  
 (i) Beneficiated; excludes directly used natural kaolin  
 (j) Crude  
 (k) Excluding data from August to December for the Republic of Croatia  
 (l) Dry weight  
 (m) As from 1992 data is for Serbia and Montenegro only  
 (n) Dissolved in December 1991. No information is available on which to estimate for individual countries

**Exports of Kaolin**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	2 596 334	2 518 303	(d) 2 168 572	(d) 2 125 129	(d) 2 173 888
Belgium-Luxembourg	121 240	123 909	139 226	165 759	...
Denmark	548	504	491	337	421
France	267 938	247 032	256 761	242 159	273 975
Germany, Federal Republic of	220 059	262 325	279 886	267 435	...
Greece	39 998	34 620	24 179	9 402	...
Italy	49 785	35 324	31 178	60 789	...
Netherlands	153 738	166 336	170 451	158 258	...
Spain	162 726	144 875	147 504	94 163	...
Austria	39 967	34 931	28 270	15 716	9 353
Bulgaria (a)	*23 800	*20 400	*19 000	*29 500	...
Czechoslovakia	358 000	366 000	(a) *231 300	—	—
Czech Republic (a)	—	—	—	*240 100	...
Hungary	7 091	...	2 572	4 398	4 059
Russia (a)	—	—	*5 700	*3 700	...
Slovenia (a)	—	—	*6 700	*4 100	...
Soviet Union (a)	*17 600	*1 200	—	—	—
Sweden	1 935	974	1 412	904	...
Switzerland	237	245	257	10 895	7 089
Turkey	48 814	50 761	63 994	84 666	189 425
USA	2 827 196	2 887 608	3 003 994	2 984 593	...
Brazil	292 446	343 006	335 476	599 523	523 978
China	(a) *266 000	(a) *683 400	376 978	419 552	...
Hong Kong	213 896	323 580	400 154	533 300	479 702
of which: Re-exports	213 896	323 580	400 154	533 278	479 651
India (b)	7 790	25 727	18 175	9 142	...
Indonesia	129 661	125 125	137 851	126 146	...
Israel	...	10 818	14 572	5 307	...
Japan	7 377	11 353	11 245	10 252	12 769
Korea, Republic of	37 776	37 660	34 419	65 476	123 510
Malaysia	108 316	131 305	111 952	161 296	113 975
Taiwan	3 516	8 779	6 706	7 263	6 997
Thailand	8 592	13 117	16 952	38 098	...
Australia (c)	126 263	149 647	132 262	154 487	...
New Zealand (c)	20 144	24 107	18 692	18 206	19 306

(a) BGS estimates, based on known imports into certain countries

(b) Years ended 31 March following that stated

(c) Years ended 30 June of that stated

(d) Dry weight



## Imports of Kaolin

Country	1990	1991	1992	1993	1994
United Kingdom	15 286	27 463	24 520	23 273	22 320
Belgium-Luxembourg	462 223	405 980	438 736	499 788	...
Denmark	24 929	22 703	15 910	9 776	9 987
France	404 983	418 671	401 173	399 791	438 057
Germany, Federal Republic of	1 005 860	889 568	918 086	830 079	...
Greece	28 514	25 078	28 857	25 114	...
Italy	685 915	703 283	752 479	750 547	...
Netherlands	478 972	496 870	545 943	568 795	...
Portugal	47 342	56 695	63 211	41 455	...
Spain	297 883	281 997	361 606	330 858	...
Austria	188 342	183 517	214 418	202 896	222 474
Croatia	—	—	25 744	13 992	...
Czechoslovakia (c)	*5 100	*2 300	*700	—	—
Czech Republic (c)	—	—	—	*3 900	...
Finland	967 917	937 236	1 017 452	1 175 689	...
Hungary	33 969	...	20 428	30 027	22 554
Norway	106 511	102 280	93 813	145 805	180 269
Poland	102 810	58 006	(c) *53 300	(c) *54 200	...
Romania (c)	*15 500	*11 000	*9 000	*13 400	...
Slovenia (c)	—	—	*5 000	*4 000	...
Sweden	374 746	399 834	350 992	360 063	...
Switzerland	102 766	87 827	76 765	75 852	75 601
Turkey	16 258	22 262	32 510	43 044	61 194
Yugoslavia (g)	76 352	(f) 14 285	10 363	...	...
Algeria (d)	12 870	...	...	...	...
Morocco	12 380	10 559	...	...	...
South Africa	27 100	20 904	24 426	22 969	36 985
Tunisia	30 223	34 036	45 176	...	...
Zimbabwe (e)	1 671	1 139	825	...	...
Canada	506 432	520 562	530 735	531 079	626 718
Mexico	104 613	114 174	111 189	129 353	...
USA	3 067	3 373	4 221	7 626	...
Argentina	15 055	18 146	20 463	28 692	...
Brazil	1 132	1 194	1 119	1 628	...
Chile	12 544	10 334	14 307	10 255	15 462
Colombia	8 797	9 750	12 459	9 732	...
Ecuador	2 284	4 054	756	1 937	...
Peru	819	1 035	...	1 395	...
Uruguay	...	4 770	5 682	5 481	6 436
Venezuela	19 666	21 153	31 085	33 413	...
Bangladesh (b)	7 674	9 144	7 702	9 594	...
China	(c) *9 500	(c) *10 500	10 310	16 844	...
Cyprus	20 728	17 850	7 876	9 926	16 126
Hong Kong	208 669	274 369	310 295	556 138	548 899
Indonesia	56 787	56 301	69 595	74 638	...
Iran (a)	25 528	(c) *25 751	31 670	17 175	...
Israel (c)	*10 700	*10 000	*10 400	*6 900	...
Japan	1 167 957	1 253 735	1 153 223	1 189 611	1 283 769
Korea, Republic of	171 319	222 853	205 494	225 961	249 641
Malaysia	...	24 366	27 787	...	...
Pakistan (b)	7 044	6 715	9 526	7 883	...
Philippines	13 474	21 676	21 996	...	...
Saudi Arabia	4 280	4 092	6 385	...	...
Taiwan	568 628	844 865	1 015 464	1 361 737	1 722 616
Thailand	33 047	40 742	44 628	121 972	...

**Imports of Kaolin**

tonnes

Country	1990	1991	1992	1993	1994
Australia (b)	11 896	11 331	7 119	11 965	...
New Zealand (b)	10 094	8 780	9 045	8 133	8 657

- (a) Years ended 20 March following that stated
- (b) Years ended 30 June of that stated
- (c) BGS estimates, based on known exports from certain countries
- (d) Including bentonite
- (e) Including fuller's earth
- (f) Data for the Federal Republic of Yugoslavia only
- (g) As from 1992 data is for Serbia and Montenegro only

## Mine Production of Lead

tonnes (metal content)

Country	1990	1991	1992	1993	1994
United Kingdom	1 377	241	...	...	...
France	1 141	1 745	—	—	—
Germany, Federal Republic of (a)	8 600	7 300	2 100	—	—
Greece	26 200	31 700	28 300	26 400	22 800
Irish Republic	35 300	39 900	42 900	48 300	53 700
Italy	15 600	14 000	18 000	7 400	13 900
Spain	61 472	49 200	31 000	25 300	23 900
Austria	2 187	1 915	1 715	2 047	—
Bosnia & Herzegovina	—	—	*800	*200	—
Bulgaria	45 200	40 600	39 600	34 400	32 000
Czechoslovakia	2 997	3 375	*2 000	—	—
Czech Republic	—	—	—	500	*1 000
Finland	2 424	2 531	923	—	—
Georgia	—	—	*1 000	*1 000	*800
Greenland	16 000	—	—	—	—
Macedonia	—	—	*12 000	*12 000	19 000
Norway	3 241	3 945	4 170	2 245	3 160
Poland	61 300	65 300	70 100	49 000	51 600
Romania	*25 100	*16 200	*16 700	*16 800	21 400
Russia	—	—	43 500	44 400	*40 000
Slovakia	—	—	—	1 200	*2 000
Slovenia	—	—	*2 000	...	—
Soviet Union	*238 900	*205 600	—	—	—
Sweden	98 259	91 127	105 295	111 709	112 787
Turkey	18 371	12 145	9 900	11 000	10 000
Yugoslavia (c)	99 148	84 500	22 661	9 229	*5 000
Algeria	1 100	1 100	900	900	700
Kenya	700	600	300	396	100
Morocco	71 822	77 531	78 716	81 684	70 300
Namibia	19 386	16 058	14 855	11 379	13 917
South Africa	69 417	76 262	75 806	100 171	95 824
Tunisia	1 780	800	800	540	2 000
Zambia	12 094	9 800	6 100	7 600	600
Canada	241 277	276 528	343 808	183 155	172 741
Honduras	4 237	8 719	9 561	3 838	2 777
Mexico	177 279	160 406	172 563	181 741	163 836
USA	496 500	476 900	406 600	362 400	370 200
Argentina	23 365	23 697	17 956	11 826	9 952
Bolivia	19 913	20 810	20 002	21 220	19 678
Brazil	8 809	7 273	4 241	4 000	*4 000
Chile	1 120	1 050	298	344	465
Peru (a)	187 827	199 811	194 225	218 507	210 873
China	315 300	352 000	330 200	346 300	352 000
India	25 500	25 000	30 500	26 000	23 900
Iran (b)	9 200	16 900	12 400	12 700	18 300
Japan	18 727	18 329	18 839	16 470	9 900
Kazakhstan	—	—	*100 000	*70 000	69 000
Korea, Dem. P.R. of	*60 000	*80 000	*70 000	*70 000	*70 000
Korea, Republic of	14 857	12 633	13 628	7 400	2 200
Myanmar	2 300	4 800	2 700	1 900	2 300
Tajikistan	—	—	*2 000	*1 600	*1 200
Thailand	32 431	24 332	17 327	12 000	7 900
Uzbekistan	—	—	*30 000	*30 200	*18 500
Australia	565 000	579 000	580 000	535 000	505 000
World total	3 100 000	3 100 000	3 000 000	2 700 000	2 600 000

(a) Recoverable

(b) Years ended 20 March following that stated

(c) As from 1992 data is for Serbia and Montenegro only

**Production of Refined Lead**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	329 378	311 014	346 795	363 753	352 466
Belgium (a)	106 809	110 684	116 297	131 112	123 500
France	270 476	297 779	287 060	258 700	260 500
Germany, Federal Republic of	348 700	362 500	354 300	334 100	331 700
Irish Republic	15 000	11 600	12 000	9 400	10 000
Italy	170 900	207 600	186 000	182 800	203 600
Netherlands	44 100	35 100	23 500	24 000	23 700
Portugal	4 000	4 000	7 400	8 300	8 300
Spain	124 000	110 400	62 100	62 400	70 400
Austria	23 511	22 679	23 930	22 636	17 165
Bulgaria	66 570	56 223	53 099	*57 000	62 300
Czechoslovakia	23 665	17 835	23 900	—	—
Czech Republic	—	—	—	23 200	19 300
German Democratic Republic	45 500	—	—	—	—
Macedonia	—	—	23 341	21 881	20 965
Poland	64 800	50 776	53 700	62 300	63 100
Romania	*20 700	*17 300	*14 900	17 428	16 400
Russia	—	—	21 900	26 000	34 300
Slovenia	—	—	15 000	12 000	15 000
Soviet Union	*459 100	*397 000	—	—	—
Sweden	76 137	88 003	91 189	84 576	82 788
Switzerland	5 700	5 200	5 700	5 700	5 700
Turkey	9 000	8 500	5 100	5 000	5 100
Ukraine	—	—	*40 000	*20 000	9 000
Yugoslavia (e)	82 000	(c) 69 186	23 265	6 393	4 500
Algeria	3 000	3 000	3 000	8 600	8 600
Kenya	2 400	2 000	2 300	2 500	1 600
Morocco	66 900	72 700	71 400	71 400	71 000
Namibia	35 129	33 367	31 655	31 235	23 813
Nigeria	4 900	5 400	6 000	4 500	4 200
South Africa	31 200	30 500	29 000	31 800	31 800
Zambia	4 700	3 500	3 400	3 100	500
Zimbabwe	*1 000	*2 800	*2 600	*2 000	3 000
Canada	183 645	212 366	252 885	219 959	237 690
Mexico	234 800	216 100	256 600	*239 300	220 700
Trinidad & Tobago	*1 500	*1 500	*1 000	*1 000	*1 600
USA (b)	1 290 479	1 194 559	1 182 246	1 195 500	1 232 000
Argentina	*20 100	*25 000	*29 700	*28 500	*25 400
Brazil	56 624	*45 000	*45 000	*50 000	*45 000
Colombia	*5 200	*4 600	*4 400	*4 500	*3 600
Peru	69 305	75 922	82 488	87 198	87 440
Venezuela	14 000	15 000	15 000	15 000	16 000
China	363 900	320 000	366 400	410 300	384 300
India	38 837	47 800	63 700	67 400	73 500
Indonesia	29 800	30 500	39 200	35 000	30 000
Iran	10 000	8 000	8 000	15 022	*18 000
Japan	327 153	332 263	330 161	309 452	269 933
Kazakhstan	—	—	*240 000	*250 000	130 000
Korea, Dem. P.R. of	*65 000	*65 000	*65 000	*65 000	*50 000
Korea, Republic of	62 761	48 520	67 671	90 050	129 800
Malaysia	16 000	24 000	28 500	29 000	28 800
Myanmar (d)	1 555	2 526	3 500	1 600	1 800
Pakistan	*3 000	*3 000	*3 000	*3 000	*3 000
Philippines	12 100	16 700	19 100	24 300	24 300
Taiwan	26 600	17 000	20 000	15 000	15 000
Thailand	15 861	12 843	18 906	17 057	16 900
United Arab Emirates	*2 000	*5 000	*3 700	*3 500	4 100

**Production of Refined Lead**

tonnes

Country	1990	1991	1992	1993	1994
Australia	224 000	239 000	232 000	221 000	212 000
New Zealand	5 000	5 000	5 000	3 000	3 000
World total	5 500 000	5 300 000	5 300 000	5 300 000	5 100 000

## Note(s):

(1) Figures relate to both primary and secondary refined lead and include the lead content of antimonial lead. Metal recovered from secondary materials by remelting alone is excluded

- (a) Including alloys
- (b) Excluding Pb content of primary antimonial lead
- (c) Excluding data from August to December for the Republic of Croatia
- (d) Years ended 31 March following that stated
- (e) As from 1992 data is for Serbia and Montenegro only

## Exports of Lead

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Ores & concentrates	1 424	873	2 539	313	45
Unwrought	88 530	89 666	92 503	109 802	96 569
Unwrought alloys	29 476	27 561	26 982	34 333	34 250
Scrap	20 663	23 910	15 741	14 530	12 592
Belgium-Luxembourg					
Unwrought	43 424	46 123	55 582	59 605	...
Unwrought alloys	7 038	7 713	7 008	13 108	...
Scrap	14 077	20 689	41 503	40 103	...
Denmark					
Unwrought	134	235	106	29	552
Unwrought alloys	1 009	169	248	364	586
Scrap	14 392	16 370	14 404	14 473	18 316
France					
Unwrought	40 707	47 775	58 427	(a) 66 744	61 247
Unwrought alloys	21 670	24 438	20 035	...	21 869
Scrap	9 389	4 029	6 744	4 262	5 536
Germany, Federal Republic of					
Ore	—	4	28	2 673	...
Unwrought	41 861	38 768	26 822	40 246	59 489
Unwrought alloys	29 896	35 657	29 987	30 911	27 307
Scrap	14 813	23 479	20 530	22 695	25 828
Greece					
Ore	—	5 100	—	...	...
Unwrought (a)	52	102	385	3 915	...
Irish Republic					
Ores & concentrates	59 881	66 540	67 637	48 621	...
Unwrought (a)	74	644	397	...	...
Scrap	4 776	3 520	3 641	...	...
Italy					
Ore	19 660	12 725	287	3 419	...
Unwrought	10 360	25 372	18 755	25 400	...
Unwrought alloys	2 561	4 640	1 956	2 647	...
Scrap	1 287	2 654	2 762	7 050	...
Netherlands					
Unwrought	5 585	5 037	7 168	8 180	...
Unwrought alloys	12 093	12 826	4 636	3 303	...
Scrap	26 534	25 768	37 431	28 458	...
Portugal					
Ore	1 140	1 730	728	...	...
Spain					
Ore	56 468	50 858	66 830	42 908	...
Unwrought (a)	19 600	7 876	1 668	3 445	...
Scrap	825	3 522	6 676	2 054	...
Austria					
Unwrought (a)	4 830	2 377	3 859	3 033	4 609
Scrap	10 727	1 632	1 392	1 200	278
Bulgaria					
Unwrought (a) (f)	*4 500	*6 800	*11 900	*15 000	...
Scrap (f)	*1 000	*3 600	*2 900	*2 800	...
Croatia					
Scrap	—	—	3 947	5 151	...
Czechoslovakia					
Ores & concentrates (f)	*6 300	*7 800	*3 300	—	—
Unwrought (a) (f)	*1 000	*2 100	*8 100	—	—
Czech Republic					
Unwrought (a) (f)	—	—	—	*7 600	...
Finland					
Ore	2 629	4 632	1 650	—	...
Unwrought (a)	183	47	281	82	...
Scrap	13 934	10 977	12 282	10 598	...
Greenland					
Ores & concentrates	27 573	—	—	—	—
Hungary					
Scrap	3 650	...	21 501	11 395	15 774

## Exports of Lead

tonnes

Country	1990	1991	1992	1993	1994
Norway					
Ore	6 567	7 367	4 286	109	1 500
Scrap	9 797	10 054	10 502	9 740	13 207
Poland					
Ores & concentrates	33 407	19 153	50 669	...	...
Unwrought	6 025	9 860	(a) 17 587	(a) (f) *9 100	...
Scrap	2 366	10 192	(f) *9 900	(f) *2 400	...
Russia					
Unwrought (a)	—	—	14 677	866	...
Slovenia					
Unwrought (a)	—	—	7 767	7 861	...
Soviet Union					
Unwrought (a) (f)	*38 600	*54 400	—	—	—
Sweden					
Ore	80 258	60 502	71 449	130 693	...
Unwrought	40 601	54 695	58 720	54 083	...
Unwrought alloys	11 077	10 483	8 423	8 269	...
Scrap	253	531	432	726	...
Switzerland					
Unwrought (a)	1 584	943	1 857	4 168	3 217
Scrap	13 402	16 679	13 563	16 074	18 586
Turkey					
Ore (e)	5 303	755	950	1 001	5 317
Yugoslavia (d)					
Concentrates	16 039	(i) 5 639	1 224	...	...
Unwrought (a)	31 015	(i) 13 159	2 797	...	...
Algeria					
Ore	2 913	...	...	...	...
Morocco					
Ore	30 432	14 908	19 024	32 543	...
Unwrought	59 596	60 690	62 017	74 900	*47 000
Namibia					
Unwrought	35 581	35 045	31 385	27 956	26 431
South Africa					
Concentrates (b)	82 508	84 225	83 041	87 777	93 716
Unwrought (f)	*10 300	*2 100	*2 600	*2 800	...
Tunisia					
Ore	3 700	1 500	1 700	...	...
Unwrought	(a) 922	(a) 680	—	...	...
Scrap	1 429	—	—	...	...
Zambia					
Unwrought	30	1 300	100	200	200
Canada					
Ores & concentrates (b) (g)	219 248	190 672	205 776	93 549	52 514
Unwrought	116 133	114 838	172 473	161 561	177 713
Scrap	17 950	5 238	6 608	3 354	6 361
Honduras					
Ores & concentrates (b)	4 237	8 719	9 561	3 838	2 777
Mexico					
Ores & concentrates	3 080	233	944	270	...
Unwrought	111 680	92 537	103 337	104 067	...
Scrap	934	208	776	101	114
USA					
Ores & concentrates (b)	175 235	186 350	230 352	88 061	...
of which: Re-exports	118 635	98 488	158 065	42 156	...
Unwrought	53 134	73 902	58 109	45 663	(a) 53 574
Unwrought alloys	7 048	22 433	7 819	7 651	...
Scrap	72 000	89 539	61 561	51 340	88 073
Argentina					
Ores & concentrates	23 899	24 297	6 599	224	*8 000
Bolivia					
Ore	35 233	32 667	32 669	37 024	35 961
Chile					
Ores & concentrates	1 147	...	—	—	1 611

**Exports of Lead**

tonnes

Country	1990	1991	1992	1993	1994
Peru					
Ores & concentrates	219 750	266 653	232 673	224 313	*230 000
Unwrought (a)	58 480	57 802	47 370	70 001	75 500
China					
Ore	1 978	5 451	15 212	28 172	...
Unwrought (a)	37 980	15 935	89 876	90 777	...
Hong Kong					
Unwrought (a)	17 380	2 135	6 716	2 194	4 487
of which: Re-exports	17 035	2 115	6 716	2 194	4 307
Scrap	2 737	6 740	2 735	2 269	706
Indonesia					
Unwrought	10 863	8 215	5 734	4 407	...
Unwrought alloys	5 740	8 463	14 276	12 387	...
Iran (c)					
Ore	3 500	25 432	16 375	9 200	...
Japan					
Unwrought (a)	1 425	906	4 336	8 764	1 423
Scrap	25 528	25 261	20 614	8 162	304
Kazakhstan					
Unwrought	—	—	56 000	31 000	...
Scrap	—	—	60 000	30 000	...
Korea, Dem. P.R. of					
Unwrought (a) (f)	*4 800	*14 700	*8 700	*2 100	*6 400
Korea, Republic of					
Ore	12 350	750	—	—	—
Unwrought (a)	4 635	5 968	8 612	20 670	17 013
Scrap	2 433	4 067	3 000	—	—
Saudi Arabia					
Scrap	20 407	3 689	9 682	...	...
Singapore					
Unwrought (a)	16 897	11 964	6 042	22 443	29 968
of which: Re-exports	16 859	11 894	5 742	21 394	29 738
Scrap	5 210	7 429	5 744	9 719	10 562
of which: Re-exports	357	173	193	2 320	598
Taiwan					
Unwrought	3 521	1 171	121	1 260	646
Unwrought alloys	13 170	6 786	1 328	340	2 710
Thailand					
Ore	34 379	34 586	12 690	6 800	...
Australia					
Ores & concentrates	126 000	134 000	200 000	192 000	151 000
Unwrought					
Base bullion (b)	*188 000	188 000	233 000	205 000	179 000
Refined (a)	176 117	176 016	187 014	166 840	178 000
Scrap (h)	28 868	30 255	21 491	24 093	...

Note(s):

(1) In this table the term 'unwrought' lead corresponds to item 685.1 of the Standard International Trade Classification (Revision 3) and comprises base bullion, pigs, unwrought bars, etc.

- (a) Including alloys
- (b) Pb content
- (c) Years ended 20 March following that stated
- (d) As from 1992 data is for Serbia and Montenegro only
- (e) Complex lead-zinc ore
- (f) BGS estimates, based on known imports into certain countries
- (g) Including Pb content of zinc concentrates
- (h) Years ended 30 June of that stated
- (i) Data for the Federal Republic of Yugoslavia only



## Imports of Lead

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Ores & concentrates	37 158	...	...	...	...
Unwrought	185 666	203 136	205 703	221 346	184 018
Unwrought alloys	5 072	1 324	4 362	4 036	3 359
Scrap	16 192	5 512	7 070	10 795	25 432
Belgium-Luxembourg					
Ore	101 231	82 066	84 345	92 378	...
Unwrought	22 577	24 743	19 162	20 353	...
Unwrought alloys	9 602	7 859	8 090	8 750	...
Scrap	12 098	18 703	40 701	55 958	...
Denmark					
Unwrought	2 175	2 910	2 359	2 944	2 368
Unwrought alloys	3 667	2 420	2 891	4 455	4 008
Scrap	826	723	997	1 686	2 748
France					
Ore	175 294	182 263	172 664	159 369	154 303
Unwrought	37 043	32 317	34 821	(a) 31 325	48 736
Unwrought alloys	17 414	10 482	7 277	...	5 148
Scrap	40 087	69 056	74 846	81 585	87 501
Germany, Federal Republic of					
Ore	205 979	175 821	199 795	191 500	97 968
Unwrought	112 265	141 134	134 115	100 711	100 803
Unwrought alloys	30 235	26 037	18 082	15 386	31 235
Scrap	27 641	24 321	21 866	14 194	21 869
Greece					
Unwrought (a)	17 602	10 386	5 383	8 317	...
Irish Republic					
Unwrought (a)	4 553	12 269	9 444	12 832	...
Scrap	11 371	9 851	10 361	8 391	...
Italy					
Ore	79 409	127 314	112 739	73 509	...
Unwrought	107 619	65 972	67 644	53 330	...
Unwrought alloys	15 783	17 611	14 311	16 458	...
Scrap	9 118	3 614	1 633	764	...
Netherlands					
Unwrought	32 898	36 124	30 836	25 183	...
Unwrought alloys	6 179	7 738	10 579	8 556	...
Scrap	20 185	21 236	16 582	19 396	...
Portugal					
Unwrought (a)	22 991	26 723	27 971	19 034	...
Spain					
Ore	42 335	53 158	81	105	...
Unwrought	6 083	15 215	42 889	32 846	...
Unwrought alloys	6 567	6 524	9 533	4 801	...
Scrap	11 680	4 635	2 598	2 960	...
Austria					
Ore	17 836	6 588	3 305	1 745	197
Unwrought (a)	41 770	46 382	43 853	40 468	46 791
Scrap	3 453	3 439	4 410	4 937	1 073
Bulgaria					
Ore (f)	*11 500	*3 000	*2 500	*3 000	...
Croatia					
Unwrought (a)	—	—	2 187	3 561	...
Czechoslovakia					
Unwrought (a)	16 000	10 000	5 000	—	—
Finland					
Unwrought	9 231	7 449	4 712	3 373	...
Unwrought alloys	4 572	4 867	3 014	1 375	...
German Democratic Republic					
Unwrought (a) (f)	*11 300	—	—	—	—
Scrap (f)	*3 800	—	—	—	—
Hungary					
Unwrought & semi-manufactures	5 072	...	10 391	14 252	12 839
Norway					
Unwrought (a)	6 427	2 368	4 084	3 155	4 569

**Imports of Lead**

tonnes

Country	1990	1991	1992	1993	1994
Poland					
Unwrought	2 493	7 838	(a) 6 090	(a) (f) *9 000	...
Russia					
Ore (f)	—	—	*36 000	*34 100	...
Slovakia					
Unwrought (a)	—	—	—	1 869	...
Slovenia					
Unwrought (a)	—	—	4 971	10 941	...
Scrap	—	—	19 225	8 736	...
Soviet Union					
Ore (f)	*12 800	*8 000	—	—	—
Sweden					
Ore	—	4 001	6 000	1 780	...
Unwrought	2 793	1 592	1 515	4 589	...
Unwrought alloys	963	480	191	979	...
Scrap	19 979	29 506	34 318	32 405	...
Switzerland					
Unwrought (a)	7 893	9 612	6 827	4 811	5 895
Turkey					
Unwrought (a)	13 714	18 938	19 034	31 517	26 183
Scrap	713	1 651	1 537	4 478	523
Yugoslavia (j)					
Concentrates	6 173	(h) 1 088	...	...	...
Unwrought (a)	26 938	(h) 2 267	101	...	...
Scrap	7 144	(h) 744	73	...	...
Algeria					
Unwrought	4 247	12 302	(a) 11 778	...	...
Unwrought alloys	5 050	7 030	...	...	...
Egypt					
Unwrought & scrap	12 700	16 117	13 898	...	...
Morocco					
Ore	29 519	28 571	22 218	12 220	...
Unwrought alloys	177	858	974	494	...
Namibia					
Concentrates (b)	20 997	14 753	11 704	18 443	2 577
Nigeria					
Unwrought (a)	500	500	500	...	...
South Africa					
Ore	31 298	15 843	8 437	5 308	0
Unwrought (a)	261	84	1 497	2 211	4 585
Scrap	5 271	2 150	...	...	...
Tunisia					
Unwrought (a)	3 764	4 497	5 370	2 881	...
Canada					
Ores & concentrates (b) (g)	45 105	14 828	24 116	21 303	35 592
Unwrought	11 682	7 921	7 745	10 890	6 377
Scrap	34 831	58 044	50 538	38 716	67 931
Cuba					
Unwrought (i)	933	963	1 614	2 137	...
Mexico					
Ores & concentrates	15 058	53 909	37 874	51 093	20 783
Scrap	2 634	1 411	809	395	...
USA					
Ores & concentrates (b)	144 226	133 639	263 806	71 842	14 541
Unwrought					
Base bullion	2 864	281	71	20	...
Other	78 802	102 322	171 185	177 593	(a) 230 800
Alloys	12 819	15 184	20 823	19 632	...
Scrap	12 251	4 021	6 782	4 024	7 389

## Imports of Lead

tonnes

Country	1990	1991	1992	1993	1994
Brazil					
Ore	30 222	30 672	35 548	44 599	...
Unwrought (a)	1 008	15 153	9 315	47 401	*46 300
Scrap	24 511	18 208	10 780	11 527	*4 000
Chile					
Unwrought (a)	1 774	2 370	2 633	3 162	3 189
Colombia					
Unwrought (a)	2 231	2 050	4 027	7 093	...
Scrap	672	2 258	3 869	3 770	...
Uruguay					
Unwrought	1 500	944	660	665	361
Venezuela					
Unwrought (a)	6 968	9 395	9 920	12 592	...
Scrap	1 931	801	1 624	166	...
China					
Unwrought (a)	1 773	168	1 741	2 261	...
Scrap	665	511	5 712	7 322	...
Hong Kong					
Unwrought (a)	18 327	2 583	8 549	4 190	6 710
Scrap	3 949	4 923	1 532	1 206	172
India (c)					
Ore	33 794	19 340	50 704	24 404	...
Unwrought	38 829	23 243	8 651	21 766	...
Unwrought alloys	1 073	906	139	39	...
Scrap	7 107	2 302	6 728	27 227	...
Indonesia					
Unwrought	12 996	16 948	28 057	34 188	...
Unwrought alloys	2 498	5 755	7 179	13 251	...
Scrap	35 822	46 424	60 328	19 756	...
Iran (d)					
Unwrought	7 000	8 000	8 000	...	...
Israel					
Unwrought	2 200	700	1 000	1 216	...
Japan					
Ore	279 535	304 054	270 197	290 706	234 085
Unwrought	71 499	72 566	51 913	49 901	55 709
Unwrought alloys	27 542	39 973	27 819	15 736	17 219
Korea, Dem. P.R. of					
Unwrought (a) (f)	*1 600	*3 200	*600	*300	...
Korea, Republic of					
Ores & concentrates	—	9 456	60 842	67 338	121 078
Unwrought	93 117	119 169	117 448	89 082	105 843
Unwrought alloys	14 263	18 895	25 980	16 389	30 132
Scrap	47 711	17 434	3 661	1 467	1 047
Malaysia					
Unwrought (a)	25 368	24 670	38 572	35 785	...
Scrap	...	6 078	2 076	...	...
Pakistan (e)					
Unwrought (a)	5 159	...	4 955	8 195	...
Philippines					
Unwrought (a)	3 769	6 303	7 327	8 922	...
Scrap	15 243	85	78	...	...
Singapore					
Unwrought (a)	37 190	12 953	39 867	39 670	25 434
Scrap	3 044	5 005	4 538	4 794	4 778
Taiwan					
Unwrought	58 325	74 720	90 985	86 494	90 493
Unwrought alloys	5 706	6 998	8 003	8 268	6 578
Scrap	34 251	11 350	505	—	—
Thailand					
Unwrought	12 747	19 512	24 524	32 724	...
Unwrought alloys	1 591	6 017	6 050	9 081	...
Scrap	7 592	16 293	13 191	5 296	...

**Imports of Lead**

tonnes

Country	1990	1991	1992	1993	1994
Australia					
Ores & concentrates (e)	21 793	47 304	30 106	33 080	...
New Zealand (e)					
Unwrought (a)	2 406	2 178	1 448	2 128	1 640

## Note(s):

(1) In this table the term 'unwrought' lead corresponds to item 685.1 of the Standard International Trade Classification (Revision 3) and comprises base bullion, pigs, unwrought bars, etc.

- (a) Including alloys
- (b) Pb content
- (c) Years ended 31 March following that stated
- (d) Years ended 20 March following that stated
- (e) Years ended 30 June of that stated
- (f) BGS estimates, based on known exports from certain countries
- (g) Including Pb content of zinc concentrates
- (h) Data for the Federal Republic of Yugoslavia only
- (i) Exports from Mexico
- (j) As from 1992 data is for Serbia and Montenegro only

## Production of Lithium Minerals

tonnes

Country	1990	1991	1992	1993	1994
Portugal Lepidolite	20 775	18 970	*15 904	*13 289	*14 000
Russia Soviet Union	— *55 000	— *50 000	*45 000 —	*40 000 —	*40 000 —
Namibia Zimbabwe	1 268 19 053	1 152 9 186	1 162 12 837	739 18 064	1 362 25 279
Canada USA (a) (b)	*9 200 *4 000	*11 300 *4 000	*10 000 *3 500	... *3 500	... ...
Argentina Brazil	69	287	620	*300	*400
Amblygonite Petalite Spodumene	38 334 103	28 212 1 721	... ... 3 056	... ... ...	... ... ...
Chile (c)	9 082	8 575	10 823	10 369	10 439
China	*15 000	*15 500	*15 500	*15 500	*16 000
Australia Spodumene	*50 576	*43 281	*39 980	*40 490	*40 000
World total (Li content)	*8 600	*8 200	*8 000	*7 900	8 100

(a) Li content

(b) Mostly spodumene

(c) Carbonate

**Exports of Lithium**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Oxides	275	269	226	160	191
Carbonate	594	607	716	520	387
Belgium-Luxembourg					
Oxides	41	83	21	27	...
France					
Oxides	1	20	4	...	35
Germany, Federal Republic of					
Oxides	724	609	509	334	...
Carbonate	1 685	1 670	2 113	993	...
Netherlands					
Oxides	18	80	73	200	...
Carbonate	36	50	120	729	...
Spain					
Lithium minerals	—	—	11 985	58 745	...
Russia					
Oxides	—	—	946	331	...
Carbonate	—	—	1 906	1 452	...
Soviet Union					
Oxides (a)	*340	*230	—	—	—
Carbonate (a)	*600	*200	—	—	—
Namibia					
Lithium minerals	1 210	1 019	1 048	465	1 269
Zimbabwe					
Lithium minerals	20 149	20 714	15 207	...	...
USA					
Oxides	3 147	3 079	2 913	3 060	3 600
Carbonate	9 333	9 380	8 206	6 258	5 258
Chile					
Carbonate	8 228	8 262	10 276	10 590	10 755
China					
Oxides	(a) *1 000	(a) *1 100	1 598	1 682	...
Carbonate	(a) *1 600	(a) *1 600	1 609	1 680	...
Australia					
Lithium minerals (b)	35 664	34 489	44 412	38 144	...

(a) BGS estimates, based on known imports into certain countries

(b) Years ended 30 June of that stated

## Imports of Lithium

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Oxides	764	3 526	2 661	1 289	854
Carbonate	1 932	2 019	2 006	1 605	1 444
Belgium-Luxembourg					
Oxides	143	163	125	230	...
Carbonate	326	399	354	423	...
France					
Oxides	371	389	371	...	376
Carbonate	805	714	866	...	978
Germany, Federal Republic of					
Oxides	779	1 538	1 974	1 878	...
Carbonate	5 490	6 362	6 280	5 459	...
Italy					
Oxides	184	342	213	...	...
Carbonate	956	846	1 070	...	...
Netherlands					
Oxides	181	137	194	298	...
Carbonate	666	595	868	1 226	...
Spain					
Lithium minerals	622	797	659	44	...
Oxides	197	109	189	65	...
Carbonate	333	336	352	270	...
Finland					
Carbonate	121	3	26	21	...
Sweden					
Carbonate	98	124	61	114	...
Yugoslavia (d)					
Carbonate	37	(b) 0	—	...	...
South Africa					
Lithium minerals	330	797	...	...	...
Oxides	135	123	162	2 227	6 363
Canada					
Carbonate	1 587	1 184	1 046	1 193	1 201
USA					
Carbonate	4 197	3 110	4 052	4 289	4 500
Brazil					
Lithium minerals	2 974	3 348	...	...	...
Oxides	321	231	...	...	...
Carbonate	273	240	...	...	...
Venezuela					
Carbonate	1 231	814	1 363	678	...
India (c)					
Oxides	296	299	440	530	...
Carbonate	63	64	108	63	...
Japan					
Oxides	1 036	1 025	988	997	1 133
Carbonate	3 835	4 136	4 137	3 858	4 466
Korea, Republic of					
Oxides	149	194	298	138	331
Carbonate	621	694	674	798	805
Taiwan					
Carbonate	230	181	157	98	106
Australia					
Oxides (a)	159	101	141	117	...
Carbonate (a)	109	98	114	97	...

(a) Years ended 30 June of that stated

(b) Data for the Federal Republic of Yugoslavia only

(c) Years ended 31 March following that stated

(d) As from 1992 data is for Serbia and Montenegro only

**Production of Magnesite**

tonnes

Country	1990	1991	1992	1993	1994
Greece	701 096	560 373	472 898	479 999	487 000
Spain	*460 000	*420 000	*400 000	*400 000	400 000
Austria	1 179 162	960 589	995 347	648 864	681 375
Bosnia & Herzegovina	—	—	*2 000	*2 000	*2 000
Czechoslovakia	561 000	328 000	1 267 000	—	—
Poland	23 300	8 100	12 900	13 000	*13 000
Russia	—	—	*1 100 000	*800 000	*600 000
Slovakia	—	—	—	*1 200 000	*1 200 000
Soviet Union	*1 600 000	*1 400 000	—	—	—
Turkey	845 124	1 324 229	1 124 475	*629 000	*1 000 000
Yugoslavia (d)	268 000	(e) 228 000	185 000	55 000	*68 000
South Africa	114 182	98 782	60 085	67 403	71 726
Zimbabwe	32 639	23 295	9 022	6 276	1 588
Canada (b)	*190 000	*190 000	*170 000	164 922	*165 000
Brazil (c)	345 415	*350 000	*300 000	*300 000	*300 000
Colombia	19 300	18 768	18 840	9 816	*9 500
China	2 400 000	*1 650 000	*1 510 000	*1 229 200	*1 500 000
India	544 000	539 000	603 000	*409 000	*500 000
Iran (a)	1 405	29 291	36 165	49 424	*40 000
Korea, Dem. P.R. of	*1 500 000	*1 600 000	*1 600 000	*1 600 000	*1 600 000
Pakistan	4 274	5 191	6 484	4 157	*4 000
Philippines	*700	*700	*700	*700	*700
Australia	*65 000	*100 000	270 053	263 907	289 071
World total	10 900 000	9 800 000	10 100 000	8 300 000	8 900 000

Note(s):

(1) In addition to the countries listed, Bulgaria, Egypt, Kenya, New Caledonia and USA are believed to produce magnesite

(a) Years ended 20 March following that stated

(b) Officially described as magnesitic dolomite and brucite

(c) Including beneficiated and directly shipped material

(d) As from 1992 data is for Serbia and Montenegro only

(e) Excluding data from August to December for the Republic of Croatia



## Exports of Magnesite and Magnesia

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Magnesite	376	2 010	3 765	120	110
Magnesia	75 144	57 638	36 250	70 465	42 480
Belgium-Luxembourg					
Magnesite	373	3 037	4 543	2 100	...
Magnesia	7 022	2 080	1 508	41 570	...
France					
Magnesite	81	45	270	6 036	51
Magnesia	19 523	25 386	21 007	27 582	16 991
Germany, Federal Republic of					
Magnesite	2 048	2 366	3 888	1 261	...
Magnesia	66 059	73 373	66 375	53 080	...
Greece					
Magnesite	8 879	4 181	6 838	5 429	...
Magnesia	236 487	210 203	187 892	150 503	...
Irish Republic	(a) *68 300	(a) *62 000	(a) *68 700	59 907	...
Italy					
Magnesite	4 013	4 068	3 550	6 461	...
Magnesia	119 678	96 259	106 940	68 563	...
Netherlands					
Magnesite	5 457	5 967	8 302	1 660	...
Magnesia	47 970	58 384	63 392	27 871	...
Spain					
Magnesite	20 937	9 516	10 540	235	...
Magnesia	76 785	69 519	69 448	79 165	...
Austria					
Magnesite	347	81	82	98	287
Magnesia	166 604	143 687	125 193	99 519	101 319
Czechoslovakia					
Magnesite	583 000	111 000	(a) *70 400	—	—
Czech Republic (a)	—	—	—	*6 000	...
Finland					
Magnesia	519	22	3	2	...
Norway					
Magnesite	177	78	1 279	8	3
Magnesia	4 074	3 297	2 568	3 099	3 377
Slovakia					
Magnesite	—	—	—	6 475	...
Soviet Union (a)	*6 200	*5 100	—	—	—
Sweden					
Magnesite	116	186	167	94	...
Magnesia	176	101	351	71	...
Turkey					
Magnesite	117 529	114 440	62 118	31 213	53 460
Magnesia	110 996	120 384	106 660	113 996	138 838
Yugoslavia (d)					
Magnesia	12 646	(e) 6 197	6 384	...	...
South Africa (a)	*5 400	*1 500	...	*1 000	...
Zimbabwe	29 738	19 182	6 682	...	...
Canada					
Magnesia	61 337	63 978	63 279	59 708	56 316
Mexico					
Magnesia	64 128	61 230	64 729	58 842	53 952
USA					
Magnesite	8 009	8 595	5 997	7 572	...
Magnesia	105 476	102 632	88 546	89 175	...
Brazil					
Magnesia	92 409	40 735	118 638	76 683	91 699

**Exports of Magnesite and Magnesias**

tonnes

Country	1990	1991	1992	1993	1994
China	1 305 566	1 540 389	2 035 530	2 160 570	2 060 000
Hong Kong (c)	13 143	8 049	10 740	9 331	10 212
India (b)					
Magnesite	70	1	—	501	...
Magnesia	4 158	3 363	1 817	2 488	...
Israel					
Magnesia	43 627	44 270	32 972	33 643	...
Japan					
Magnesite	791	309	401	469	397
Magnesia	94 564	89 937	77 512	75 349	60 069
Korea, Dem. P.R. of (a)	*185 600	*147 800	*142 300	*126 900	...
Singapore	1 010	590	2 381	2 903	2 516
of which: Re-exports	138	112	342	785	271
Australia					
Magnesite (f)	3 213	3 805	402	480	...
Magnesia (f)	137	1 310	17 101	78 431	...

## Note(s):

(1) The term 'magnesias', as used here, includes dead-burned, sintered and caustic-burned (caustic calcined) material

- (a) BGS estimates, based on known imports into certain countries
- (b) Years ended 31 March following that stated
- (c) Re-exports
- (d) As from 1992 data is for Serbia and Montenegro only
- (e) Data for the Federal Republic of Yugoslavia only
- (f) Years ended 30 June of that stated

## Imports of Magnesite and Magnesia

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Magnesite	22 406	29 771	27 579	25 425	39 111
Magnesia	130 355	143 188	148 380	117 895	139 112
Belgium-Luxembourg					
Magnesite	1 738	959	15 323	804	...
Magnesia	27 835	27 114	178 175	108 866	...
Denmark					
Magnesite	5 730	7 218	4 727	5 213	5 807
Magnesia	9 746	9 222	8 051	15 206	11 022
France					
Magnesite	1 368	745	1 728	633	3 121
Magnesia	206 689	209 522	192 790	145 512	193 556
Germany, Federal Republic of					
Magnesite	18 598	15 609	13 201	6 721	...
Magnesia	508 324	526 083	570 510	469 428	...
Greece					
Magnesite	92 623	57 401	39 690	15 252	...
Magnesia	1 420	6 185	523	951	...
Irish Republic					
Magnesite	30 643	23 503	13 447	117	...
Magnesia	15 197	11 521	17 025	25 623	...
Italy					
Magnesite	16 640	16 891	18 457	31 113	...
Magnesia	86 147	93 468	81 751	101 151	...
Netherlands					
Magnesite	2 743	4 167	6 822	2 573	...
Magnesia	107 093	101 936	103 605	121 489	...
Portugal					
Magnesite	1 466	1 589	1 752	1 001	...
Magnesia	1 996	2 606	2 567	3 598	...
Spain					
Magnesite	883	372	302	739	...
Magnesia	77 236	73 124	82 975	120 386	...
Austria					
Magnesite	607	148	62	261	686
Magnesia	134 806	145 167	174 186	149 103	174 538
Bulgaria (b)	*17 200	*2 100	*2 100	*3 200	...
Croatia	—	—	593	940	...
Finland					
Magnesite	956	1 520	3 156	4 144	...
Magnesia	6 192	5 053	8 724	3 575	...
German Democratic Republic (b)	*33 900	—	—	—	—
Hungary					
Magnesia	50 729	...	2 685	2 254	546
Norway					
Magnesite	2 358	1 642	1 541	1 541	678
Magnesia	1 870	3 584	10 727	4 123	6 710
Poland					
Magnesia	174 067	64 871	(b) *40 800	(b) *42 900	...
Romania (b)	*58 100	*40 500	*42 700	*27 800	...
Russia					
Magnesite	—	94 041	90 350	35 493	...
Slovakia (b)	—	—	—	*13 300	...
Sweden					
Magnesite	12 864	22 308	13 738	17 483	...
Magnesia	16 663	10 302	15 673	20 170	...
Switzerland					
Magnesite	368	379	518	382	682
Magnesia	5 967	5 813	4 837	4 954	4 922
Turkey					
Magnesia	20	4 944	2 337	7 794	11 965
Ukraine (b)	—	—	*280 300	*331 600	...
Yugoslavia (d)					
Magnesite	17 760	(e) 15 333	10 835	...	...
Magnesia	8 034	(e) 1 794	2 180	...	...

**Imports of Magnesite and Magnesias**

tonnes

Country	1990	1991	1992	1993	1994
Algeria					
Magnesia	1 893	1 334	...	...	...
Egypt	...	...	29 678	14 785	...
South Africa					
Magnesite	35 108	22 153	7 939	6 456	2 546
Magnesia	79 649	79 743	63 320	128 130	130 819
Tunisia					
Magnesia	853	1 130	1 088	...	...
Canada					
Magnesite	96 714	71 341	66 111	67 689	80 202
Magnesia	99 827	87 006	67 780	86 315	95 180
Mexico					
Magnesite	8 611	7 447	4 555	2 375	1 567
Magnesia	23 939	24 266	27 635	33 929	30 990
USA					
Magnesite	1 957	1 956	3 182	332	...
Magnesia	243 932	258 126	296 986	424 209	...
Argentina					
Magnesia	15 855	18 292	11 742	19 075	...
Brazil					
Magnesia	1 875	2 572	4 534	3 433	...
Chile					
Magnesia	9 947	12 820	9 817	10 624	12 979
Colombia	1 779	6 384	7 055	3 469	...
Peru					
Magnesia	...	1 477	1 550	1 871	...
Venezuela					
Magnesite	39 609	35 769	23 301	26 714	...
Magnesia	31 381	43 965	29 487	30 059	...
Bangladesh (a)	1 234	...	...	...	...
Hong Kong	14 808	10 592	15 559	14 946	21 747
India (c)					
Magnesite	7 304	2 142	2 133	2 290	...
Magnesia	72 284	77 319	85 532	72 503	...
Indonesia					
Magnesite	466	1 372	10 016	3 002	...
Magnesia	19 149	15 156	13 171	30 380	...
Israel (b)	*1 200	*2 200	*2 200	*2 200	...
Japan					
Magnesite	1 381	2 270	6 525	8 544	12 400
Magnesia	372 014	421 934	385 528	466 224	532 354
Korea, Republic of					
Magnesite	2 384	365	1 974	491	312
Magnesia	80 494	97 192	99 662	137 353	147 354
Malaysia					
Magnesite	...	16 254	12 238	...	...
Pakistan (a)					
Magnesite	488	103	1 432	30	...
Magnesia	700	402	30 617	788	...
Philippines					
Magnesite	8 430	3 303	3 182	...	...
Magnesia	620	10 161	8 390	...	...
Singapore	16 007	21 035	16 595	30 405	14 442
Taiwan					
Magnesite	123	237	4 266	154	363
Magnesia	60 921	79 350	77 225	99 164	96 048
Thailand					
Magnesite	20 563	18 852	29 513	23 297	...
Magnesia	4 515	6 817	4 763	5 639	...

**Imports of Magnesite and Magnesias**

tonnes

Country	1990	1991	1992	1993	1994
Australia					
Magnesite (a)	16 926	8 942	13 593	9 973	...
Magnesia (a)	935	10 191	13 746	7 395	...
New Zealand (a)					
Magnesite	3 779	991	1 026	443	1 049
Magnesia	5 436	4 706	15 973	23 117	26 244

## Note(s):

- (1) The term 'magnesias', as used here, includes dead-burned, sintered and caustic-burned (caustic calcined) material
- (a) Years ended 30 June of that stated
- (b) BGS estimates, based on known exports from certain countries
- (c) Years ended 31 March following that stated
- (d) As from 1992 data is for Serbia and Montenegro only
- (e) Data for the Federal Republic of Yugoslavia only

**Production of Manganese Ore**

tonnes

Country		1990	1991	1992	1993	1994
Greece	(50%)	5 400	5 000	5 000	5 000	*5 000
Italy	(30%)	6 654	8 350	8 198	8 200	...
Austria (e)		43 141	39 925	30 752	26 890	31 288
Bosnia & Herzegovina	(35%)	—	—	*10 000	*2 000	*2 000
Bulgaria	(30%)	39 000	*34 000	*29 000	—	—
Czechoslovakia	(17%) (d)	*900	...	...	—	—
Georgia	(30%)	—	—	*1 200 000	*1 000 000	*800 000
Hungary	(30%)	60 000	30 000	18 000	59 000	43 109
Romania	(22%)	40 000	20 000	15 000	*15 000	*28 000
Soviet Union	(35%)	8 500 000	7 240 000	—	—	—
Turkey	(40%)	*8 900	*8 900	*8 900	*8 900	*8 900
Ukraine	(30%)	—	—	5 819 000	4 300 000	*2 980 000
Yugoslavia	(34%) (g)	50 863	*40 000	—	—	—
Gabon	(50%)	2 422 968	1 620 388	1 556 000	1 290 000	*1 440 000
Ghana	(40%)	382 100	485 100	279 019	309 122	238 430
Morocco	(50%)	49 450	59 255	49 120	42 585	31 452
South Africa						
Metallurgical	(40%)	4 318 306	3 098 613	2 374 613	2 439 501	2 816 282
Chemical	(55%)	83 784	47 447	89 022	67 188	48 856
Zambia	(45%)	721	662	292	...	...
Mexico	(38%)	365 400	206 500	362 500	305 300	240 200
USA	(10%) (a)	*8 000	...	...	...	...
Argentina	(30%)	3 338	4 823	1 500	...	...
Brazil	(40%) (b)	2 790 372	*2 000 000	*2 000 000	*2 000 000	*2 500 000
Chile	(33%)	39 697	43 767	49 857	62 989	62 958
China	(30%)	4 060 000	5 158 000	5 592 300	7 301 000	*7 000 000
India	(35%) (c)	1 393 000	1 401 000	*1 810 000	1 660 000	*1 600 000
Indonesia	(50%)	9 472	13 253	*13 000	*14 000	...
Iran	(30%) (f)	54 404	49 690	38 475	75 987	75 000
Kazakhstan	(30%)	—	—	*100 000	*150 000	133 000
Philippines	(48%)	15 001	4 064	3 224	*3 500	...
Thailand	(45%)	16 652	11 032	7 827	6 500	...
Australia	(48%)	1 932 000	1 470 000	1 285 000	2 092 000	1 986 000
World total		26 700 000	23 100 000	22 800 000	23 300 000	22 100 000

## Note(s):

(1) Estimated average manganese content is given in parentheses for each country, relating where possible to the later years

(2) In addition to the countries listed, Colombia, Cuba and Vietnam are believed to produce manganese ore

(a) Shipments of manganiferous iron ore only

(b) Including beneficiated and direct shipping ore

(c) Including ore grading 54% to less than 35% Mn

(d) Manganiferous iron ore

(e) Mn content of domestic iron ore

(f) Years ended 20 March following that stated

(g) As from 1992 data is for Serbia and Montenegro only

## Exports of Manganese

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Ore (a)	394	491	132	1 559	267
Metal	1 697	...	...	...	...
Belgium-Luxembourg					
Ore	335	12 857	14 208	7 924	...
Metal	2 489	1 881	1 749	2 021	...
France					
Ore (a)	52 873	87 341	143 667	81 039	138 497
Metal	4 825	3 961	4 819	7 144	1 773
Germany, Federal Republic of					
Ore (a)	11 066	6 807	17 565	36 531	...
Metal	1 502	1 679	3 037	3 520	...
Netherlands					
Ore	45 429	48 876	47 942	37 710	...
Metal	1 983	2 050	2 681	8 139	...
Portugal					
Ore	8 348	8 226	—	40	...
Bulgaria					
Ore	83 100	6 900	23 700	18 300	...
Hungary					
Ore	2 000	2 000	...	...	...
Norway					
Ore	31 027	27 772	—	5 795	—
Metal	2	9	79	68	653
Soviet Union					
Ore	128 000	(f) 249 898	—	—	—
Sweden					
Metal	60	112	58	59	...
Turkey					
Ore	11 671	30	8 500	—	3 004
Yugoslavia (g)					
Ore	5 046	(e) —	—	...	...
Gabon					
Ore	2 205 000	1 833 000	1 551 100	...	...
Ghana					
Ore	295 000	320 000	284 000	...	...
Morocco					
Ore	44 584	44 108	39 821	35 129	...
South Africa					
Ore	2 160 002	1 661 518	1 394 606	1 243 817	1 290 870
Metal	32 154	...	...	...	...
Mexico					
Ore	65 263	22 717	32 168	66 832	31 580
USA					
Ore	82 928	211 252	13 287	16 263	15 306
Metal	6 100	5 305	5 244	4 099	4 866
Brazil					
Ore	923 916	854 006	476 859	750 785	899 110
China					
Ore	27 998	19 498	4 987	5 373	...
Metal	42 524	34 600	29 390	34 517	50 248
Hong Kong					
Metal (c)	...	...	2 772	2 422	967
India (d)					
Ore (b)	317 504	265 291	210 052	286 450	...
Indonesia					
Ore (a)	67 027	3 004	5 120	...	...
Singapore					
Ore	9 699	10 412	8 150	8 742	13 100
of which: Re-exports	6 411	1 482	723	1 126	2 084

**Exports of Manganese**

tonnes

Country	1990	1991	1992	1993	1994
Australia Ore	*1 600 000	*1 075 000	*902 000	*1 720 000	...

## Note(s):

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

- (a) Including manganiferous iron ore
- (b) Including ferruginous manganese ore
- (c) Re-exports
- (d) Years ended 31 March following that stated
- (e) Data for the Federal Republic of Yugoslavia only
- (f) Data for the Russian Federation only
- (g) As from 1992 data is for Serbia and Montenegro only



## Imports of Manganese

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Ore (b)	318 303	355 271	395 613	49 073	8 037
Metal	4 274	3 726	4 704	4 346	5 692
Belgium-Luxembourg					
Ore	164 337	138 151	149 821	106 689	...
Metal	3 166	2 781	2 968	3 982	...
Denmark					
Ore	184	264	237	107	168
Metal	1 672	434	260	38	107
France					
Ore (b)	754 626	719 715	902 486	816 394	946 617
Metal	3 274	3 220	4 433	4 538	6 764
Germany, Federal Republic of					
Ore (b)	368 591	252 537	285 849	101 070	...
Metal	9 581	11 492	13 649	13 215	...
Greece					
Ore	22 751	24 491	23 931	80	...
Metal	229	274	1 122	914	...
Irish Republic					
Ore (b)	22 729	32 476	33 605	35 381	...
Italy					
Ore (b)	348 450	240 852	85 086	165 897	...
Metal	2 248	2 069	2 798	2 729	...
Netherlands					
Ore	71 157	65 905	50 123	25 638	...
Metal	2 263	1 750	2 793	3 688	...
Portugal					
Ore (c)	10 258	12 024	2 844	3 225	...
Spain					
Ore	262 314	56 007	74 349	221 544	...
Metal	959	991	1 645	1 058	...
Austria					
Ore	801	488	102	138	204
Metal	429	1 484	192	239	841
Bulgaria					
Ore	18 000	16 000	1 900	3 700	...
Croatia					
Ore	—	—	44 575	29 766	...
Metal	—	—	52	264	...
Czechoslovakia					
Ore	951 000	217 000	200 000	—	—
Finland					
Ore	17 830	8 452	28 599	25 626	...
Norway					
Ore	713 174	498 782	619 431	652 774	674 952
Metal	1 294	1 288	1 438	1 242	1 363
Poland					
Ore	106 183	151 833	158 277	...	...
Romania					
Ore	224 000	43 000	81 988	5 759	...
Slovakia					
Ore	—	—	—	103 856	...
Sweden					
Ore	217	27 531	8 867	8 544	...
Metal	1 254	1 862	2 234	2 285	...
Switzerland					
Metal	629	519	613	391	466
Turkey					
Ore	1 408	1 314	460	721	558
Yugoslavia (h)					
Ore	131 645	(g)—	...	...	...

**Imports of Manganese**

tonnes

Country	1990	1991	1992	1993	1994
Cameroon					
Ore	2 360	2 400	2 000	...	...
Egypt					
Ore	900	1 994	12 245	...	...
Kenya					
Ore (b)	2 600	2 000	1 000	...	...
South Africa					
Ore	8 631	7 426	6 813	6 523	6 780
Zimbabwe					
Ore	8 896	4 798	550	...	...
Canada					
Ore (a)	62 831	7 324	7 611	7 609	6 285
Metal	4 268	3 712	3 326	4 140	5 889
Mexico					
Ore	137 416	80 713	71 500	...	...
USA					
Ore	308 650	220 914	241 538	228 307	330 536
Metal	12 972	15 883	13 951	15 113	20 343
Argentina					
Ore	97 301	73 813	61 083	38 543	67 352
Brazil					
Metal	799	946	1 847	2 269	...
Colombia					
Ore	7 777	9 410	13 531	17 242	...
Venezuela					
Ore	31 578	96 800	39 789	64 076	...
China					
Ore	357 021	560 947	635 114	568 029	950 000
Metal	468	303	261	212	...
Hong Kong					
Ore	959	762	1 493	1 178	460
Metal	...	...	3 505	2 708	1 004
India (e)					
Ore	3 471	3 087	2 676	2 241	...
Metal	4 978	1 994	731	1 500	...
Indonesia					
Ore (b)	2 803	2 705	3 642	5 009	...
Israel					
Ore (d)	*1 700	*1 100	*2 000	*2 500	...
Japan					
Ore (b)	1 646 743	1 663 589	1 054 360	1 350 768	1 199 398
Metal	13 687	17 931	19 948	24 512	28 012
Korea, Dem. P.R. of					
Ore (d)	*39 100	*73 300	*31 500	*30 500	...
Korea, Republic of					
Ore	393 118	442 785	397 923	406 125	457 636
Metal	891	1 158	1 039	1 830	1 929
Malaysia					
Ore	...	1 233	5 135	1 217	...
Philippines					
Ore (b)	20 224	15 002	4 474	4 334	...
Saudi Arabia					
Ore	5 737	98 385	22 309	...	...
Singapore					
Ore	80 014	46 630	16 411	26 620	53 823
Taiwan					
Ore	141 392	125 004	26 718	62 469	52 734
Metal	89	168	409	496	591

**Imports of Manganese**

tonnes

Country	1990	1991	1992	1993	1994
Australia					
Ore (f)	1 008	860	21	37	...
Metal (f)	1 346	1 246	1 465	1 812	...

## Note(s):

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) Mn content

(b) Including manganiferous iron ore

(c) Including ferruginous manganese ore

(d) BGS estimates, based on known exports from certain countries

(e) Years ended 31 March following that stated

(f) Years ended 30 June of that stated

(g) Data for the Federal Republic of Yugoslavia only

(h) As from 1992 data is for Serbia and Montenegro only

**Production of Mercury**

kilograms

Country	1990	1991	1992	1993	1994
Spain	713 300	52 100	36 000	393 000	661 000
Czechoslovakia	126 000	75 000	60 000	—	—
Finland	109 176	110 435	74 596	100 824	103 500
Russia	—	—	*70 000	*60 000	...
Slovakia	—	—	—	60 000	17 250
Slovenia	—	—	12 000	...	6 000
Soviet Union	*800 000	*750 000	—	—	—
Turkey	66 000	25 000	5 000	—	—
Ukraine	—	—	*100 000	*80 000	172 500
Yugoslavia (a)	37 000	*35 000	—	—	—
Algeria	637 000	431 000	476 000	459 100	414 000
Mexico	735 000	340 000	21 000	12 000	*12 000
USA	562 000	58 000	64 000	*29 000	*15 000
China	930 000	800 000	600 000	554 000	466 000
Kyrgyzstan	—	—	*300 000	*250 000	448 500
Tajikistan	—	—	*100 000	*80 000	...
World total	4 700 000	2 700 000	1 900 000	2 100 000	2 500 000

(a) As from 1992 data is for Serbia and Montenegro only

## Exports of Mercury

kilograms

Country	1990	1991	1992	1993	1994
United Kingdom	176 377	108 335	79 967	199 166	245 039
Belgium-Luxembourg	36 500	50 100	199 600	3 400	...
Denmark	6 200	—	3 000	2 500	200
France	38 000	112 000	87 000	39 000	19 800
Germany, Federal Republic of	75 600	374 200	97 200	66 700	...
Irish Republic	349	14 111	149 192	8 450	...
Italy	21 000	67 900	82 600	150 000	...
Netherlands	154 000	68 000	44 000	96 000	...
Spain	475 000	832 000	898 000	1 170 000	...
Austria	700	1 500	2 400	500	1 400
Finland	103 000	110 000	89 000	228 000	...
Norway	259 000	8 000	29 000	5 000	2 000
Slovenia	—	—	3 000	1 000	...
Sweden	45 000	79 000	59 000	2 000	...
Switzerland	32 575	11 263	3 131	4 767	...
Yugoslavia (a)	2 000	(c) 0	—	...	...
Algeria	400 610	679 000	...	...	...
Canada	33 165	50 858	64 481	35 614	5 162
Mexico	23 186	328	1 881	...	...
USA	311 622	588 204	994 441	888 000	...
China	329 713	62 940	52 487	53 423	...
Hong Kong (b)	116 121	123 783	476 724	309 048	1 012 158
Japan	103 997	8 676	2 646	6 482	18 576
Singapore	7 405	5 995	19 079	39 041	3 471
of which: Re-exports	7 304	5 945	19 079	39 041	3 210
Taiwan	3 510	49 859	51 035	21 555	36 858

(a) As from 1992 data is for Serbia and Montenegro only

(b) Re-exports

(c) Data for the Federal Republic of Yugoslavia only

**Imports of Mercury**

kilograms

Country	1990	1991	1992	1993	1994
United Kingdom	51 090	39 472	67 252	14 995	5 062
Belgium-Luxembourg	74 000	87 200	94 000	50 300	...
Denmark	3 700	14 800	24 000	3 800	5 100
France	107 000	109 000	133 000	183 000	53 400
Germany, Federal Republic of	188 700	191 900	174 200	96 500	...
Greece	4 000	4 000	5 000	2 000	...
Irish Republic	48 521	15 647	25 800	30 590	...
Italy	92 000	75 900	48 700	11 000	...
Netherlands	106 000	83 000	37 000	191 000	...
Portugal	15 000	14 000	5 000	1 400	...
Spain	79 000	210 000	220 000	356 000	...
Austria	5 900	6 600	5 300	800	2 400
Finland	1 000	1 000	...	...	...
German Democratic Republic (a)	*10 000	—	—	—	—
Hungary	27 000	...	23 000	17 000	7 000
Norway	...	3 000	...	21 000	3 000
Poland (a)	...	...	*13 000	...	...
Romania (a)	*15 000	*1 000	...	*2 000	...
Slovenia	—	—	78 000	37 000	...
Sweden	14 000	9 000	56 000	5 000	...
Switzerland	15 781	12 949	7 413	11 952	8 366
Turkey	22 000	5 000	5 000	3 631	22 105
Yugoslavia (b)	48 000	(e) ...	5 000	...	...
Morocco	9 296	10 269	6 000	...	...
South Africa	119 040	97 042	...	37 406	53 342
Tunisia	6 357	1 189	1 000	...	...
Canada	53 890	12 027	18 835	8 751	5 625
Mexico	751	45 023	84 865	97 000	37 000
USA	14 951	55 433	91 705	39 943	129 000
Argentina	58 000	123 000	37 000	...	...
Brazil	239 515	148 828	181 000	158 000	...
Colombia	44 720	76 853	39 000	12 000	...
Ecuador	6 000	18 000	1 000	7 000	...
Peru	11 713	20 675	...	28 000	...
Uruguay	7 000	300	400	—	3 500
Venezuela	15 330	48 832	3 929	20 872	...
Bangladesh (c)	11 791	5 085	10 000	8 000	...
China	...	...	555 630	344 178	...
Hong Kong	128 746	115 526	651 045	472 246	1 385 149
India (d)	426 515	482 901	338 947	305 039	...
Indonesia	41 583	86 280	192 972	218 699	...
Israel (a)	*1 000	*6 000	*2 000	*1 000	...
Japan	33 830	44 815	25 791	12 169	6 257
Korea, Dem. P.R. of (a)	*3 000	*3 000	...	*2 000	...
Korea, Republic of	27 161	30 287	18 008	33 414	34 368
Malaysia	...	5 170	11 160	...	...
Myanmar (d)	16 257	10 160	...	...	...
Pakistan (c)	61 035	75 146	112 132	36 463	...
Philippines	92 729	120 813	95 425	...	...
Saudi Arabia	139 615	—	...	...	...
Singapore	18 742	85 589	23 921	49 710	104 546
Sri Lanka	1 339	837	2 384	173 269	5 037
Taiwan	10 808	13 599	18 901	3 789	9 622
Thailand	10 000	10 654	11 449	87 497	...

**Imports of Mercury**

kilograms

Country	1990	1991	1992	1993	1994
Australia (c)	73 558	73 557	80 759	59 183	...

- (a) BGS estimates, based on known exports from certain countries
- (b) As from 1992 data is for Serbia and Montenegro only
- (c) Years ended 30 June of that stated
- (d) Years ended 31 March following that stated
- (e) Data for the Federal Republic of Yugoslavia only

**Production of Mica**

tonnes

Country	1990	1991	1992	1993	1994
France (e)	*7 000	*6 000	*5 000	*4 000	*10 000
Spain (e)	913	*300	*250	...	...
Norway (b)	*4 800	*4 200	*4 300	*4 300	*4 800
Russia	—	—	*35 000	*30 000	*29 000
Soviet Union	*45 000	*40 000	—	—	—
Yugoslavia (g)	802	(a) *700	281	68	...
Madagascar	721	1 900	950	...	...
Morocco	*1 500	*1 500	*1 500	*1 500	*1 500
South Africa	1 765	1 883	2 079	1 991	1 959
Zimbabwe	1 801	506	495	510	213
Canada	15 988	*18 000	*20 000	*22 000	*22 000
Mexico	5 863	5 587	5 866	6 437	7 061
USA (d) (e)	108 845	102 830	85 338	*87 931	*96 000
Argentina	864	1 671	1 008	1 466	...
Brazil	4 890	5 926	6 961	*8 000	...
China (c)	*25 000	*23 000	*27 000	...	...
India	6 682	5 529	*5 500	...	...
Iran (f)	1 352	4 135	*4 000	1 224	...
Malaysia (h)	3 341	4 281	4 754	4 659	4 993
Sri Lanka	1 797	1 402	*1 000	...	...
Taiwan	4 946	8 596	11 038	9 751	5 220
World total	244 000	238 000	222 000	218 000	228 000

## Note(s):

(1) In addition to the countries listed, Australia, Namibia, Pakistan and Romania are believed to produce mica

(a) Excluding data from August to December for the Republic of Croatia

(b) Crude only

(c) Conservative BGS estimates, based on exports

(d) Sold or used by producers

(e) Including mica recovered from mica schists and/or kaolin beneficiation

(f) Years ended 20 March following that stated

(g) As from 1992 data is for Serbia and Montenegro only

(h) Sericite clay



## Exports of Mica

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Unmanufactured	0	81	9	167	40
Ground	4 981	5 902	6 624	8 389	6 551
Waste	81	156	109	44	126
Belgium-Luxembourg	5 165	487	416	185	...
France					
Unmanufactured	1 229	580	815	(c) 8 779	82
Ground	7 142	7 246	8 464	...	9 084
Germany, Federal Republic of					
Unmanufactured	13	26	3	63	...
Ground	1 398	1 711	2 529	1 801	...
Italy					
Unmanufactured	(c) 392	48	282	(c) 204	...
Ground	...	190	329	...	...
Netherlands					
Unmanufactured	989	866	722	790	...
Ground	996	1 198	513	959	...
Spain	1 189	944	1 658	1 481	...
Austria	671	833	1 060	1 326	3 807
Finland	3 743	4 133	4 303	3 971	...
Norway	2 414	2 077	2 170	2 165	2 213
Sweden	15	85	59	76	...
Switzerland	131	46	84	8	4
Turkey	4 544	127	5 602	138	129
Madagascar	2 038	493	1 137	...	...
Morocco	700	942	1 900	...	...
South Africa	1 060	831	874	852	918
Zimbabwe					
Ground	708	880	...	...	...
Canada	12 182	13 362	15 503	15 745	19 081
USA					
Unmanufactured	794	1 152	899	627	...
Ground	4 342	3 430	4 040	4 614	...
Brazil	1 516	1 903	2 304	3 236	...
China	24 879	23 020	27 026	25 405	...
Hong Kong (a)	552	834	1 058	768	569
India (b)					
Block	264	268	211	245	...
Splittings	2 283	2 578	1 449	1 318	...
Condenser films	34	58	0	17	...
Waste	8 199	3 254	4 062	4 430	...
Japan	683	711	793	730	785
Malaysia	3 465	3 058	3 936	5 008	6 040
Singapore	290	306	440	505	466
of which: Re-exports	289	306	346	388	448
Sri Lanka	1 288	839	1 993	1 698	1 468
Taiwan	273	189	238	159	132

Note(s):

- (1) This table shows unmanufactured mica and includes sheet, block, splittings, ground and waste, unless these are separately specified. Mica powder is included under the term 'ground'

(a) Re-exports

(b) Years ended 31 March following that stated

(c) Including ground

**Imports of Mica**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Unmanufactured	150	73	51	129	117
Ground	3 784	2 609	3 209	4 308	3 922
Waste	16 886	13 885	10 466	12 844	11 175
Belgium-Luxembourg					
Ground	1 589	1 869	1 753	2 004	...
Denmark	228	221	244	95	152
France					
Unmanufactured	3 082	3 239	3 686	(a) 5 104	2 566
Ground	1 580	1 695	1 739	...	2 620
Germany, Federal Republic of					
Unmanufactured	1 600	2 107	1 876	2 278	...
Ground	14 949	15 507	18 431	12 550	...
Greece	557	355	541	374	...
Irish Republic	507	484	1 068	212	...
Italy					
Unmanufactured	224	158	354	(a) 1 591	...
Ground	1 659	1 484	1 534	...	...
Netherlands					
Unmanufactured	936	542	341	640	...
Ground	2 405	1 597	2 141	1 870	...
Portugal	216	95	97	79	...
Spain	1 854	1 889	1 716	1 863	...
Austria	370	280	342	242	293
Finland	346	291	629	1 022	...
Norway					
Unmanufactured	157	74	125	173	2 425
Waste	4 524	2 915	1 726	1 420	22
Poland	863	...	...	...	...
Soviet Union (c)	*1 700	*500	—	—	—
Sweden	574	746	772	548	...
Switzerland	566	505	394	275	364
Turkey	3	2 009	11	81	86
Yugoslavia (f)	102	(d) 4	7	...	...
Egypt	...	...	66	67	...
South Africa	697	739	736	1 513	...
Canada	2 340	1 201	1 603	2 196	3 095
Jamaica	153	157	204	178	208
Mexico	280	689	649	1 608	...
USA					
Block	381	127	273	184	...
Splittings	1 204	1 244	1 601	2 625	...
Ground	9 142	9 722	11 568	13 147	...
Other unmanufactured	4 065	3 681	3 966	4 912	...
Colombia	98	192	201	152	...
Venezuela	318	435	312	286	...
Hong Kong	904	315	1 238	517	633
Indonesia	814	543	887	613	...
Japan					
Block	672	4 890	...	...	...
Splittings	6 787	7 112	(e) 14 157	(e) 10 316	(e) 11 570
Waste	4 929	3 521	1 556	4 646	1 546
Other unmanufactured	15 005	18 842	20 600	19 609	23 771
Korea, Republic of	2 508	3 095	2 875	3 036	4 216
Malaysia	...	260	291	...	...
Philippines	129	176	153	...	...
Saudi Arabia	281	158	1 051	...	...
Singapore	1 353	1 443	59 993	1 491	1 542
Taiwan					
Unmanufactured	407	274	139	238	211
Ground	709	903	1 069	946	1 128
Thailand	595	510	687	641	...

**Imports of Mica**

tonnes

Country	1990	1991	1992	1993	1994
Australia (b)	937	527	1 072	1 377	...
New Zealand (b)	£146 000	£130 000	£92 000	£199 000	£252 000

## Note(s):

- (1) This table shows unmanufactured mica and includes sheet, block, splittings, ground and waste, unless these are separately specified. Mica powder is included under the term 'ground'
- (a) Including ground  
 (b) Years ended 30 June of that stated  
 (c) BGS estimates, based on known exports from certain countries  
 (d) Data for the Federal Republic of Yugoslavia only  
 (e) Including block  
 (f) As from 1992 data is for Serbia and Montenegro only

**Mine Production of Molybdenum**

tonnes (metal content)

Country	1990	1991	1992	1993	1994
Armenia	—	—	*1 000	*500	*500
Bulgaria	231	*200	*200	*200	*200
Russia	—	—	*5 000	*4 800	4 300
Soviet Union	*17 000	*16 000	—	—	—
Turkey	*100	*100	*100	*100	*100
Niger	*10	*10	*10	*10	—
Canada	11 994	11 329	9 405	9 699	9 541
Mexico	2 001	1 716	1 458	1 705	2 619
USA	61 611	53 364	49 725	36 803	46 800
Chile	13 830	14 434	14 840	14 899	15 949
Peru	2 509	3 046	3 245	2 866	2 778
China	14 800	13 200	19 200	18 300	*17 500
Iran	*500	*400	*800	1 200	*1 000
Kazakhstan	—	—	*700	*600	490
Korea, Republic of	103	144	5	—	—
Mongolia	2 011	*1 700	*1 500	2 100	2 100
World total	127 000	116 000	107 000	94 000	104 000

## Note(s):

- (1) In addition to the countries listed, Australia, Georgia, India, Democratic P.R. of Korea, Romania, Tajikistan and Uzbekistan are believed to produce molybdenum

## Exports of Molybdenum

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Ores & concentrates	3 060	875	1 056	603	1 189
Metal	397	452	206	1 354	2 712
Oxides	557	112	91	83	201
Belgium-Luxembourg					
Ores & concentrates	17 695	14 560	14 614	11 352	...
Metal	196	80	74	89	...
Oxides	195	214	55	96	...
France					
Ores & concentrates	693	235	479	79	0
Metal	271	256	174	139	162
Germany, Federal Republic of					
Ores & concentrates	2 499	2 195	1 079	151	148
Metal	861	4 142	862	933	...
Oxides	493	779	792	1 003	...
Italy					
Metal	153	170	164	3	...
Netherlands					
Ores & concentrates	15 984	14 248	8 234	6 035	...
Metal	200	193	217	285	...
Oxides	1 451	1 057	1 335	822	...
Austria					
Metal	1 656	1 390	1 412	1 492	1 398
Russia					
Ores & concentrates	—	—	849	3 964	...
Sweden					
Ores & concentrates	2 952	3 602	2 676	2 046	...
Metal	3	1	7	9	...
Canada					
Ores & concentrates (a)	11 062	10 199	7 042	9 917	8 858
Mexico					
Ores & concentrates	22 693	3 130	2 287	2 522	5 003
USA					
Ores & concentrates (a)	41 568	33 616	33 347	28 298	33 610
Metal	1 356	1 412	1 069	813	...
Oxides	787	1 571	556	1 042	...
Chile					
Ores & concentrates	26 268	27 338	28 337	30 584	29 922
Oxides	1 078	1 170	1 214	1 210	1 620
Peru					
Ores & concentrates	4 574	5 507	6 161	5 859	5 001
China					
Ores & concentrates	370	1 311	1 472	2 369	...
Metal	178	232	204	772	...
Oxides	381	895	6 858	15 723	...
Japan					
Metal	91	72	85	102	122

Note(s):

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) Mo content

**Imports of Molybdenum**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Ores & concentrates	18 224	14 212	12 144	11 961	27 869
Metal	377	399	468	375	531
Oxides	160	218	98	41	270
Belgium-Luxembourg					
Ores & concentrates	32 706	26 865	29 147	30 925	...
Metal	205	319	207	181	...
Oxides	160	152	111	306	...
France					
Ores & concentrates	9 993	8 451	8 470	2 686	2 948
Metal	510	413	463	583	558
Oxides	126	292	359	...	512
Germany, Federal Republic of					
Ores & concentrates	15 929	14 733	10 197	7 416	10 395
Metal	1 284	1 031	1 121	1 406	...
Oxides	361	306	297	650	...
Italy					
Ores & concentrates	2 697	2 630	2 408	2 730	...
Metal	129	200	198	393	...
Oxides	37	82	41	...	...
Netherlands					
Ores & concentrates	22 205	19 111	14 620	12 205	...
Metal	167	134	223	175	...
Oxides	18	27	128	172	...
Spain					
Ores & concentrates	2 335	2 014	1 191	1 777	...
Metal	56	52	50	45	...
Austria					
Ores & concentrates	8 977	6 764	6 131	6 873	8 308
Metal	307	303	172	170	234
Oxides	2 419	1 760	2 091	1 975	2 512
Czechoslovakia					
Ores & concentrates (a)	*1 600	*600	*100	—	—
Finland					
Ores & concentrates	1 792	1 306	1 884	1 949	...
Sweden					
Ores & concentrates	8 122	8 378	6 178	2 945	...
Metal	263	228	352	229	...
Oxides	201	471	1 929	932	...
Switzerland					
Metal	17	19	47	25	27
Yugoslavia (e)					
Metal	24	(d) 2	0	...	...
South Africa					
Metal	15	15	...	1	4
Oxides	326	437	479	562	814
Canada					
Metal	77	47	41	65	68
Oxides	176	305	250	200	503
USA					
Ores & concentrates	1 055	273	1 425	5 836	3 789
Metal	417	522	317	662	985
Oxides	643	987	997	635	628
Brazil					
Ores & concentrates	2 080	2 096	2 816	4 670	...
Metal	72	64	79	83	...
Oxides	391	304	377	...	...
Chile					
Ores & concentrates	—	3	7	10 545	15 063
India (b)					
Ores & concentrates	1 566	1 274	656	858	...
Metal	114	72	84	82	...

**Imports of Molybdenum**

tonnes

Country	1990	1991	1992	1993	1994
Japan					
Ores & concentrates	24 408	25 298	21 090	23 629	24 120
Metal	528	504	437	371	707
Oxides	335	567	794	1 160	1 041
Korea, Republic of					
Ores & concentrates	745	1 450	1 249	2 038	2 498
Metal	358	79	97	94	163
Malaysia					
Metal	365	207	435	...	...
Philippines					
Metal	21	41	38	...	...
Singapore					
Metal	49	73	1	13	12
Taiwan					
Metal	139	130	152	121	165
Australia					
Metal (c)	104	140	59	117	...
Oxides (c)	86	33	91	178	...

## Note(s):

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) BGS estimates, based on known exports from certain countries

(b) Years ended 31 March following that stated

(c) Years ended 30 June of that stated

(d) Data for the Federal Republic of Yugoslavia only

(e) As from 1992 data is for Serbia and Montenegro only

**Mine Production of Nickel**

tonnes (metal content)

Country	1990	1991	1992	1993	1994
Greece (d)	15 728	16 005	15 424	10 931	18 800
Albania	8 843	4 000	*200	—	—
Finland	10 812	10 332	10 311	8 862	7 200
German Democratic Republic	872	—	—	—	—
Norway	2 200	2 200	3 398	3 462	3 328
Russia	—	—	*174 000	196 400	212 000
Soviet Union	*212 000	*200 000	—	—	—
Ukraine	—	—	5 900	2 500	1 000
Yugoslavia (e)	*4 900	*3 200	*3 000	*3 000	...
Botswana	19 022	19 294	18 873	21 621	19 041
South Africa (a)	28 200	26 885	27 621	29 868	30 135
Zimbabwe	11 442	11 312	10 115	11 889	13 516
Canada	196 225	192 259	186 384	188 080	150 096
Cuba	39 292	32 246	31 036	29 157	25 956
Dominican Republic	42 148	44 661	42 641	37 423	...
USA	330	5 523	6 671	2 464	—
Brazil	24 054	26 376	29 372	*30 000	...
Colombia	23 100	23 000	23 400	22 900	26 200
China	27 300	30 400	32 800	30 800	36 900
Indonesia	68 583	70 400	78 100	65 800	81 200
Myanmar (b)	*100	...	—	—	—
Philippines	15 818	13 707	14 005	10 000	9 845
Australia	70 000	67 600	59 000	72 000	82 000
New Caledonia (c)	85 047	99 664	100 500	100 604	96 000
World total	910 000	900 000	870 000	880 000	880 000

(a) Refined nickel and nickel in matte

(b) Ni content of nickel speiss. Years ended 31 March following that stated

(c) Ni and Co content

(d) Ni content of ferro-nickel

(e) As from 1992 data is for Serbia and Montenegro only



## Smelter/Refinery Production of Nickel

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	26 500	28 600	28 000	29 900	28 400
France	8 539	7 455	6 800	9 123	8 350
Greece	15 728	16 005	15 424	10 931	16 200
Albania	2 143	827	—	—	—
Czechoslovakia	2 600	2 433	1 500	—	—
Finland	17 136	13 146	14 984	14 577	*15 900
German Democratic Republic	1 300	—	—	—	—
Norway	57 811	58 729	55 686	56 817	68 000
Russia	—	—	*230 000	*184 700	190 700
Soviet Union	*272 300	*257 000	—	—	—
Ukraine	—	—	*5 000	*2 500	*2 500
Yugoslavia (a)	4 900	3 200	*1 500	*500	3 000
South Africa	28 200	26 885	27 621	29 868	30 135
Zimbabwe	18 800	17 500	16 500	17 400	19 600
Canada	134 700	131 500	135 233	123 139	105 144
Cuba	21 126	18 756	16 920	16 185	14 099
Dominican Republic	28 701	29 063	27 535	23 863	30 757
USA	3 701	7 065	8 962	4 878	—
Brazil	13 004	13 840	14 668	15 705	16 504
Colombia	18 425	20 190	20 165	20 161	20 833
China	27 500	28 000	30 800	30 500	31 200
Indonesia	5 000	5 300	5 500	5 300	5 700
Japan	100 200	114 200	107 000	102 900	112 600
Korea, Republic of	8 200	11 400	10 300	11 300	16 000
Taiwan	10 400	11 200	9 000	9 000	9 000
Australia	44 600	50 000	50 584	50 400	58 900
New Caledonia	32 278	34 411	31 895	36 850	39 500
World total	900 000	910 000	870 000	810 000	840 000

Note(s):

(1) Data relate to refined nickel plus the nickel content of ferro-nickel and nickel oxide

(a) As from 1992 data is for Serbia and Montenegro only

**Exports of Nickel**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Mattes, sinters etc.	255	700	1 850	1 413	2 000
Unwrought	14 327	15 377	14 464	16 664	15 391
Unwrought alloys	3 799	3 083	3 045	2 978	2 544
Scrap	5 070	5 880	7 258	5 888	5 789
Oxides	66	16	30	33	4
Belgium-Luxembourg					
Mattes, sinters etc.	4	1 048	3 560	2 978	...
Unwrought	273	349	751	2 416	...
Unwrought alloys	516	597	448	734	...
Scrap	2 191	1 130	1 062	325	...
Denmark					
Scrap	110	148	143	247	233
France					
Unwrought	6 371	4 638	4 096	6 104	5 029
Unwrought alloys	1 666	253	77	55	76
Scrap	4 118	4 615	5 078	3 367	3 107
Germany, Federal Republic of					
Unwrought	4 661	4 362	9 133	11 196	8 035
Unwrought alloys	3 723	3 794	3 041	2 785	3 040
Scrap	9 765	11 063	15 528	11 770	12 982
Oxides	107	197	187	164	189
Irish Republic					
Unwrought (a)	99	85	70	32	...
Scrap	410	241	322	277	...
Italy					
Unwrought (a)	1 631	3 851	701	397	1 074
Scrap	309	365	453	341	...
Netherlands					
Mattes, sinters etc. (b)	*9 800	*8 400	*7 900	*1 600	...
Unwrought (a)	365	3 194	619	3 145	...
Scrap	5 500	6 123	8 376	9 087	...
Oxides (b)	*250	*250	*300	*350	...
Spain					
Scrap	125	256	1 706	697	...
Albania					
Unwrought	2 000	2 000	...	...	...
Austria					
Unwrought (a)	98	184	267	306	176
Scrap	184	113	273	266	448
Estonia					
Unwrought (a) (b)	—	—	*1 300	*2 000	...
Scrap (b)	—	—	*8 000	*4 500	...
Finland					
Ores & concentrates	26 296	1 266	1 686	2 888	...
Unwrought	10 515	6 791	10 520	(a) 12 849	12 530
Scrap	28	90	977	1 846	638
Oxides	474	476	459	557	...
Lithuania					
Scrap (b)	—	—	*6 200	*3 700	...
Norway					
Ore	21 578	23 452	29 320	30 870	45 854
Unwrought (a)	58 605	56 655	53 874	59 860	67 187
Scrap	85	53	285	289	360
Russia					
Mattes, sinters etc.	—	—	9 134	12 627	...
Unwrought (a)	—	—	118 294	87 175	...
Scrap (b)	—	—	*11 500	*20 300	...
Oxides	—	—	1 279	1 009	...
Soviet Union					
Mattes, sinters etc. (b)	*27 300	*13 400	—	—	—
Unwrought (a) (b)	*80 300	*98 900	—	—	—

## Exports of Nickel

tonnes

Country	1990	1991	1992	1993	1994
Sweden					
Unwrought (a)	95	62	598	81	...
Scrap	542	947	2 479	984	...
Switzerland					
Unwrought (a)	63	64	93	127	249
Scrap	276	347	241	387	240
Yugoslavia (g)					
Scrap	80	(i) 121	47	...	...
Botswana					
Mattes, sinters etc.	48 500	48 800	45 500	51 600	44 000
South Africa					
Unwrought (a)	21 167	17 934	17 170	16 442	...
Scrap (b)	*1 900	*1 800	*1 200	*1 800	...
Zimbabwe					
Unwrought (a)	13 740	11 517	11 767	...	...
Canada					
Mattes, sinters etc.	68 671	75 107	75 610	59 440	71 778
Unwrought (a)	(c) 65 861	(c) 61 961	104 875	99 595	82 466
Scrap	5 594	4 232	4 178	2 428	2 257
Cuba					
Oxide, sinter & sulphide (e)	*40 600	*30 400	*33 000	*29 100	...
USA					
Mattes, sinters etc.	8 268	6 959	4 561	4 944	4 800
Unwrought (a)	4 426	4 768	4 814	3 966	*4 500
Scrap	21 458	21 502	17 213	16 369	24 146
Brazil					
Unwrought	1 713	2 437	3 162	4 556	4 716
China					
Unwrought (a)	(b) *500	(b) *200	179	3	...
Hong Kong					
Unwrought (a) (f)	2 509	4 980	22 079	9 591	6 557
Scrap	56	55	365	3 135	234
Oxides (f)	101	63	—	—	—
Indonesia					
Ore	1 364 752	1 697 110	1 493 474	1 545 562	...
Mattes, sinters etc.	35 069	42 284	35 774	46 609	...
Israel					
Scrap (b)	*300	*500	*300	*300	...
Japan					
Mattes, sinters etc.	167	0	1 218	3 291	9 916
Unwrought (a)	147	81	78	89	134
Scrap	222	312	441	320	562
Oxides	245	1 102	360	347	613
Korea, Republic of					
Unwrought (a)	1 330	837	282	122	1 876
Scrap	2 221	7 567	2 084	2 587	1 340
Philippines					
Ores & concentrates	511 054	626 573	478 255	580 248	...
Singapore					
Unwrought (f)	633	1 220	907	1 647	2 898
Scrap	174	69	138	124	317
Taiwan					
Unwrought (a)	1 421	105	82	137	84
Scrap	3 041	2 346	1 470	1 642	1 924

**Exports of Nickel**

tonnes

Country	1990	1991	1992	1993	1994
Australia (d)	(b) *69 100	(b) *71 300	*79 000	*95 000	*112 000
New Caledonia					
Ores	2 263 000	2 067 000	3 483 201	3 353 879	...
Mattes, sinters etc.	14 400	11 600	10 700	14 700	...
New Zealand					
Scrap (h)	80	159	796	515	260

## Note(s):

- (1) In this table the term 'unwrought' nickel corresponds to item 683.1 of the Standard International Trade Classification (Revision 3) which excludes all electro-plating anodes
  - (2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- 
- (a) Including alloys
  - (b) BGS estimates, based on known imports into certain countries
  - (c) Exports to the USA only
  - (d) Unwrought metal and Ni content of ores, concentrates and intermediate products
  - (e) Ni-Co content (mainly nickel)
  - (f) Re-exports
  - (g) As from 1992 data is for Serbia and Montenegro only
  - (h) Years ended 30 June of that stated
  - (i) Data for the Federal Republic of Yugoslavia only

## Imports of Nickel

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Mattes, sinters etc.	48 861	44 929	43 027	43 275	40 827
Unwrought	18 018	16 621	15 696	12 408	17 231
Unwrought alloys	990	667	1 177	2 767	4 836
Scrap	6 372	5 766	6 562	6 264	7 927
Oxides	195	113	112	110	83
Belgium-Luxembourg					
Ore	1 459	439	3	123	...
Mattes, sinters etc.	7 826	5 310	6 021	2 144	...
Unwrought	8 240	9 650	8 038	13 831	...
Unwrought alloys	116	139	96	104	...
Scrap	572	908	1 261	1 967	...
Oxides	166	137	119	153	...
Denmark					
Unwrought (a)	131	150	157	139	157
France					
Mattes, sinters etc.	13 404	11 690	10 530	16 363	16 440
Unwrought	27 423	21 853	20 464	19 875	27 257
Unwrought alloys	4 455	4 468	4 387	4 521	5 189
Scrap	2 042	2 835	3 760	1 332	2 247
Oxides	288	176	215	...	310
Germany, Federal Republic of					
Mattes, sinters etc.	11 196	11 337	16 555	17 233	9 056
Unwrought (a)	57 383	51 950	40 969	52 398	57 878
Scrap	8 046	10 781	30 484	30 348	16 961
Oxides	378	377	454	509	393
Greece					
Unwrought (a)	100	173	62	49	...
Irish Republic					
Unwrought (a)	639	694	672	699	...
Italy					
Mattes, sinters etc.	11 158	8 590	9 347	7 479	5 644
Unwrought	14 297	20 244	13 638	23 440	31 540
Unwrought alloys	1 319	1 004	897	1 336	...
Scrap	44	149	693	119	...
Oxides	120	283	106	137	...
Netherlands					
Mattes, sinters etc. (e)	*3 700	*13 700	*15 900	*15 000	...
Unwrought	1 373	1 295	1 463	4 233	...
Unwrought alloys	14	11	271	422	...
Scrap	2 797	3 732	6 468	2 855	...
Oxides	200	226	172	756	...
Portugal					
Unwrought (a)	286	230	291	211	...
Spain					
Mattes, sinters etc.	342	280	382	400	...
Unwrought (a)	11 040	9 665	6 444	9 335	...
Austria					
Mattes, sinters etc.	843	597	255	149	169
Unwrought (a)	2 709	2 506	2 402	2 519	2 822
Scrap	201	504	1 509	1 617	1 005
Oxides	790	1 571	1 017	270	496
Czechoslovakia					
Unwrought (a)	8 123	5 500	2 700	—	—
Finland					
Ore	26 917	20 093	32 733	85 360	111 084
Mattes, sinters etc.	6 040	5 538	4 755	360	2 938
Unwrought (a)	3 051	5 476	3 834	5 932	5 593
Scrap	4 754	4 882	9 586	11 916	8 515
Norway					
Mattes, sinters etc.	128 467	133 194	115 227	141 931	146 274
Unwrought (a)	302	52	55	75	275
Russia					
Ore	—	357 000	3 563	—	...

**Imports of Nickel**

tonnes

Country	1990	1991	1992	1993	1994
Slovakia					
Unwrought (a)	—	—	—	1 139	...
Slovenia					
Unwrought (a)	—	—	990	956	...
Sweden					
Ore	1 055	—	100	43	...
Mattes, sinters etc.	2 330	2 380	3 081	3 400	...
Unwrought	12 123	10 039	10 096	14 862	...
Unwrought alloys	410	1 291	377	382	...
Scrap	8 492	9 939	17 237	13 029	...
Switzerland					
Unwrought (a)	1 407	1 194	1 264	883	702
Scrap	64	77	464	141	190
Turkey					
Unwrought (a)	935	941	727	1 076	836
Yugoslavia (g)					
Unwrought (a)	988	(f) 161	...	...	...
South Africa					
Unwrought (a)	401	44	386	155	201
Canada					
Ores & concentrates (b)	33	8	281	589	896
Mattes, sinters etc.	13 085	23 299	33 863	33 974	34 476
Unwrought (a)	4 084	10 063	3 790	10 778	11 063
Scrap	9 314	14 717	18 238	18 308	20 950
Mexico					
Unwrought (a)	1 885	1 644	1 672	1 448	1 697
USA					
Slurry, mattes, sinters etc.	1 055	5 157	4 798	5 088	...
Unwrought (a)	108 940	104 062	91 880	98 641	98 418
Scrap	7 945	7 469	7 608	6 038	5 752
Oxides	615	575	721	863	...
Argentina					
Unwrought	317	500	580	319	...
Brazil					
Unwrought (a)	2 804	3 435	4 107	4 751	*5 600
Colombia					
Unwrought	164	181	253	395	...
Venezuela					
Unwrought (a)	224	197	277	144	...
China					
Unwrought (a)	35	4 568	6 478	2 573	...
Hong Kong					
Unwrought (a)	3 836	8 068	32 137	12 334	9 648
India (c)					
Mattes, sinters etc.	5 408	4 964	1 753	1 827	...
Unwrought (a)	4 585	3 253	5 533	7 146	...
Scrap	401	200	145	168	...
Japan					
Ore	3 337 710	4 002 388	3 450 616	3 043 604	2 901 560
Mattes, sinters etc.	62 291	67 267	67 707	66 018	84 498
Unwrought	44 069	50 822	27 489	33 322	47 560
Unwrought alloys	314	376	276	224	266
Scrap	3 843	4 155	4 551	4 984	6 305
Oxides	269	272	212	236	126
Korea, Dem. P.R. of					
Unwrought (a) (e)	*150	*100	*100	*200	...
Korea, Republic of					
Mattes, sinters etc.	10 479	16 103	14 730	16 495	20 305
Unwrought (a)	6 571	13 280	5 526	8 671	12 750
Scrap	2 439	2 366	2 310	2 025	1 690
Malaysia					
Unwrought (a)	311	478	212	197	...

**Imports of Nickel**

tonnes

Country	1990	1991	1992	1993	1994
Pakistan					
Unwrought (a) (d)	486	686	977	368	...
Singapore					
Mattes, sinters etc.	1 423	1 040	714	517	841
Unwrought	671	706	1 328	1 751	3 182
Scrap	277	224	306	366	302
Taiwan					
Mattes, sinters etc.	6 035	7 280	8 316	3 168	2 763
Unwrought (a)	11 153	13 145	9 581	15 372	20 737
Scrap	14	82	220	124	135
Oxides	398	432	493	541	693
Thailand					
Unwrought (a)	927	812	1 201	956	...
Australia (d)					
Unwrought	170	291	291	271	...
Unwrought alloys	334	285	225	184	...
Scrap	70	38	115	133	...

## Note(s):

- (1) In this table the term 'unwrought' nickel corresponds to item 683.1 of the Standard International Trade Classification (Revision 3) which excludes all electro-plating anodes
  - (2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- (a) Including alloys  
 (b) Ni content  
 (c) Years ended 31 March following that stated  
 (d) Years ended 30 June of that stated  
 (e) BGS estimates, based on known exports from certain countries  
 (f) Data for the Federal Republic of Yugoslavia only  
 (g) As from 1992 data is for Serbia and Montenegro only

**Production of Crude Petroleum**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	87 992 000	86 832 000	89 184 000	93 950 000	119 032 000
Denmark (e)	5 933 019	7 003 426	7 611 388	8 298 537	9 161 162
France	3 023 000	2 950 000	2 873 000	2 754 000	2 800 000
Germany, Federal Republic of	3 606 000	3 385 000	3 247 000	3 051 000	2 936 000
Greece	836 013	848 594	697 739	557 258	514 000
Italy	4 623 694	4 305 916	4 468 191	4 584 000	4 663 000
Netherlands	3 533 000	3 258 000	2 845 000	2 672 000	3 437 000
Spain	795 000	1 067 000	1 067 000	875 000	1 066 000
Albania	1 067 000	1 002 000	985 000	620 000	536 000
Austria	1 148 593	1 279 882	1 179 933	1 155 224	1 099 994
Azerbaijan	—	—	11 158 000	10 262 000	9 339 000
Belarus	—	—	2 010 000	2 000 000	1 971 000
Bulgaria	60 000	58 000	53 000	52 000	36 000
Croatia	—	—	1 742 851	1 729 110	1 576 579
Czechoslovakia	123 000	140 000	143 467	—	—
Czech Republic	—	—	—	110 634	129 000
Georgia	—	—	201 000	190 000	190 000
Hungary	1 974 000	1 893 000	1 825 000	1 709 000	1 700 000
Norway	81 745 000	94 181 000	106 977 000	114 184 000	129 321 000
Poland	163 000	158 000	199 000	235 000	200 000
Romania	7 928 000	6 791 000	6 608 000	6 673 000	6 716 000
Russia	—	—	399 000 000	354 000 000	311 355 000
Slovakia	—	—	—	66 523	66 800
Soviet Union	571 000 000	515 416 000	—	—	—
Turkey	3 719 956	4 520 030	4 296 026	4 025 000	4 038 000
Ukraine	—	—	4 400 000	4 263 000	3 942 000
Yugoslavia (d)	3 144 526	3 005 374	1 163 000	1 155 000	1 184 000
Algeria	56 673 000	58 454 000	58 045 000	56 341 000	55 852 000
Angola	25 780 000	24 751 000	26 356 000	24 980 000	26 142 000
Benin	206 100	202 300	195 000	194 000	192 000
Cameroon	8 292 000	7 709 000	6 978 000	6 343 000	6 543 000
Congo	8 015 900	8 042 100	8 659 600	9 428 200	9 003 000
Egypt (f)	43 407 000	44 375 000	43 821 000	44 967 000	45 186 000
Equatorial Guinea	—	—	75 000	234 000	270 000
Gabon	13 754 000	14 982 000	14 898 000	14 982 000	15 876 000
Ivory Coast	315 000	60 000	63 000	—	—
Libya	65 990 000	73 968 000	73 266 000	67 874 000	66 631 000
Nigeria	90 736 000	96 455 000	97 193 000	102 050 000	102 099 000
Tunisia	4 502 000	5 195 000	5 134 000	4 503 000	4 503 000
Zaire	1 411 000	1 380 000	1 302 000	1 172 000	1 241 000
Barbados	62 369	62 382	65 716	63 471	*65 000
Canada	82 235 200	81 963 600	85 129 400	88 765 300	92 587 300
Cuba	736 000	817 000	882 100	1 131 000	1 209 000
Guatemala	199 630	187 648	284 473	341 000	339 000
Mexico	136 484 511	143 480 935	142 950 000	143 570 000	144 139 000
Trinidad & Tobago	7 790 100	7 424 600	6 994 400	6 380 900	6 750 000
USA	366 095 000	369 181 000	356 936 000	*340 000 000	*350 000 000
Argentina	25 545 968	26 108 344	29 415 684	31 442 617	35 332 700
Bolivia	973 000	1 034 000	985 000	1 071 000	1 162 000
Brazil	32 825 392	32 478 773	32 799 027	33 561 670	34 794 122
Chile	1 038 015	942 613	786 550	752 660	651 409
Colombia	22 647 000	21 927 000	22 649 000	23 359 000	23 387 000
Ecuador	14 568 801	15 258 343	16 344 278	17 497 000	19 303 000
Peru	6 352 058	5 656 596	5 710 510	6 222 761	6 268 000
Suriname	229 959	246 598	263 844	262 000	252 000
Venezuela	111 876 674	125 041 231	125 762 000	130 200 000	138 000 000



## Production of Crude Petroleum

tonnes

Country	1990	1991	1992	1993	1994
Abu Dhabi	80 953 877	95 836 898	97 860 963	*95 000 000	*95 500 000
Bahrain	2 084 000	2 100 137	2 065 437	2 031 284	7 117 486
Brunei	6 544 000	8 049 000	8 142 000	7 797 000	8 095 000
China (a)	138 306 000	140 990 000	142 100 000	145 237 400	145 910 000
Dubai	20 902 000	20 861 000	19 373 000	17 158 000	16 217 000
India	33 309 000	31 287 000	27 863 000	26 495 000	32 363 000
Indonesia	70 185 234	71 038 899	76 456 000	75 356 000	75 378 000
Iran	157 084 000	166 731 000	173 172 000	183 677 000	180 891 000
Iraq	100 681 000	14 876 000	20 871 000	23 548 000	27 752 000
Israel	11 494	8 575	7 115	5 382	4 105
Japan	576 581	800 933	852 000	774 000	789 000
Kazakhstan	—	—	21 933 600	19 572 200	18 897 000
Kuwait (c)	58 729 000	9 567 000	53 121 000	94 488 000	102 454 000
Kyrgyzstan	—	—	141 000	135 000	130 000
Malaysia	30 600 000	32 000 000	31 300 000	30 600 000	30 900 000
Myanmar	758 329	689 864	775 974	734 754	765 000
Oman	34 097 108	35 324 604	36 961 266	38 571 000	40 521 000
Pakistan	2 925 000	3 054 000	2 977 000	2 909 000	2 774 000
Philippines	237 093	149 760	537 000	466 000	246 000
Qatar	21 200 000	20 500 000	22 600 000	23 400 000	*23 300 000
Ras al Khaimah	37 000	40 000	40 000	50 000	50 000
Saudi Arabia (c)	334 200 000	410 047 000	420 104 000	407 555 000	402 770 000
Sharjah	1 802 000	1 922 000	1 927 000	2 142 000	2 402 000
Syria	20 292 000	24 644 000	27 660 000	29 200 000	29 200 000
Taiwan	100 000	99 000	66 000	61 000	61 000
Tajikistan	—	—	96 000	39 000	30 000
Thailand	2 292 500	2 432 400	2 315 000	2 319 000	2 309 000
Turkmenistan	—	—	5 227 000	5 314 000	3 860 000
Uzbekistan	—	—	2 831 000	2 806 000	2 709 000
Vietnam	2 482 000	3 900 000	5 401 000	6 257 000	7 002 000
Yemen, Republic of (b)	8 700 826	9 443 061	8 433 626	10 600 000	16 000 000
Australia	30 547 662	28 835 416	28 326 395	26 300 345	28 505 191
New Zealand	1 795 000	1 877 200	1 766 600	1 864 400	1 983 000
Papua New Guinea	—	—	2 123 000	5 748 000	5 522 000
World total	3 073 000 000	3 043 000 000	3 063 000 000	3 065 000 000	3 117 000 000

Note(s):

(1) The figures shown in this table exclude natural gasoline

(a) Including oil from shale and coal

(b) Yemen Arab Republic and People's Dem. Rep. of Yemen were unified on 22 May 1990 as the Republic of Yemen

(c) Including shares of production from the Neutral Zone

(d) As from 1992 data is for Serbia and Montenegro only

(e) Sales

(f) Years ended 30 June of that stated

**Production of Natural Gas**million m<sup>3</sup>

Country	1990	1991	1992	1993	1994
United Kingdom	49 551	55 221	55 944	65 497	69 969
Denmark (g)	2 752	3 509	3 850	4 266	4 622
France	2 964	3 370	3 280	3 520	3 190
Germany, Federal Republic of	14 554	21 890	18 770	18 680	18 500
Greece	—	—	100	70	120
Irish Republic	2 320	2 400	2 300	2 690	2 710
Italy	17 000	17 220	18 109	19 400	20 080
Netherlands	72 238	81 666	82 020	83 652	78 604
Spain	1 330	1 320	1 210	630	840
Albania	*700	*140	*100	*30	60
Austria	1 288	1 329	1 441	1 488	1 355
Azerbaijan	—	—	7 000	6 800	5 970
Belarus	—	—	*301	*300	280
Bulgaria	14	10	8	70	50
Croatia	—	—	1 820	2 068	1 792
Czechoslovakia	1 227	592	370	—	—
Czech Republic	—	—	—	101	*100
German Democratic Republic	*8 500	—	—	—	—
Hungary	4 932	5 043	5 057	5 011	5 000
Norway	27 642	27 425	29 419	28 867	30 631
Poland	3 867	4 132	4 019	4 949	4 634
Romania	29 200	24 810	22 140	21 190	*20 000
Russia	—	—	641 000	618 000	566 230
Slovakia	—	—	—	264	*200
Soviet Union	815 300	810 530	—	—	—
Turkey	212	203	200	210	200
Ukraine	—	—	20 900	*20 000	*16 980
Yugoslavia (h)	2 659	(f) 1 878	846	*800	*800
Algeria	50 640	54 760	55 800	57 000	50 360
Angola	460	580	570	560	*560
Egypt	8 110	9 080	9 820	11 230	10 570
Gabon	100	100	100	100	90
Libya	6 200	6 750	6 770	6 360	6 220
Morocco	57	39	20	30	20
Nigeria	3 710	4 750	4 720	5 150	4 090
South Africa	—	—	40	1 860	1 960
Tunisia	378	387	402	370	360
Canada	123 228	129 598	141 365	155 033	166 528
Mexico	26 730	26 521	26 146	25 440	*26 000
Trinidad & Tobago	5 271	5 705	5 943	6 680	7 270
USA (e)	504 314	501 146	505 170	522 500	*534 000
Argentina	19 700	21 957	22 291	*23 000	*24 000
Bolivia	3 004	2 987	3 130	3 100	3 279
Brazil	3 443	3 411	3 543	3 924	*4 000
Chile	1 921	1 649	1 750	*1 900	*2 100
Colombia	4 280	4 400	4 270	4 500	4 370
Peru	650	585	525	*600	*600
Venezuela	21 966	21 902	21 620	25 610	25 870
Abu Dhabi	14 721	15 706	16 659	14 300	...
Afghanistan (c)	300	300	300	300	*300
Bahrain	6 170	6 315	7 249	7 646	9 996
Bangladesh (d)	4 754	4 893	5 337	5 973	6 430
Brunei	8 462	7 850	8 100	8 280	9 310
China	15 298	16 073	15 788	16 765	16 666
Dubai	2 890	2 980	2 250	1 700	*1 500
India	10 245	11 532	15 320	14 960	*16 000
Indonesia	61 137	65 599	73 132	75 450	*80 000
Iran	23 710	26 000	25 000	27 070	31 050
Iraq	4 180	1 100	2 270	2 550	3 000
Israel	33	27	23	24	21
Japan	2 043	2 134	2 170	2 170	2 270
Kazakhstan	—	—	6 005	5 416	4 200

**Production of Natural Gas**million m<sup>3</sup>

Country	1990	1991	1992	1993	1994
Kuwait (a)	5 230	500	2 620	4 470	4 660
Kyrgyzstan	—	—	*90	*5	*5
Malaysia	18 520	21 150	22 550	24 920	26 000
Myanmar (b)	953	900	1 204	1 100	1 290
Oman	1 749	1 817	*2 000	*3 000	*3 300
Pakistan	14 290	15 130	15 540	16 890	13 840
Qatar	6 720	9 300	12 620	13 500	12 900
Ras al Khaimah	40	40	40	40	*40
Saudi Arabia (a)	30 500	32 000	34 000	35 900	37 700
Sharjah	3 900	4 320	5 820	6 890	...
Syria	2 920	3 500	3 600	3 700	*3 700
Taiwan	1 129	928	872	826	867
Tajikistan	—	—	*90	*90	*5
Thailand	6 520	8 088	8 645	8 790	10 480
Turkmenistan	—	—	56 060	60 910	33 210
Uzbekistan	—	—	39 930	41 980	44 030
Australia	20 620	21 694	23 462	24 457	28 147
New Zealand	4 793	5 273	5 571	5 383	4 996
Papua New Guinea	—	—	60	80	100
World total	2 114 000	2 144 000	2 149 000	2 199 000	2 152 000

## Note(s):

(1) So far as possible the figures in this table exclude flared or reinjected gas

(a) Including one-half of the output of the Neutral Zone

(b) Years ended 31 March following that stated

(c) Years ended 20 March following that stated

(d) Years ended 30 June of that stated

(e) Dry gas

(f) Excluding data from August to December for the Republic of Croatia

(g) Sales

(h) As from 1992 data is for Serbia and Montenegro only

## Exports of Crude Petroleum

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	54 162 184	51 694 907	54 388 088	59 668 482	77 612 329
Denmark	2 727 597	4 051 480	4 428 201	3 161 834	2 897 144
France	20 594	30 099	115	218	40 191
Germany, Federal Republic of	1 100 013	120 400	173 376	36 914	...
Greece	416 623	532 827	533 000	536 000	...
Italy	814 846	499 208	252 138	577 000	...
Netherlands	1 316 126	1 190 242	1 004 076	872 990	...
Croatia	—	—	406 066	85 709	...
Hungary	2 344 000	2 715 000	...	...	...
Latvia (a)	—	—	*404 900	*1 029 200	...
Norway	68 331 921	82 196 498	92 568 217	99 581 969	111 335 668
Russia	—	56 476 000	66 209 000	79 940 000	...
Slovenia	—	—	757 731	1 818 955	...
Soviet Union	108 551 000	...	—	—	—
Sweden	—	84 005	1 172	7 014	...
Ukraine (a)	—	—	*628 600	*1 151 400	...
Algeria	31 441 296	32 004 000	*26 000 000	*30 000 000	...
Angola	22 127 000	18 626 000	19 781 000	*18 800 000	...
Benin	*291 000	*295 000	*298 000	...	...
Cameroon	2 091 000	2 060 000	1 823 000	*1 500 000	...
Congo	6 175 000	7 010 024	8 295 529	9 001 933	...
Egypt	4 200 256	13 615 000	9 952 000	*9 600 000	...
Gabon	11 983 000	13 642 000	13 369 000	14 807 000	...
Libya	49 225 000	51 686 000	49 980 000	*47 000 000	...
Nigeria	76 508 000	82 610 000	81 288 000	*79 800 000	...
Tunisia	3 372 222	3 422 500	3 882 404	3 138 000	...
Zaire	1 210 000	1 447 000	1 476 000	...	...
Bahamas (b)	7 933 551	...	...	...	...
Canada	31 977 809	39 300 009	42 470 114	47 756 211	51 982 676
Guatemala	188 681	124 683	215 885	...	...
Mexico	67 625 194	70 776 000	70 725 000	69 123 000	67 572 000
Netherlands Antilles	1 924 000	1 152 000	1 084 000	...	...
Trinidad & Tobago	4 471 381	3 984 862	3 002 468	2 760 088	*2 800 000
USA	1 086 434	310 185	261 426	155 596	...
Argentina	1 038 185	881 398	2 697 115	4 523 323	...
Colombia	10 305 978	9 109 615	9 504 567	9 691 614	...
Ecuador	7 700 000	8 300 000	9 500 000	10 100 000	...
Peru	146 000	51 000	42 000	—	—
Venezuela	65 023 000	72 316 000	74 800 000	80 600 000	...
Brunei	7 056 000	8 596 000	8 794 000	8 000 000	...
China	23 978 675	22 237 537	21 507 171	19 434 492	18 490 000
Indonesia	37 855 428	39 553 728	39 160 164	36 712 313	...
Iran (a)	*93 234 000	*108 890 000	*105 843 000	*109 682 000	...
Iraq	75 724 000	1 910 000	2 973 000	2 899 000	...
Kazakhstan	—	—	4 392 000	883 000	...
Kuwait	27 719 000	4 299 000	25 385 000	72 750 000	...
Malaysia	22 172 000	22 653 604	22 526 376	21 588 758	...
Oman	29 459 000	31 232 000	34 310 000	36 092 000	...
Pakistan (c)	327 834	429 494	455 286	409 902	...
Qatar	16 510 630	15 751 141	17 000 371	17 341 251	...
Saudi Arabia	209 413 267	309 829 937	317 156 009	313 661 000	...
Singapore	19 059	686	22 199	159	60 215
of which: Re-exports	488	498	432	83	60 207
Syria	9 152 973	8 516 000	9 257 000	*14 500 000	...
United Arab Emirates	85 548 000	95 430 000	89 418 000	*85 000 000	...

**Exports of Crude Petroleum**

tonnes

Country	1990	1991	1992	1993	1994
Australia	8 373 300	7 526 800	8 997 300	8 802 100	10 308 100
New Zealand (c)	659 949	921 251	966 523	859 876	1 103 798

- (a) BGS estimates, based on known imports into certain countries  
 (b) Re-exports  
 (c) Years ended 30 June of that stated

**Imports of Crude Petroleum**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	43 748 921	45 655 480	47 144 259	48 992 898	39 837 795
Belgium-Luxembourg	23 562 511	28 775 995	29 156 487	27 064 460	...
Denmark	4 079 612	4 864 862	4 957 042	5 006 197	4 986 799
France	70 267 015	73 392 448	71 115 870	75 094 000	75 359 934
Germany, Federal Republic of	72 400 222	90 119 452	98 062 296	99 997 742	...
Greece	8 008 909	9 824 216	13 215 000	12 687 000	...
Irish Republic	1 989 428	1 726 241	1 952 631	1 861 000	...
Italy	72 710 934	73 204 325	75 446 644	75 566 000	...
Netherlands	49 659 179	53 008 915	56 831 463	55 322 944	...
Portugal	10 595 000	9 473 000	11 174 000	11 321 572	...
Spain	49 350 695	50 921 769	56 697 055	50 565 416	...
Austria	6 796 999	7 000 545	7 549 799	7 453 315	7 789 848
Bulgaria	10 844 000	9 290 000	4 830 000	...	...
Croatia	—	—	1 790 215	1 890 190	...
Czechoslovakia	13 581 000	11 383 000	7 049 000	—	—
Czech Republic	—	—	—	5 610 000	...
Finland	8 973 190	9 925 143	8 869 699	8 217 932	...
German Democratic Republic	17 638 000	—	—	—	—
Hungary	6 224 091	8 490 000	4 165 051	6 207 092	5 821 385
Lithuania	—	—	3 400 000	...	...
Norway	1 624 245	1 664 901	1 120 755	1 332 434	1 054 754
Poland	13 008 000	11 647 000	11 926 000	13 674 000	...
Romania	16 206 000	9 603 000	6 572 000	7 581 000	...
Slovakia (d)	—	—	—	*2 212 200	...
Slovenia	—	—	1 646 153	1 997 591	...
Soviet Union	8 218 000	8 150 000	—	—	—
Sweden	16 928 391	16 326 656	17 112 959	18 119 914	...
Switzerland	3 054 292	4 528 655	4 124 040	4 499 304	4 766 577
Turkey	19 842 000	17 528 000	19 185 000	21 970 000	...
Yugoslavia (f)	11 995 890	(c) 3 839 942	—	...	...
Ethiopia	702 734	228 059	...	...	...
Ghana	1 070 000	1 085 000	1 097 000	...	...
Ivory Coast	2 214 000	2 250 000	2 264 000	*2 550 000	...
Kenya	1 338 348	2 059 000	2 069 000	*2 080 000	...
Liberia	385 000	378 000	382 000	...	...
Madagascar	207 861	339 807	332 791	...	...
Morocco	5 838 151	5 048 466	6 728 000	6 123 000	...
Senegal	771 478	505 804	541 482	...	...
Sierra Leone	86 289	58 732	...	...	...
Somalia	*258 000	*80 000	*60 000	...	...
South Africa	17 300 000	17 500 000	18 000 000	...	...
Sudan	1 050 000	1 176 000	1 189 000	...	...
Tanzania	*710 000	*700 000	*705 000	...	...
Tunisia	396 058	117 779	247 559	371 948	...
Zaire	125 000	110 000	105 000	...	...
Zambia	1 293 674	537 304	*500 000	...	...
Bahamas	7 401 300	4 300 400	...	...	...
Barbados	217 000	198 000	210 000	...	...
Canada	29 051 388	28 117 457	26 804 328	30 064 238	33 056 827
Costa Rica	422 169	362 853	575 386	...	...
Cuba	7 675 000	6 145 000	4 608 000	*4 600 000	...
Dominican Republic	1 515 000	1 440 000	1 454 000	...	...
El Salvador	438 932	490 699	627 801	938 165	...
Guatemala	545 018	672 019	787 551	...	...
Honduras	420 585	356 824	239 438	...	...
Jamaica	1 154 950	1 426 320	1 289 217	887 552	801 244
Martinique	862 404	627 319	868 875	684 297	772 200
Netherlands Antilles	11 195 000	17 485 000	9 841 000	*10 000 000	...
Nicaragua	565 000	261 406	686 042	290 000	...
Panama	1 209 192	1 142 112	1 843 997	1 735 158	...
Trinidad & Tobago	736 724	1 570 244	1 026 574	2 345 857	...
USA	303 073 018	289 626 171	309 091 322	344 809 373	...

## Imports of Crude Petroleum

tonnes

Country	1990	1991	1992	1993	1994
Brazil	28 288 265	25 302 911	26 268 000	22 551 000	...
Chile	5 379 166	5 677 432	6 280 616	6 583 670	6 956 520
Paraguay	289 111	272 263	242 910	219 913	237 950
Peru	800 773	692 044	795 140	833 510	...
Uruguay	1 212 743	1 940 049	1 122 270	168 581	181 957
Bahrain	10 243 000	10 260 000	10 352 000	10 850 000	...
Bangladesh (a)	2 192 210	1 060 013	1 043 072	1 221 288	...
China	2 922 711	5 972 471	11 357 906	15 671 205	12 350 000
Cyprus	624 485	767 829	749 029	706 267	875 423
India (b)	20 637 000	23 994 000	29 380 002	30 822 000	...
Indonesia	6 586 034	7 336 844	6 830 446	6 957 757	...
Israel	7 288 000	7 952 000	10 579 000	12 092 000	...
Japan	201 320 242	211 531 290	221 866 404	226 544 346	240 110 138
Jordan	2 688 111	2 324 092	2 974 858	2 899 533	...
Korea, Dem. P.R. of (d)	*1 598 000	*1 102 000	*1 129 000	*1 095 000	...
Korea, Republic of	41 297 050	55 577 825	69 489 953	74 153 065	77 692 874
Lebanon	1 250 000	1 390 000	1 490 000	...	...
Malaysia	1 026 217	1 084 177	1 138 448	1 672 000	...
Pakistan	3 515 677	4 038 294	4 075 559	4 178 100	...
Philippines	10 730 785	6 433 527	7 062 115	11 251 000	...
Singapore	43 129 467	45 455 676	46 784 287	52 874 372	51 240 009
Sri Lanka	1 663 556	1 636 799	1 176 325	1 614 821	1 806 309
Syria	250 000	—	—	—	...
Taiwan	20 545 150	22 396 898	22 846 009	24 513 928	24 164 307
Thailand	10 119 567	10 718 398	13 286 300	16 283 062	...
Yemen, Republic of (e)	3 444 000	3 500 000	3 549 000	3 350 000	...
Australia	10 732 000	13 859 000	15 573 500	18 872 000	17 631 500
New Zealand (a)	3 290 907	3 315 764	3 195 895	3 214 826	3 682 547

(a) Years ended 30 June of that stated

(b) Years ended 31 March following that stated

(c) Data for the Federal Republic of Yugoslavia only

(d) BGS estimates, based on known exports from certain countries

(e) Yemen Arab Republic and People's Dem. Rep. of Yemen were unified on 22 May 1990 as the Republic of Yemen

(f) As from 1992 data is for Serbia and Montenegro only

**Production of Phosphate Rock**

tonnes

Country	1990	1991	1992	1993	1994
Finland	546 134	472 459	570 528	627 570	647 300
Russia	—	—	13 974 000	10 394 000	*8 000 000
Soviet Union	*35 082 000	*29 994 000	—	—	—
Sweden	6 645	—	—	—	—
Turkey	86 788	3 360	*30 000	38 384	—
Algeria	1 128 000	1 090 000	1 143 000	718 000	*725 000
Egypt (e)	886 911	377 333	359 024	267 298	268 020
Morocco	21 396 000	17 970 000	19 146 000	18 305 000	18 913 000
Senegal					
Phosphate rock	2 147 000	1 702 121	2 283 500	1 667 000	1 587 400
Aluminium phosphate (a)	*140 000	55 190	92 700	*40 000	23 400
South Africa	3 164 800	3 180 100	3 080 300	2 465 800	2 525 200
Tanzania	26 000	2 419	4 948	2 219	—
Togo	2 995 490	2 964 642	2 083 000	1 794 300	2 149 200
Tunisia	6 258 514	6 352 000	6 335 284	5 499 900	5 698 500
Zimbabwe	147 767	116 938	142 322	153 471	150 560
Mexico	623 481	596 392	451 659	501 254	556 392
Netherlands Antilles (b)	4 180	9 522	...	...	...
USA	46 343 000	48 096 000	46 965 000	35 494 000	41 047 000
Brazil (d)	3 148 372	3 300 000	2 900 000	3 400 000	3 500 000
Chile					
Phosphate rock	13 986	13 338	17 546	14 560	9 645
Guano	1 452	1 308	139	—	—
Colombia	31 000	31 516	32 041	44 960	48 100
Peru	47 333	18 239	*20 000	37 381	75 189
Venezuela	138 391	161 472	20 936	...	11 200
China	21 550 000	23 660 000	25 870 000	21 158 700	6 000 000
Christmas Island (b) (c) (e)	—	63 609	196 803	263 946	296 709
India	674 000	562 771	487 800	969 400	1 176 500
Indonesia	1 600	6 384	*8 000	*7 000	*7 000
Iraq	*900 000	*400 000	*600 000	*800 000	*1 000 000
Israel	2 482 000	2 267 000	2 372 000	2 662 000	2 779 000
Jordan	5 748 100	4 460 800	5 230 000	4 215 000	4 216 600
Kazakhstan	—	—	680 000	530 000	1 736 800
Korea, Dem. P.R. of	*500 000	*500 000	*500 000	*500 000	*500 000
Pakistan	30 000	18 985	19 828	13 822	*15 000
Philippines					
Phosphate rock	2 963	20 633	*20 000	*87 000	*20 000
Guano	888	11 689	*10 000	5 258	...
Sri Lanka	32 564	19 693	26 010	*36 000	32 000
Syria	1 633 000	1 359 000	1 266 000	931 000	1 203 000
Thailand	9 547	5 936	7 981	11 000	*10 000
Vietnam	260 000	275 000	290 000	362 500	469 800
Australia	16 000	3 000	2 000	1 700	21 000
Nauru (b)	926 200	530 100	747 300	633 700	613 200
World total	159 000 000	151 000 000	138 000 000	115 000 000	106 000 000

(a) Including lime phosphates

(b) Exports

(c) Including phosphate dust

(d) Including beneficiated and directly shipped material

(e) Years ended 30 June of that stated



## Exports of Phosphate Rock

tonnes

Country	1990	1991	1992	1993	1994
Belgium-Luxembourg	16 438	15 241	22 200	2 613	...
Denmark	1 294	3 091	118	176	169
France	2 660	1 511	1 085	2 467	2 270
Germany, Federal Republic of	5 040	9 517	664	1 938	...
Netherlands	211 330	159 236	186 836	169 574	...
Finland	22 545	—	—	3 946	...
Russia	—	701 607	658 425	1 023 437	...
Soviet Union (b)	*1 885 000	...	—	—	—
Sweden	12 354	1 659	49	49	...
Algeria	851 433	1 043 611	677 521	449 300	574 600
Egypt	297 200	164 000	179 900	134 400	113 800
Morocco	11 672 000	9 143 199	9 132 000	8 398 400	9 526 800
Senegal	1 209 432	928 731	1 261 120	948 500	...
South Africa	1 217 100	1 165 500	1 344 400	1 196 900	1 273 000
Togo	2 783 495	3 074 395	2 085 500	1 567 400	2 233 800
Tunisia	601 821	421 285	925 522	1 122 000	1 308 100
Netherlands Antilles	4 180	9 522	...	...	...
USA	6 959 000	5 749 000	3 977 000	3 575 000	3 159 000
China	344 648	533 866	455 583	641 486	727 400
Christmas Island (a) (c)	63 609	196 803	263 946	296 709	260 200
Israel	1 501 000	1 635 000	1 723 000	*1 900 000	*2 300 000
Jordan	4 871 123	4 245 700	4 263 880	3 564 950	3 825 000
Kazakhstan	—	—	5 129	1 872	...
Malaysia	1 767	937	2 746	2 544	...
Singapore	5 348	595	1 462	843	166
of which: Re-exports	5 347	541	1 186	826	128
Syria	1 326 721	1 246 000	1 239 512	865 000	1 072 000
Nauru	926 200	530 100	747 300	633 700	613 200

(a) Including phosphate dust

(b) BGS estimates, based on known imports into certain countries

(c) Years ended 30 June of that stated

**Imports of Phosphate Rock**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	548 126	340 846	224 075	42 187	74 785
Belgium-Luxembourg	2 211 516	2 162 072	2 068 791	1 555 443	1 566 400
Denmark	172 960	*110 000	*120 000	167 400	66 200
France	3 270 709	3 084 720	2 231 780	1 425 316	1 559 872
Germany, Federal Republic of	902 915	704 070	551 286	425 712	*380 000
Greece	713 185	663 077	340 357	260 532	*345 000
Irish Republic	4 507	4 262	11 204	2 941	...
Italy	851 157	587 416	530 071	224 521	237 500
Netherlands	2 235 549	2 028 363	1 875 209	1 781 633	*1 700 000
Portugal	169 350	160 412	123 192	98 482	*144 000
Spain	2 088 262	1 998 050	1 739 836	1 340 545	1 954 800
Albania	101 500	24 200	...	...	...
Austria	440 217	296 957	283 537	240 883	224 906
Bulgaria	335 400	181 400	166 300	245 700	290 600
Croatia	—	—	292 935	240 482	...
Czechoslovakia (a)	92 000	31 000	10 600	—	—
Finland	112 200	54 000	*80 000	*60 000	77 200
German Democratic Republic (a)	*140 000	—	—	—	—
Hungary	328 149	58 000	*10 000	2 698	30 923
Norway	620 089	697 599	591 895	687 926	625 090
Poland	1 463 000	625 000	1 115 000	1 013 900	1 501 500
Romania (a)	*600 000	643 800	938 649	989 684	842 000
Slovenia	—	—	35 633	42 281	...
Sweden	649 904	379 254	121 390	61 001	59 900
Switzerland	2 040	446	352	236	548
Turkey	730 319	743 785	706 107	736 475	615 573
Yugoslavia (e)	1 066 386	(d) 512 717	293 920	...	...
Ivory Coast	...	...	2 500	1 200	...
South Africa	124 682	262 000	318 677	319 951	625 010
Canada	1 258 290	1 078 689	1 169 026	1 207 346	1 168 324
Cuba	8 200	12 700	5 000	...	5 000
Mexico	2 278 380	1 630 230	589 869	525 403	1 177 705
USA	456 761	552 119	1 530 140	532 453	620 006
Brazil	205 183	212 533	304 811	396 887	576 200
Chile	16 897	34 357	21 400	25 339	36 827
Colombia	49 960	56 668	81 430	72 859	68 500
Uruguay	56 236	42 141	36 750	12 175	36 707
Venezuela	75 206	76 510	69 334	49 775	59 400
Bangladesh (b)	120 103	110 800	90 100	88 400	162 600
China	203 882	354 545	128 695	112 300	...
India (c)	2 681 911	2 428 436	2 230 859	1 922 739	...
Indonesia	898 852	1 585 622	793 044	133 344	1 153 300
Iran (f)	...	264 575	197 245	195 451	229 000
Japan	1 543 302	1 455 907	1 453 204	1 395 178	1 194 059
Korea, Dem. P.R. of	36 400	21 000	—	59 600	40 900
Korea, Republic of	1 559 966	1 309 706	1 671 025	1 646 266	1 681 299
Lebanon	134 800	158 600	215 000	230 000	267 000
Malaysia	481 100	412 020	433 160	351 599	308 100
Pakistan (b)	279 564	249 011	251 358	274 375	251 500
Philippines	834 369	929 045	608 026	418 611	555 900
Saudi Arabia	3 878	2 433	5 052	...	...
Singapore	10 199	611	249	181	109
Sri Lanka	16 405	5 003	2 208	0	1 000
Taiwan	420 425	348 656	380 483	325 253	352 998

**Imports of Phosphate Rock**

tonnes

Country	1990	1991	1992	1993	1994
Australia	1 092 000	394 000	845 000	680 000	955 000
New Zealand (b)	708 618	543 688	679 842	814 004	891 331

- (a) P<sub>2</sub>O<sub>5</sub> content
- (b) Years ended 30 June of that stated
- (c) Years ended 31 March following that stated
- (d) Data for the Federal Republic of Yugoslavia only
- (e) As from 1992 data is for Serbia and Montenegro only
- (f) Years ended 20 March following that stated

**Mine Production of Platinum Group Metals**

kilograms (metal content)

Country	1990	1991	1992	1993	1994
Finland					
Platinum (a)	72	59	54	51	*60
Palladium (a)	104	101	107	121	*100
Russia					
Platinum	—	—	*28 000	*20 000	*15 000
Palladium	—	—	*70 000	*50 000	*40 000
Other platinum metals	—	—	*6 000	*4 000	*3 000
Soviet Union					
Platinum	*31 000	*30 000	—	—	—
Palladium	*94 000	*91 500	—	—	—
Yugoslavia (b)					
Platinum (a)	21	(c) 22	19	*15	*15
Palladium (a)	130	(c) 155	130	*125	*125
South Africa (a)	141 913	142 861	152 891	176 167	164 806
Zimbabwe					
Platinum	21	19	9	4	7
Palladium	31	30	19	11	17
Canada					
Platinum	5 044	4 683	4 800	5 000	6 000
Palladium	5 269	6 439	5 800	6 000	7 000
Other platinum metals	1 396	586	1 307	1 440	1 970
USA					
Platinum	*2 050	*1 730	*1 840	*2 050	*1 960
Palladium	*6 170	*6 050	*6 470	*6 780	*6 440
Colombia	1 316	1 603	1 956	1 724	1 130
Japan					
Platinum (a)	1 425	988	629	661	700
Palladium (a)	1 047	1 053	986	1 183	12 000
Australia					
Platinum	*100	*100	*150	*100	*100
Palladium	*450	*400	*550	*430	*400
World total	292 000	288 000	282 000	276 000	261 000

## Note(s):

- (1) Wherever possible, figures relate to quantities of platinum group metals thought to be recovered from ores originating in the country stated
- (2) Figures for metal production are only given for countries where recovery is thought to be based predominantly on domestic materials or on imported materials which have not been recorded as mine production elsewhere in the table
- (3) In addition to the countries listed, Bulgaria, China, Ethiopia, Indonesia, Papua New Guinea and Philippines are believed to produce platinum group metals

(a) Metal production

(b) As from 1992 data is for Serbia and Montenegro only

(c) Excluding data from August to December for the Republic of Croatia

## Exports of Platinum Group Metals

kilograms

Country	1990	1991	1992	1993	1994
United Kingdom					
Platinum	45 347	50 722	33 655	28 188	21 847
Palladium	30 371	39 113	26 748	28 216	29 631
Other platinum metals	6 169	5 564	6 058	4 679	4 448
Waste & scrap	1 550	1 452	7 062	5 203	2 538
Belgium-Luxembourg					
Platinum	3 760	4 107	6 032	4 115	...
Platinum metals	11 154	15 645	14 503	23 897	...
Waste & scrap	£4 576 000	£5 486 000	£14 159 000	£14 190 000	...
Denmark					
Platinum & platinum metals	453	244	106	124	183
Waste & scrap	918	178	182	11	10
France					
Platinum	6 595	5 340	4 609	...	5 677
Platinum metals	6 778	4 863	5 150	...	7 182
Waste & scrap	14 163	96 621	6 371	3 200	16 700
Germany, Federal Republic of					
Platinum	15 546	14 003	15 278	14 874	...
Palladium	10 727	12 193	11 287	16 145	...
Other platinum metals	2 326	2 098	2 843	2 259	...
Waste & scrap	36 628	120 506	88 977	38 117	...
Italy					
Platinum	1 577	6 346	1 890	1 000	...
Platinum metals	441	43 565	24 697	...	...
Netherlands					
Platinum	2 040	1 998	3 313	2 446	...
Platinum metals	206	310	361	631	...
Waste & scrap	3 000	54 000	2 000	20 000	...
Portugal					
Platinum & platinum metals	330	...	...	237	...
Spain					
Platinum & platinum metals	1 246	715	10 760	2 099	...
Austria					
Platinum & platinum metals	1 255	1 058	1 248	811	1 100
Czechoslovakia					
Waste & scrap (a)	*13 600	*4 000	*2 100	—	—
Czech Republic					
Waste & scrap (a)	—	—	—	*900	...
Norway					
Platinum & platinum metals	3 307	3 509	4 251	3 909	5 682
Russia					
Platinum & platinum metals (a)	—	—	*63 200	*117 800	...
Soviet Union					
Platinum & platinum metals (a)	*90 000	*134 100	—	—	—
Sweden					
Platinum & platinum metals	£2 833 000	£952 000	£510 000	£555 000	...
Switzerland					
Platinum & platinum metals	44 636	56 764	62 183	77 121	71 808
Waste & scrap	11 525	9 021	9 684	5 443	6 318
Yugoslavia (g)					
Platinum & platinum metals	£296 000	(f) —	—	...	...
Waste & scrap	£5 407 000	(f) —	—	...	...
South Africa					
Platinum & platinum metals (d)	135 581	141 120	137 063	153 711	161 694
Waste & scrap (a)	*19 100	*21 300	*500	*900	...

**Exports of Platinum Group Metals**

kilograms

Country	1990	1991	1992	1993	1994
Canada					
Ores & concentrates (b)	10 323	7 921	9 793	10 157	7 325
Platinum metals	7 060	6 353	7 245	7 503	6 604
USA					
Ores & concentrates (b)	415	863	488	98	202
Platinum	9 047	14 275	14 205	*18 100	...
of which: Re-exports	1 537	1 574	2 325	*2 000	...
Palladium	11 247	13 894	17 799	*26 300	...
of which: Re-exports	360	259	72	*100	...
Other platinum metals	2 232	1 068	1 473	*1 600	...
of which: Re-exports	480	161	208	*200	...
Waste & scrap	34 487	11 427	27 628	34 625	42 063
Colombia					
Platinum	379	190	...	...	...
China					
Platinum & platinum metals	1 129	160	83	407	...
Hong Kong					
Platinum & platinum metals (c)	1 131	2 071	1 572	1 808	1 439
Israel					
Platinum & platinum metals	£110 000	£418 000	£426 000	£308 000	...
Japan					
Platinum	5 021	3 363	5 518	3 800	4 539
Platinum metals	2 180	2 554	4 192	4 189	7 399
Korea, Republic of					
Waste & scrap	6 362	13 999	197	2 960	—
Malaysia					
Waste & scrap	...	10 250	16 690	96 000	...
Singapore					
Platinum & platinum metals (c)	904	51	60	169	715
Taiwan					
Platinum & platinum metals	11 524	9 315	9 125	4 094	6 842
Australia					
Platinum & platinum metals (e)	744	44 169	472	11	...

## Note(s):

(1) In this table the term 'Platinum' and/or 'Platinum metals' includes unwrought, partly worked and alloys

- (a) BGS estimates, based on known imports into certain countries
- (b) Platinum metals content
- (c) Re-exports
- (d) Sales
- (e) Years ended 30 June of that stated
- (f) Data for the Federal Republic of Yugoslavia only
- (g) As from 1992 data is for Serbia and Montenegro only

## Imports of Platinum Group Metals

kilograms

Country	1990	1991	1992	1993	1994
United Kingdom					
Ores & concentrates	49 487	42 283	55 434	43 037	...
Platinum	35 654	39 357	37 335	22 847	19 599
Palladium	21 916	21 782	13 600	14 974	28 263
Other platinum metals	6 288	5 039	4 616	5 966	4 189
Waste & scrap	310 763	253 915	62 771	33 780	72 612
Belgium-Luxembourg					
Platinum	3 398	1 375	1 347	1 252	...
Platinum metals	1 817	4 731	921	1 951	...
Waste & scrap	£17 605 000	£11 764 000	£2 877 000	£748 000	...
Denmark					
Platinum & platinum metals	673	603	622	561	567
France					
Platinum	8 530	8 393	7 494	...	9 677
Platinum metals	7 451	7 299	7 486	...	7 671
Waste & scrap	35 133	2 209	4 305	...	4 400
Germany, Federal Republic of					
Platinum	21 973	19 245	19 579	13 844	...
Palladium	26 211	26 578	31 023	20 915	...
Other platinum metals	2 786	2 699	3 614	3 061	...
Waste & scrap	105 543	46 443	15 707	11 504	...
Greece					
Platinum & platinum metals	347	248	...	2 000	...
Italy					
Platinum	4 296	10 499	7 134	14 000	...
Platinum metals	10 081	5 249	6 485	6 000	...
Waste & scrap	5 000	4 000	5 100	4 000	...
Netherlands					
Platinum	917	945	1 119	867	...
Platinum metals	2 238	2 304	11 564	3 863	...
Waste & scrap	1 000	...	...	1 000	...
Portugal					
Platinum & platinum metals	247	...	...	200	...
Spain					
Platinum & platinum metals	4 816	1 611	2 216	1 754	...
Waste & scrap	...	1 000	1 000	5 000	...
Austria					
Platinum & platinum metals	2 794	3 041	4 129	2 959	3 918
Bulgaria					
Platinum & platinum metals (e)	*300	*200	*50	*100	...
Croatia					
Platinum & platinum metals	—	—	£109 000	£190 000	...
Czechoslovakia					
Platinum & platinum metals (e)	*1 000	*600	*600	—	—
Czech Republic					
Platinum & platinum metals (e)	—	—	—	*400	...
Finland					
Platinum & platinum metals	758	124	107	111	...
German Democratic Republic					
Platinum & platinum metals (e)	*2 700	—	—	—	—
Hungary					
Platinum & platinum metals	100	(e) *300	(e) *500	(e) *150	...
Norway					
Platinum & platinum metals	411	942	1 052	1 756	918
Romania					
Platinum & platinum metals (e)	*360	*50	*40	*20	...
Sweden					
Platinum & platinum metals	1 000	3 000	3 000	1 000	...
Switzerland					
Platinum & platinum metals	41 639	71 075	35 400	66 353	76 655
Waste & scrap	5 112	4 252	686	8 101	5 575
Turkey					
Platinum & platinum metals	4 000	7 000	5 755	5 034	1 607
Yugoslavia (f)					
Platinum & platinum metals	£1 673 000	(d) £56 000	£58 000	...	...

**Imports of Platinum Group Metals**

kilograms

Country	1990	1991	1992	1993	1994
Algeria					
Platinum & platinum metals	234	...	...	...	...
South Africa					
Platinum & platinum metals	176	714	739	7 154	9 941
Waste & scrap	5	9 241	271 410	324 059	95 732
Canada					
Platinum & platinum metals (c)	6 275	5 350	7 322	6 991	11 271
USA					
Platinum	52 277	50 200	55 009	55 883	54 344
Platinum metals					
Palladium	51 992	60 239	61 210	79 161	92 535
Rhodium	13 098	6 553	7 785	7 171	7 821
Other	3 264	3 170	4 003	5 512	10 858
Waste & scrap	4 614	4 019	5 090	4 219	3 217
Brazil					
Platinum	143	560	244	...	...
Palladium	313	740	508	...	...
Venezuela					
Platinum & platinum metals	385	1 094	1 241	991	...
China					
Platinum & platinum metals	7 360	9 406	1 432	945	...
Cyprus					
Platinum & platinum metals	68	100	94	75	73
Hong Kong					
Platinum & platinum metals	2 595	5 047	5 798	5 878	8 313
India (a)					
Platinum & platinum metals	210	126	101	251	...
Indonesia					
Platinum & platinum metals	41	1 163	16	21 279	...
Israel					
Platinum & platinum metals	...	£625 000	£807 000	£1 472 000	...
Japan					
Platinum	61 851	71 162	58 023	65 927	74 762
Platinum metals	64 305	72 175	68 372	77 058	85 937
Waste & scrap	5 295	24 775	2 786	93 473	2 890
Korea, Republic of					
Platinum & platinum metals	1 748	2 709	3 957	4 316	5 638
Malaysia					
Platinum & platinum metals	6 629	3 435	9 341	...	...
Singapore					
Platinum & platinum metals	4 871	3 747	13 556	13 117	17 924
Taiwan					
Platinum & platinum metals	1 712	2 254	3 046	3 741	6 563
Thailand					
Platinum & platinum metals	72 059	27 222	122 442	76 915	...
Australia					
Platinum metals (b)	11 486	4 821	8 289	3 556	...

## Note(s):

(1) In this table the term 'Platinum' and/or 'Platinum metals' includes unwrought, partly worked and alloys

(a) Years ended 31 March following that stated

(b) Years ended 30 June of that stated

(c) Derived from Canadian ores and concentrates exported for treatment

(d) Data for the Federal Republic of Yugoslavia only

(e) BGS estimates, based on known exports from certain countries

(f) As from 1992 data is for Serbia and Montenegro only



## Production of Potash

tonnes (K<sub>2</sub>O content)

Country	1990	1991	1992	1993	1994
United Kingdom					
Chloride	513 634	520 575	557 173	*584 000	*580 000
France					
Potassic salts	1 395 000	1 217 000	1 141 000	890 000	870 000
Germany, Federal Republic of					
Potassic salts	2 216 000	3 708 000	3 758 000	2 860 000	3 286 000
Italy					
Potassic salts	95 460	31 000	86 000	—	—
Spain					
Potassic salts	685 700	585 200	593 600	660 900	683 700
Azerbaijan	—	—	*62 000	*10 000	*10 000
Belarus	—	—	3 311 000	1 947 000	2 510 000
German Democratic Republic					
Potassic salts	*3 200 000	—	—	—	—
Russia	—	—	3 454 200	2 597 000	2 479 000
Soviet Union	9 088 000	8 509 600	—	—	—
Ukraine	—	—	98 000	88 000	77 700
Canada					
Chloride	6 989 481	7 405 575	7 269 583	6 836 000	8 037 000
USA					
Potassic salts	1 713 000	1 749 000	1 705 000	1 506 000	1 400 000
Brazil					
Chloride	65 735	100 667	85 035	173 368	242 300
Chile					
Chloride	*25 500	*33 000	*33 400	*34 500	*47 000
Nitrate	*40 900	*41 000	*46 300	*49 000	*46 000
China	46 100	98 000	153 000	117 200	*110 000
Israel					
Chloride	1 311 000	1 320 000	1 296 300	1 309 000	1 259 000
Jordan	841 600	818 000	794 152	822 100	930 200
World total	28 200 000	26 100 000	24 400 000	20 500 000	22 600 000

## Exports of Potash

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Chloride	384 505	529 875	603 716	...	...
Other potassic fertilisers	1 493	740	2 102	722	427
Potassic chemicals	6 932	7 323	14 385	3 585	4 901
Belgium-Luxembourg					
Fertiliser salts	674	743	*210	200	...
Sulphate (b)	*221 800	*284 500	*333 700	*326 400	...
Chloride	224 280	174 627	144 854	164 600	...
Other potassic fertilisers	9 723	12 610	11 780	29 000	...
Potassic chemicals	626	206	3 848	24 465	...
France					
Sulphate	1 454	1 792	13 166	1 321	1 059
Chloride	311 105	239 739	187 142	335 165	323 202
Other potassic fertilisers	13 243	1 844	2 470	164	223
Potassic chemicals	518	31 807	31 809	45 432	39 389
Germany, Federal Republic of					
Fertiliser salts	45 668	85 355	47 919	...	...
Potassic fertilisers	2 540 235	4 845 376	4 535 160	(f) 3 865 412	...
Potassic chemicals	42 629	36 799	33 584	31 351	...
Italy					
Sulphate	92 078	7 851	119 366	27 222	...
Other potassic fertilisers	1 431	721	337	3 695	...
Potassic chemicals	5 419	7 175	8 438	12 253	...
Netherlands					
Sulphate (a)	569	1 610	687	1 754	...
Chloride (a)	74 179	49 099	59 754	70 364	...
Potassic chemicals	5 649	6 846	6 765	10 021	...
Portugal					
Potassic fertilisers	10 105	1 104	...	156	...
Spain					
Sulphate	71 557	24 750	51 665	29 111	...
Chloride	595 951	457 416	491 278	734 273	...
Potassic chemicals	8 333	6 802	1 646	1 778	...
Belarus					
Chloride (b)	—	—	*315 700	*521 600	...
Czechoslovakia					
Potassic chemicals (b)	*500	*1 600	*6 400	—	—
Czech Republic					
Potassic chemicals (b)	—	—	—	*3 100	...
German Democratic Republic					
Fertiliser salts (a)	2 381 500	—	—	—	—
Latvia					
Chloride (b)	—	—	*120 700	*177 300	...
Norway					
Potassic chemicals	7	2 370	9 005	7 675	12 758
Poland					
Potassic chemicals	2 641	2 957	(b) *1 700	(b) *2 200	...
Romania					
Potassic chemicals (b)	*1 700	*1 400	...	...	...
Russia					
Chloride	—	...	4 083 000	2 725 000	...
Other potassic fertilisers	—	(g) 4 573 000	40 000	5 000	...
Soviet Union					
Fertiliser salts	5 480 000	...	—	—	—
Sweden					
Sulphate	55 362	98 650	83 109	102 563	...
Switzerland					
Potassic chemicals	1 000	1 693	1 013	936	343
Yugoslavia (d)					
Potassic chemicals	4 206	(e) 1 728	921	...	...

## Exports of Potash

tonnes

Country	1990	1991	1992	1993	1994
Canada					
Chloride	11 494 339	10 557 861	10 199 772	10 146 972	12 960 816
Other potassic fertilisers	274 321	70 401	49 531	24 124	35 236
Potassic chemicals	10 124	25 981	8 635	14 773	39 114
USA					
Sulphate	561 900	509 700	602 443	556 035	...
Chloride	445 800	730 600	708 474	361 193	...
Potassic chemicals	62 081	106 770	116 214	87 093	...
Chile					
Fertiliser salts	137 724	133 043	136 050	132 304	169 931
Potassic chemicals	111 207	129 702	135 343	154 227	181 795
China					
Potassic chemicals	(b) *5 300	(b) *5 800	7 085	16 324	...
Hong Kong					
Potassic chemicals (c)	1 493	2 875	1 037	1 419	1 584
Israel					
Chloride (b)	*1 467 400	*1 265 100	*1 362 200	*1 389 000	...
Other potassic fertilisers	(b) *119 700	(b) *126 700	114 204	24 232	...
Potassic chemicals	228 144	(b) *193 900	(b) *206 900	*165 800	...
Japan					
Potassic fertilisers	1 074	1 022	994	1 324	1 407
Potassic chemicals	17 390	17 299	17 515	15 474	12 694
Jordan					
Fertiliser salts	1 403 358	1 412 000	1 235 196	1 476 667	...
Korea, Republic of					
Sulphate	89 123	30 517	28 312	...	46 851
Potassic chemicals	15 669	20 658	20 473	22 492	31 543
Singapore					
Sulphate	6 857	10 798	11 655	8 342	6 191
of which: Re-exports	6 838	10 778	11 655	8 342	6 191
Chloride	107 358	58 966	79 615	60 719	58 888
of which: Re-exports	105 606	58 671	79 329	60 695	57 874
Other potassic fertilisers	4 770	4 868	1 152	2 512	7 147
of which: Re-exports	4 768	1 726	...	2 033	7 136
Taiwan					
Potassic fertilisers	80 895	71 744	93 037	59 457	108 419
Potassic chemicals	6 589	3 949	8 353	9 813	1 600

## Note(s):

(1) So far as possible the term 'potassic chemicals', as used in this table, relates to items 522.64, 523.3,4,5 and 7 of the S.I.T.C. (Rev.3) and includes hydroxide, carbonate, chlorate, nitrate and sulphate

- (a) K<sub>2</sub>O content
- (b) BGS estimates, based on known imports into certain countries
- (c) Re-exports
- (d) As from 1992 data is for Serbia and Montenegro only
- (e) Data for the Federal Republic of Yugoslavia only
- (f) Including fertiliser salts
- (g) Including chloride

**Imports of Potash**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Fertiliser salts	19 605	16 413	12 080	18 464	22 450
Chloride	...	...	396 762	332 807	461 710
Other potassic fertilisers	46 105	44 848	25 921	7 267	10 415
Potassic chemicals	36 718	38 896	41 756	36 097	34 206
Belgium-Luxembourg					
Fertiliser salts	32 899	29 455	*36 000	28 500	...
Sulphate	84 139	109 280	80 570	118 000	...
Chloride	1 427 117	1 292 291	1 187 209	1 857 000	...
Other potassic fertilisers	29 500	25 069	33 158	2 000	...
Potassic chemicals	15 859	19 165	27 833	56 324	...
Denmark					
Sulphate	18 208	17 497	25 869	22 165	24 953
Chloride	269 454	190 538	205 503	223 001	251 523
Other potassic fertilisers	6 477	9 752	9 783	7 869	6 733
Potassic chemicals	7 729	8 432	12 463	12 274	9 887
France					
Fertiliser salts	85 922	79 037	45 832	241	9 514
Sulphate	112 096	125 542	102 504	97 702	86 436
Chloride	1 110 814	1 274 356	1 131 359	887 696	1 296 250
Other potassic fertilisers	23 720	25 145	25 475	23 487	31 344
Potassic chemicals	34 674	35 076	31 084	37 142	40 394
Germany, Federal Republic of					
Chloride	113 229	86 939	105 833	136 681	...
Potassic chemicals	34 004	43 416	49 146	27 759	...
Greece					
Sulphate	38 582	161 107	100 591	*48 350	...
Chloride	2 115	44 751	12 528	*20 354	...
Potassic chemicals	12 173	19 205	13 085	974	...
Irish Republic					
Sulphate	3 989	1 165	90	...	...
Chloride	225 690	221 953	215 244	...	...
Other potassic fertilisers	3 395	233	2 723	(e) (h) 252 326	...
Italy					
Fertiliser salts	427	504	817	212	...
Sulphate	114 265	114 158	85 219	99 844	...
Chloride	592 539	566 542	554 009	548 841	...
Other potassic fertilisers	29 579	33 555	31 383	18 910	...
Potassic chemicals	36 727	32 633	40 614	38 070	...
Netherlands					
Fertiliser salts (a)	682	374	249	284	...
Sulphate (a)	15 480	35 016	28 618	18 820	...
Chloride (a)	324 576	262 473	246 544	208 624	...
Other potassic fertilisers (a)	9 993	12 382	10 782	6 516	...
Potassic chemicals	49 116	51 172	30 531	42 203	...
Portugal					
Sulphate	2 217	3 053	1 397	...	...
Chloride	64 524	69 660	55 758	...	...
Potassic chemicals	5 548	4 684	4 207	4 639	...
Spain					
Sulphate	12 718	11 113	4 055	7 260	...
Chloride	52 930	53 119	209 079	71 233	...
Other potassic fertilisers	6 075	12 519	4 278	30 548	...
Potassic chemicals	45 816	61 572	68 756	81 121	...
Austria					
Fertiliser salts	16 730	13 959	11 449	3 017	13 324
Sulphate	16 668	15 980	13 219	14 353	9 055
Chloride	170 116	166 429	162 716	161 606	181 328
Other potassic fertilisers	4 075	5 238	3 396	4 761	5 369
Potassic chemicals	6 372	7 066	7 148	6 858	7 737
Bulgaria					
Fertiliser salts (a)	116 400	...	...	3 000	...
Croatia					
Chloride	—	—	185 230	145 890	...
Other potassic fertilisers	—	—	7 765	3 550	...

## Imports of Potash

Country	1990	1991	1992	1993	1994
Czechoslovakia					
Potassic fertilisers (a)	470 000	95 000	113 600	—	—
Finland					
Chloride (c)	*186 300	*255 700	*257 000	*278 400	...
Other potassic fertilisers	107	215	2 593	1 962	...
Potassic chemicals	7 767	5 502	5 300	6 387	...
Hungary					
Potassic fertilisers	680 948	...	21 017	77 041	95 227
Potassic chemicals	...	...	2 485	1 520	1 746
Iceland					
Sulphate	1 468	120	1 824	1 019	...
Chloride	5 549	5 953	8 163	5 445	...
Norway					
Sulphate	138 965	166 147	156 709	130 881	159 036
Chloride	305 288	303 395	282 898	381 300	361 047
Other potassic fertilisers	514	1 015	480	447	458
Potassic chemicals	2 122	2 310	2 190	2 752	4 860
Poland					
Chloride	11 425	6 569	...	...	...
Other potassic fertilisers	1 166 000	136 000	(h) 197 848	(c) (h) *168 000	...
Potassic chemicals	3 410	2 931	...	...	...
Romania					
Fertiliser salts (a)	299 500	25 600	36 800	60 000	...
Slovakia					
Potassic fertilisers	—	—	—	34 274	...
Sweden					
Fertiliser salts	5 720	1 050	3 037	2 705	...
Sulphate	34 590	55 796	9 980	6 428	...
Chloride	177 540	161 749	138 757	137 468	...
Other potassic fertilisers	2 069	2 487	3 834	3 149	...
Potassic chemicals	4 884	3 906	5 292	4 060	...
Switzerland					
Sulphate	5 088	6 296	4 759	3 795	2 800
Chloride	51 509	51 220	35 733	35 448	31 400
Other potassic fertilisers	5 405	4 904	3 056	3 820	5 191
Potassic chemicals	14 205	14 206	14 855	15 295	16 192
Turkey					
Sulphate	20 565	17 803	24 537	29 624	26 966
Other potassic fertilisers	84 783	76 325	88 242	131 910	128 697
Potassic chemicals	10 304	7 997	11 851	13 671	9 205
Yugoslavia (g)					
Sulphate	14 052	(f) 2 937	3 618	...	...
Chloride	398 739	(f) 182 099	136 350	...	...
Potassic chemicals	6 871	(f) 1 097	880	...	...
Algeria					
Sulphate	51 400	...	...	...	...
Potassic chemicals	558	41	...	...	...
Cameroon					
Potassic fertilisers	21 515	*13 000	*4 600	*2 300	...
Egypt					
Potassic fertilisers	*46 300	*44 000	14 992	*40 000	...
Gabon					
Potassic fertilisers	*1 400	...	...	...	...
Kenya					
Potassic fertilisers (a)	3 700	1 700	1 400	100	...
Madagascar					
Potassic fertilisers	19 371	2 395	2 905	...	...
Mauritius					
Potassic fertilisers	24 988	25 061	27 833	...	...
Morocco					
Sulphate	50 969	42 211	26 632	(h) 35 978	...
Chloride	36 256	21 314	60 689	...	...
Potassic chemicals	608	1 946	394	...	...
Nigeria					
Potassic fertilisers (a)	58 400	65 500	41 800	23 100	...

**Imports of Potash**

tonnes

Country	1990	1991	1992	1993	1994
Reunion					
Potassic fertilisers (a)	2 400	100	1 600	1 000	...
Senegal					
Potassic fertilisers	34 615	23 377	21 831	...	...
South Africa					
Sulphate	14 096	26 344	22 016	12 187	11 667
Chloride	195 460	196 894	215 929	282 844	254 847
Potassic chemicals	18 980	22 565	29 990	33 817	29 413
Tunisia					
Potassic fertilisers	56 598	19 587	9 459	9 569	...
Potassic chemicals	661	709	762	...	...
Zimbabwe					
Sulphate	20 396	27 935	16 444	...	...
Chloride	47 234	61 607	22 187	...	...
Belize					
Potassic fertilisers	7 785	685	3 368	3 530	...
Canada					
Sulphate	86 877	65 360	84 325	107 434	69 789
Chloride	7 382	7 737	8 844	4 576	4 950
Other potassic fertilisers	1 912	4 644	3 780	1 537	1 216
Potassic chemicals	21 253	18 604	17 675	17 646	18 674
Costa Rica					
Potassic fertilisers	85 141	82 372	98 352	...	...
Cuba					
Chloride	*345 000	*100 000	*60 000	*50 000	...
Dominican Republic					
Potassic fertilisers	25 089	23 800	29 900	10 100	...
El Salvador					
Potassic fertilisers	...	3 043	...	7 675	...
Guatemala					
Potassic fertilisers	31 073	40 307	21 723	22 100	...
Honduras					
Potassic fertilisers	44 548	39 549	22 229	...	...
Jamaica					
Potassic fertilisers	400	404	2 738	341	...
Martinique					
Potassic fertilisers	18 365	13 765	19 260	5 302	15 153
Mexico					
Sulphate	19 825	30 006	42 836	39 958	48 300
Chloride	77 700	69 140	58 468	181 810	128 842
Potassic chemicals	13 083	13 143	11 823	6 513	...
Nicaragua					
Potassic fertilisers	8 448	3 480	8 139	...	...
Panama					
Potassic fertilisers	17 939	7 159	12 056	12 136	...
USA					
Fertiliser salts	1 302	532	568	6 827	...
Sulphate	55 361	59 239	67 746	87 328	...
Chloride	6 707 720	6 904 942	6 862 406	7 058 085	...
Other potassic fertilisers	355 682	210 320	180 224	46 016	...
Potassic chemicals	59 125	64 584	66 189	79 187	...
Argentina					
Sulphate	5 325	10 122	6 520	9 126	...
Chloride	12 167	15 620	17 635	18 929	...
Potassic chemicals	...	...	14 133	11 539	...
Brazil					
Sulphate	35 212	45 120	57 678	46 548	...
Chloride	1 860 343	2 037 045	2 117 161	2 516 340	...
Potassic chemicals	12 518	14 063	24 456	23 475	...
Chile					
Sulphate	14 806	18 664	13 444	11 711	9 318
Chloride	135 069	142 163	38 184	42 205	46 450
Other potassic fertilisers	3 255	10 451	6 228	9 563	13 417

## Imports of Potash

tonnes

Country	1990	1991	1992	1993	1994
Colombia					
Sulphate	21 358	10 139	12 434	14 136	...
Chloride	341 698	247 197	281 008	217 679	...
Potassic chemicals	1 808	*1 000	1 668	1 549	...
Ecuador					
Fertiliser salts	9 945	4 209	4 168	12 000	...
Chloride	30 713	40 209	10 231	25 829	...
Other potassic fertilisers	5 154	3 231	13 522	1 503	...
Guyana					
Potassic fertilisers	*3 000	*2 000	*500	...	...
Peru					
Chloride	1 637	2 638	...	30 106	...
Potassic chemicals	819	665	...	1 047	...
Uruguay					
Potassic fertilisers	12 936	6 252	7 121	9 663	4 906
Venezuela					
Sulphate	51 946	17 300	24 752	2 909	...
Chloride	41 825	100 741	96 008	86 028	...
Potassic chemicals	2 016	2 940	2 477	4 796	...
Bangladesh (d)					
Potassic fertilisers	50 427	53 085	53 905	2 048	...
China					
Sulphate	666 039	423 664	522 845	566 335	570 000
Chloride	2 072 805	2 432 214	2 444 345	1 727 246	2 850 000
Other potassic fertilisers	53 804	79 777	1 580	386	...
Potassic chemicals	204	2 273	2 985	5 482	...
Cyprus					
Potassic fertilisers	410	332	506	428	3 034
Hong Kong					
Potassic chemicals	2 172	3 874	1 142	1 738	1 787
India (b)					
Chloride	1 615 426	1 399 328	1 225 097	1 086 248	...
Other potassic fertilisers	232 257	75 000	39 841	31 376	...
Potassic chemicals	886	2 256	2 332	5 162	...
Indonesia					
Fertiliser salts	151 633	46 194	—	—	...
Sulphate	26 325	4 210	13 038	5 083	...
Chloride	417 635	279 843	443 623	505 630	...
Potassic chemicals	5 398	5 293	4 639	10 657	...
Japan					
Sulphate	190 373	218 671	184 268	186 213	197 924
Chloride	944 421	1 037 536	965 638	993 180	1 002 914
Other potassic fertilisers	64 608	83 776	81 073	84 203	82 979
Potassic chemicals	17 680	26 860	23 666	23 765	41 088
Korea, Dem. P.R. of					
Potassic fertilisers (c)	...	...	*121 900	...	...
Korea, Republic of					
Chloride	570 899	602 086	673 414	618 319	671 066
Potassic chemicals	9 132	7 648	8 038	9 557	11 197
Malaysia					
Sulphate	...	17 226	3 503	...	...
Chloride	(e) 64 868	55 400	142 999	...	...
Other potassic fertilisers	804 161	758 623	683 373	(e) (h) 747 161	...
Pakistan (d)					
Potassic chemicals	1 444	699	572	1 217	...
Philippines					
Sulphate	29 715	38 135	45 414	...	...
Chloride	146 070	234 075	143 722	...	...
Other potassic fertilisers	1 180	560	4 443	(e) (h) 197 482	...
Potassic chemicals	5 226	5 717	7 298	...	...
Saudi Arabia					
Sulphate	50 585	27 371	...	...	...
Other potassic fertilisers	11 569	10 649	(e) 98 921	...	...

**Imports of Potash**

tonnes

Country	1990	1991	1992	1993	1994
Singapore					
Sulphate	10 373	12 958	17 535	8 100	4 764
Chloride	84 344	60 456	57 500	32 887	35 166
Other potassic fertilisers	24 856	24 491	15 173	41 993	27 874
Sri Lanka					
Chloride	52 302	16 008	28 200	34 576	52 673
Other potassic fertilisers	19 465	12 596	21 197	48 551	53 746
Syria					
Potassic fertilisers	*87 000	*40 000	*1 500	*15 000	...
Taiwan					
Chloride	257 242	329 675	259 777	320 177	282 513
Potassic chemicals	6 041	6 301	5 778	6 711	10 096
Thailand					
Sulphate	16 154	20 002	20 302	25 090	...
Chloride	106 228	91 160	115 858	111 129	...
Potassic chemicals	11 203	16 758	15 022	16 304	...
Australia					
Sulphate (d)	11 815	17 946	21 223	10 465	...
Chloride (d)	275 948	228 750	222 659	242 978	...
Other potassic fertilisers (d)	1 976	737	529	4 923	...
Potassic chemicals (d)	16 511	15 913	16 007	16 508	...
New Zealand (d)					
Sulphate	4 171	2 269	12 776	4 624	7 760
Chloride	147 491	135 695	180 733	209 624	236 004
Potassic chemicals	1 781	2 032	1 839	1 982	4 464

## Note(s):

(1) So far as possible the term 'potassic chemicals', as used in this table, relates to items 522.64, 523.3,4,5 and 7 of the S.I.T.C. (Rev.3) and includes hydroxide, carbonate, chlorate, nitrate and sulphate

- (a) K<sub>2</sub>O content
- (b) Years ended 31 March following that stated
- (c) BGS estimates, based on known exports from certain countries
- (d) Years ended 30 June of that stated
- (e) Including sulphate
- (f) Data for the Federal Republic of Yugoslavia only
- (g) As from 1992 data is for Serbia and Montenegro only
- (h) Including chloride



**Production of Rare Earth Minerals**

tonnes

Country	1990	1991	1992	1993	1994
Soviet Union (d)					
Monazite (a)	*8 500	*8 500	*8 000	*7 000	*6 000
Madagascar					
Bastnaesite	*5	*5	*5	*5	*5
South Africa					
Monazite	*724	*400	*400	*400	*400
Zaire					
Monazite	124	*120	*50	*50	*50
USA					
Bastnaesite (a)	22 713	16 465	20 699	17 754	20 664
Monazite (a)	*2 100	*1 500	*800	...	...
Brazil					
Monazite	2 579	*2 500	*2 500	...	...
China (a)	16 480	16 150	*21 300	*22 100	*23 000
India					
Monazite (b)	*4 500	*4 000	*4 000	*4 600	*4 600
Malaysia					
Monazite	3 323	1 981	777	407	425
Xenotime	165	5	13	22	1
Sri Lanka					
Monazite	*200	*200	*200	*200	*200
Thailand					
Monazite	377	134	89	*220	*220
Xenotime	14	3	—	—	—
Australia					
Monazite	11 000	5 000	6 000	8 000	*3 300
World total (c)	106 000	85 400	98 700	95 800	95 800
World total (REO content)	*77 200	*59 800	*67 600	*67 300	64 500

## Note(s):

- (1) With the exception of the data for the former Soviet Union, USA and China, figures in this table refer to gross tonnage of rare earth concentrates
- (2) Rare earth minerals are believed to be produced, on a small scale, in Indonesia, Democratic P.R. of Korea and Mozambique
- (a) REO content. Assumed to be 60% of concentrates produced
- (b) Years ended 31 March following that stated
- (c) Expressed as grossed up weight of concentrates produced
- (d) Dissolved in December 1991. No information is available on which to estimate for individual countries

**Exports of Rare Earths**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Cerium compounds	679	466	497	219	408
Other rare earth compounds	102	145	185	380	658
Ferro-cerium & other pyrophoric alloys	10	113	9	93	20
Metals	84	42	75	106	107
France					
Ferro-cerium & other pyrophoric alloys	103	108	132	...	127
Metals	42	24	16	...	41
Germany, Federal Republic of					
Rare earth compounds	249	328	234	120	...
Ferro-cerium & other pyrophoric alloys	189	173	158	16	...
Italy					
Metals	42	36	121	...	...
Austria					
Cerium compounds	697	590	599	687	789
Other rare earth compounds	1 071	957	2 183	2 809	3 234
Metals	273	470	383	358	376
Estonia					
Rare earth compounds (b)	—	—	*1 500	*600	*1 500
Norway					
Rare earth compounds	598	114	2	2	1
Russia					
Rare earth compounds (b)	—	—	*1 000	*1 200	...
Soviet Union					
Rare earth compounds (b)	*1 400	*2 000	—	—	—
Metals (b)	*400	*500	—	—	—
South Africa (a)					
Rare earth compounds	£7 900	£7 200	£9 000	£13 400	£57 100
USA					
Ores & concentrates	...	*800	—	—	...
Cerium compounds	1 730	1 378	1 962	1 622	...
Other rare earth compounds	2 230	2 161	1 335	1 088	...
Ferro-cerium & other pyrophoric alloys	83	83	...	...	...
Metals	211	59	36	161	...
Brazil					
Rare earth compounds	246	156	...	...	...
Ferro-cerium & other pyrophoric alloys	44	...	...	...	...
Metals	234	130	144	...	...
China					
Ores & concentrates	327	660	...	1 307	...
Rare earth compounds	3 093	4 671	9 315	14 969	...
Ferro-cerium & other pyrophoric alloys	(b) *200	(b) *150	(b) *20	221	...
Metals	1 327	2 393	2 986	2 747	...
Hong Kong					
Ferro-cerium & other pyrophoric alloys (c)	116	88	...	...	...
Japan					
Cerium compounds	648	396	467	537	597
Other rare earth compounds	154	199	238	199	204
Malaysia					
Ores & concentrates	212	—	—	30	320
Thailand					
Ores & concentrates	220	—	149	—	...
Ferro-cerium & other pyrophoric alloys	18	11	127	349	...

**Exports of Rare Earths**

tonnes

Country	1990	1991	1992	1993	1994
Australia Ores & concentrates	11 100	8 700	5 700	6 500	3 000

Note(s):

- (1) Rare earths are here taken to include yttrium and scandium
- (a) Values shown are for the common customs area
- (b) BGS estimates, based on known imports into certain countries
- (c) Re-exports

**Imports of Rare Earths**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Cerium compounds	269	315	404	319	555
Other rare earth compounds	323	366	418	321	555
Ferro-cerium & other pyrophoric alloys	23	41	16	13	18
Metals	22	78	113	114	237
Belgium-Luxembourg					
Cerium compounds	249	342	336	617	...
Other rare earth compounds	3	44	67	122	...
Ferro-cerium & other pyrophoric alloys	45	38	47	51	...
Metals	147	54	28	44	...
France					
Cerium compounds	638	740	680	...	564
Other rare earth compounds	364	999	4 537	...	13 570
Ferro-cerium & other pyrophoric alloys	37	627	1 025	...	77
Metals	302	243	284	...	294
Germany, Federal Republic of					
Cerium compounds	1 577	1 746	1 257	932	...
Other rare earth compounds	1 871	1 400	1 798	2 471	...
Ferro-cerium & other pyrophoric alloys	30	16	15	32	...
Metals	163	154	230	276	...
Italy					
Ferro-cerium & other pyrophoric alloys	24	39	8	...	...
Metals	59	26	97	...	...
Netherlands					
Cerium compounds	395	435	256	52	...
Other rare earth compounds	2 651	2 578	3 368	3 358	...
Ferro-cerium & other pyrophoric alloys	44	21	40	32	...
Metals	12	0	3	22	...
Spain					
Rare earth compounds	257	186	177	194	...
Ferro-cerium & other pyrophoric alloys	41	43	38	31	...
Metals	68	129	68	20	...
Austria					
Cerium compounds	1 200	504	957	574	451
Other rare earth compounds	15	23	49	492	406
Metals	255	995	999	622	377
Norway					
Rare earth compounds	48	9	2	12	258
Metals	248	75	218	181	326
Turkey					
Rare earth compounds	230	87	124	128	126
Yugoslavia (c)					
Ferro-cerium & other pyrophoric alloys	300	(b) 75	3	...	...
South Africa					
Rare earth compounds (a)	£137 000	£339 000	£665 000	£592 000	£1 038 000
Canada					
Cerium compounds	311	303	369	394	510
Other rare earth compounds	255	649	180	108	154
USA					
Ores & concentrates	800	...	...	...	...
Cerium compounds	359	545	811	1 268	...
Other rare earth compounds	6 504	7 962	6 008	7 568	...
Ferro-cerium & other pyrophoric alloys	93	93	103	118	...
Metals	183	226	293	196	...
Brazil					
Cerium compounds	72	91	97	...	...
Other rare earth compounds	216	518	...	...	...
Metals	54	84	36	...	...

## Imports of Rare Earths

tonnes

Country	1990	1991	1992	1993	1994
Hong Kong					
Ferro-cerium & other pyrophoric alloys	228	189	...	...	...
Indonesia					
Rare earth compounds	26	11	16	...	...
Ferro-cerium & other pyrophoric alloys	...	...	104	31	...
Japan					
Cerium compounds	2 349	2 832	2 799	3 325	6 734
Other rare earth compounds	6 544	7 637	5 844	5 308	7 641
Metals	180	436	414	1 079	1 851
Korea, Republic of					
Cerium compounds	604	452	242	256	253
Other rare earth compounds	74	107	137	88	431
Ferro-cerium & other pyrophoric alloys	30	...	...	...	...
Metals	121	9	4	8	13
Malaysia					
Ores & concentrates	...	830	151	...	...
Saudi Arabia					
Ferro-cerium & other pyrophoric alloys	43	488	...	...	...
Taiwan					
Ores & concentrates	332	548	375	392	367
Rare earth compounds	340	442	469	917	2 086
Ferro-cerium & other pyrophoric alloys	34	32	24	18	50
Metals	56	52	87	152	97
Thailand					
Ferro-cerium & other pyrophoric alloys	70	73	80	100	...

Note(s):

(1) Rare earths are here taken to include yttrium and scandium

(a) Values shown are for the common customs area

(b) Data for the Federal Republic of Yugoslavia only

(c) As from 1992 data is for Serbia and Montenegro only

## Production of Salt

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Rock salt	1 102 000	1 635 000	*1 400 000	*1 200 000	*1 600 000
Brine salt	1 341 000	1 319 800	*1 300 000	*1 300 000	*1 300 000
Salt in brine (a)	3 991 000	3 874 000	3 401 103	4 075 543	*3 500 000
Denmark (m)	522 206	550 150	528 429	591 055	633 592
France					
Rock salt	*800 000	*800 000	103 000	116 000	120 000
Salt in brine	4 022 000	4 130 000	4 860 000	4 355 000	4 608 000
Sea salt	1 591 000	1 388 000	1 156 000	*1 200 000	950 000
Germany, Federal Republic of					
Rock salt	4 910 000	4 762 000	4 265 000	4 883 000	4 725 000
Brine salt	785 000	778 000	807 000	813 000	801 000
Salt in brine	5 242 186	5 161 212	5 293 737	4 889 018	5 006 060
Greece	182 470	128 845	*143 184	175 159	*100 000
Italy					
Rock salt & brine salt	3 752 003	3 503 891	3 365 946	2 490 000	2 502 000
Sea salt	700 000	700 000	610 000	580 000	...
Netherlands	3 653 000	3 417 000	3 628 000	*3 500 000	3 500 000
Portugal					
Rock salt	661 640	622 495	592 287	552 188	556 724
Sea salt	*125 000	*125 000	*125 000	...	...
Spain					
Rock salt	*2 200 000	*2 200 000	2 870 000	(1) 2 505 000	(1) 2 850 000
Sea salt	*900 000	*900 000	*900 000	...	...
Other salt	*100 000	*100 000	*100 000	...	...
Albania					
Rock salt	85 342	52 000	*5 000	*10 000	*10 000
Sea salt	151 157	...	...	...	...
Armenia	—	—	*100 000	*50 000	*40 000
Austria					
Rock salt	1 236	1 252	1 344	1 183	1 197
Salt in brine	288 000	280 000	*280 000	*256 000	*185 000
Evaporated salt	386 188	459 250	461 679	439 455	516 455
Azerbaijan	—	—	*50 000	*40 000	*30 000
Belarus	—	—	*360 000	*300 000	*250 000
Bosnia & Herzegovina	—	—	*70 000	*50 000	*50 000
Bulgaria	93 000	*90 000	*90 000	*80 000	*80 000
Croatia	—	—	28 585	29 643	21 655
Czechoslovakia	76 140	77 316	...	—	—
Czech Republic	—	—	—	*75 000	*75 000
Finland	9 023	5 187	8 781	7 112	...
German Democratic Republic	*2 600 000	—	—	—	—
Poland					
Rock salt	556 000	556 000	582 000	719 000	*800 000
Other salt	3 499 000	3 284 000	3 305 000	3 075 000	3 274 000
Romania	4 262 000	3 255 000	2 556 000	2 185 800	*2 400 000
Russia	—	—	*4 000 000	*3 500 000	*3 500 000
Slovakia	—	—	—	*70 000	*70 000
Slovenia	—	—	*8 000	*8 000	*8 000
Soviet Union	14 700 000	14 000 000	—	—	—
Switzerland	209 812	302 173	228 756	220 901	*220 000
Turkey					
Rock salt	76 340	80 929	86 321	153 854	...
Sea salt	504 160	467 460	511 671	539 603	...
Other salt	1 308 462	889 662	819 632	832 483	(1) *1 400 000
Ukraine	—	—	*4 400 000	*4 200 000	*3 500 000
Yugoslavia (n)					
Rock salt	99 747	(p) *130 000	—	—	—
Sea salt	71 345	(p) *50 000	46 945	38 867	32 000
Other salt	204 213	(p) *217 000	—	—	—

## Production of Salt

tonnes

Country	1990	1991	1992	1993	1994
Algeria					
Brine salt & sea salt	222 000	207 000	180 000	179 000	*180 000
Angola	*70 000	*70 000	*70 000	*70 000	*70 000
Botswana	—	2 600	53 708	98 000	186 000
Cape Verde Islands	1 140	*1 500	1 310	1 718	3 056
Egypt (j)	1 013 230	673 100	794 980	1 118 820	1 007 495
Ethiopia (d)	*180 000	*170 000	*180 000	*180 000	*180 000
Ghana	*50 000	*50 000	*50 000	*50 000	*50 000
Kenya	102 100	72 449	29 490	15 517	*15 000
Libya	*12 000	*12 000	*12 000	*12 000	*12 000
Madagascar	*55 000	*50 000	*50 000	*50 000	*50 000
Mali	*5 000	*5 000	*5 000	*5 000	*5 000
Mauritania	*5 500	*5 400	*5 400	*6 000	*6 000
Mauritius (c)	7 000	7 000	7 000	*7 000	7 000
Morocco	158 530	143 921	164 528	170 000	177 428
Mozambique	*40 000	*40 000	*40 000	*40 000	*40 000
Namibia	157 224	141 368	120 835	132 585	356 965
Senegal	90 800	60 700	110 000	117 400	*117 000
Somalia	*1 500	*500	*1 000	*1 000	*1 000
South Africa	728 110	664 624	701 991	613 301	414 463
Sudan	95 000	75 000	*75 000	*75 000	*750 000
Tanzania	39 315	64 419	77 281	83 400	84 289
Tunisia (c)	402 000	431 000	460 000	435 000	*435 000
Bahamas (k)	1 140 143	1 319 713	*1 000 000	*1 000 000	...
Canada					
Rock salt	7 749 239	8 731 370	7 984 369	8 025 899	(l) 11 497 000
Other salt (e)	3 511 723	3 261 720	3 187 024	2 899 767	...
Costa Rica	*40 000	*50 000	*50 000	*45 000	*45 000
Cuba	*200 000	*200 000	*185 000	*185 000	*175 000
Dominican Republic	11 339	*11 400	*12 000	*12 000	*10 000
El Salvador (c)	31 584	30 351	21 573	*22 000	*22 000
Guatemala (c)	43 600	42 500	46 200	...	...
Honduras	*30 000	*30 000	*30 000	*30 000	*25 000
Mexico	7 135 121	7 532 421	7 395 152	7 490 820	7 458 414
Netherlands Antilles (k)	190 057	252 237	370 503	*300 000	*350 000
Nicaragua (c)	*15 000	*15 000	*15 000	*15 000	*15 000
Panama (c)	22 206	25 903	31 045	18 560	*20 000
USA (f)					
Rock salt	13 055 000	11 064 000	10 911 000	13 401 000	14 900 000
Salt in brine	17 724 000	18 640 000	17 571 000	*18 100 000	18 000 000
Evaporated salt	6 136 000	6 198 000	6 302 000	6 670 000	6 560 000
Argentina	833 578	943 198	952 205	1 033 804	*1 000 000
Brazil					
Rock salt	1 032 996	1 206 962	1 230 608	*1 250 000	*1 250 000
Sea salt	4 170 000	3 703 000	4 030 000	*4 000 000	*4 000 000
Chile	1 834 971	1 676 253	1 671 681	1 443 250	3 177 898
Colombia					
Rock salt	208 697	218 736	230 000	230 685	*230 000
Sea salt	478 150	482 360	317 033	169 370	*170 000
Peru	*200 000	*200 000	238 244	175 007	97 212
Venezuela (c)	430 000	293 386	312 700	*370 000	*400 000
Afghanistan (g)	*10 000	*12 000	*12 000	*13 000	*13 000
Bangladesh (j)	217 000	400 000	720 000	...	...
Cambodia	*40 000	*40 000	*40 000	*40 000	*40 000
China	20 230 000	24 100 000	28 380 000	29 426 400	*30 000 000
India					
Rock salt	*2 700	*2 700	*2 700	*2 000	*3 000
Sea salt	*9 500 000	*9 500 000	*9 500 000	*9 500 000	*9 500 000
Indonesia	*600 000	*610 000	*630 000	*650 000	650 000
Iran (g)	848 098	1 066 010	1 017 627	988 695	*1 050 000
Iraq	*250 000	*120 000	*250 000	*300 000	*300 000
Israel	426 000	1 115 000	*605 000	1 123 000	1 120 000
Japan (i)	1 377 300	1 380 000	1 405 000	1 381 000	1 390 000
Jordan (b)	55 000	5 000	15 000	10 000	19 000

**Production of Salt**

tonnes

Country	1990	1991	1992	1993	1994
Korea, Dem. P.R. of	*580 000	*580 000	*590 000	*590 000	*600 000
Korea, Republic of	616 681	*695 804	771 937	*750 000	*760 000
Kuwait	25 487	—	800	40 863	*30 000
Laos	*8 000	*8 000	*8 000	*8 000	*8 000
Lebanon	*3 000	*3 000	*3 000	*3 000	*3 000
Mongolia	*17 000	*17 000	*17 000	*18 000	*18 000
Myanmar (b) (c) (h)	*260 000	*260 000	*260 000	*260 000	*260 000
Pakistan					
Rock salt	763 046	769 051	832 000	895 098	907 000
Sea salt	*13 782	12 494	10 000	14 152	*13 000
Philippines	490 407	492 859	495 816	535 481	*540 000
Sri Lanka	53 088	52 938	121 875	43 344	*50 000
Syria	127 172	74 000	84 000	113 000	*127 000
Taiwan	82 820	195 319	25 732	176 298	185 987
Thailand					
Rock salt	119 179	124 500	212 750	262 000	*230 000
Other salt	*100 000	*100 000	*100 000	*100 000	100 000
Vietnam	543 300	*550 000	*550 000	...	...
Yemen, Republic of (o)	143 400	115 800	107 000	*110 000	*110 000
Australia	7 227 000	7 737 000	7 693 000	7 553 000	7 685 000
New Zealand	80 000	*80 000	*80 000	*80 000	*80 000
World total	180 200 000	179 700 000	175 500 000	177 900 000	183 500 000

## Note(s):

- (1) This table does not include production of refined salt  
(2) Salt is known to be produced in many countries for which statistics are not available. Among these are Martinique, Nigeria and Turkmenistan

- (a) Used for purposes other than salt-making  
(b) Brine salt  
(c) Sea salt  
(d) Years ended 6 July of that stated  
(e) Including salt in brine  
(f) Sold or used by producers  
(g) Years ended 20 March following that stated  
(h) Years ended 31 March following that stated  
(i) Government licensed plants  
(j) Years ended 30 June of that stated  
(k) Exports  
(l) Salt; all forms  
(m) Sales  
(n) As from 1992 data is for Serbia and Montenegro only  
(o) Yemen Arab Republic and People's Dem. Rep. of Yemen were unified on 22 May 1990 as the Republic of Yemen  
(p) Excluding data from August to December for the Republic of Croatia



## Exports of Salt

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	325 542	198 613	182 572	296 689	222 700
Belgium-Luxembourg	81 418	89 171	72 498	212 140	...
Denmark	305 011	301 911	312 946	332 818	345 531
France	936 060	799 506	486 013	465 211	598 955
Germany, Federal Republic of	2 167 794	3 315 346	3 107 795	2 373 780	...
Irish Republic	1 554	1 701	511	...	...
Italy	170 784	224 277	374 201	243 828	...
Netherlands	2 662 295	3 085 450	3 025 690	2 330 797	...
Portugal	28 454	18 436	19 189	8 258	...
Spain	78 718	109 360	228 618	309 852	...
Albania	46 000	...	...	...	...
Croatia	—	—	6 418	2 950	...
Norway	2 309	2 027	2 093	3 439	4 357
Poland	290 533	233 903	249 214	...	...
Romania	(a) *581 500	(a) *418 900	295 953	247 099	...
Soviet Union	344 678	...	—	—	—
Sweden	1 985	1 478	1 575	4 133	...
Switzerland	526	4 060	7 737	10 932	22 969
Turkey	2 368	31 316	7 901	6 079	4 409
Algeria	11 647	16 160	...	...	...
Egypt	...	122 316	208 106	280 431	...
Kenya	37 224	...	48 533	...	...
Madagascar	8 141	10 387	7 768	...	...
Morocco	4 959	4 002	12 388	25 500	...
Namibia	153 371	103 312	73 164	60 680	61 932
Senegal	110 139	119 404	...	...	...
South Africa	91 049	56 169	50 337	19 262	5 086
Tunisia	399 488	350 048	343 463	286 250	...
Bahamas	1 141 914	1 319 713	...	...	...
Canada	1 912 161	2 783 021	2 632 613	3 105 598	3 639 220
Jamaica	3 793	2 751	5 620	3 879	3 843
Mexico	5 722 364	6 133 227	6 371 223	...	...
Netherlands Antilles	190 057	252 237	370 503	...	...
USA	2 266 152	1 816 635	1 003 655	699 606	...
Argentina	191 290	19 598	37 428	61 072	...
Brazil	12 196	56 883	43 994	187 401	...
Chile	1 201 421	1 012 187	930 061	1 168 034	2 985 664
Colombia	21 592	14 666	18 574	2 480	...
Abu Dhabi	3 048	3 419	2 063	3 062	...
China	480 974	212 403	151 709	200 580	...
Hong Kong (c)	6 151	7 009	6 220	6 216	8 702
India (b)	403 882	406 164	332 681	481 949	...
Indonesia	501	14 594	14 382	1 425	...
Iran (e)	44 442	64 948	39 446	83 994	...
Israel (a)	*18 100	*26 200	*87 100	*129 700	...
Japan	1 320	1 509	1 349	1 463	1 503
Jordan	13 090	8 633	6 212	908	...
Korea, Republic of	40 464	59 621	3 733	240	931
Malaysia	1 508	1 628	4 489	5 586	...
Pakistan (d)	22 644	18 249	30 418	29 992	...
Saudi Arabia	3 831	1 849	3 544	...	...
Singapore	16 084	13 628	10 808	11 304	12 112
of which: Re-exports	14 436	12 911	10 310	10 691	10 662
Taiwan	8 000	9 000	2 060	134	86
Thailand	31 091	55 375	76 922	91 014	...

**Exports of Salt**

tonnes

Country	1990	1991	1992	1993	1994
Australia	6 466 000	7 061 000	7 027 000	6 983 000	7 260 000
New Zealand (d)	3 055	4 095	6 212	9 699	13 299

(a) BGS estimates, based on known imports into certain countries

(b) Years ended 31 March following that stated

(c) Re-exports

(d) Years ended 30 June of that stated

(e) Years ended 20 March following that stated

## Imports of Salt

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	166 797	164 101	171 520	181 388	229 125
Belgium-Luxembourg	960 257	998 749	1 148 139	1 032 334	...
Denmark	128 161	193 426	131 201	213 545	382 222
France	182 412	198 176	226 382	205 939	308 881
Germany, Federal Republic of	764 171	929 790	1 141 388	1 041 907	...
Greece	75 299	71 312	43 249	91 063	...
Irish Republic	121 234	130 311	106 054	63 118	...
Italy	680 046	576 459	568 014	535 734	...
Netherlands	264 166	424 538	400 314	268 878	...
Portugal	104 417	75 943	76 216	58 447	...
Spain	199 198	95 456	29 832	23 403	...
Bulgaria (a)	...	*38 000	*38 000	*40 000	...
Croatia	—	—	76 463	64 693	...
Czechoslovakia (a)	...	*570 300	*696 200	—	—
Czech Republic (a)	—	—	—	*166 500	...
Faeroe Islands	15 993	20 234	16 680	10 644	...
Finland	686 355	477 639	432 500	377 057	...
Greenland	5 024	3 914	3 338	2 889	...
Hungary	471 362	...	432 247	431 306	464 159
Iceland	90 765	68 650	62 756	56 842	88 801
Malta	1 872	2 093	2 960	2 036	...
Norway	511 753	557 491	578 360	618 282	735 202
Slovenia	—	—	56 776	53 100	...
Sweden	932 959	894 245	960 099	1 018 041	...
Switzerland	3 162	3 238	3 170	2 941	3 037
Turkey	18 072	5 352	25 584	24 709	17 690
Yugoslavia (e)	251 300	(d) 127 917	139 509	...	...
Benin	7 942	...	3 192	...	...
Burkina Faso	23 890	...	...	...	...
Burundi	7 843	17 461	5 455	...	...
Cameroon	57 025	...	...	...	...
Central African Republic	2 700	3 887	...	...	...
Congo	23 000	3 758	6 856	7 621	...
Gabon	5 162	...	...	...	...
Mauritius	598	1 292	992	...	...
Morocco	42	2 845	2 776	...	...
Reunion	2 599	2 805	2 738	...	...
Rwanda	17 629	...	...	...	...
Seychelles	460	353	...	...	...
South Africa	51 889	86 899	63 606	193 000	108 461
Togo	15 415	17 442	...	...	...
Uganda	...	42 175	54 503	...	...
Zambia	885	...	...	...	...
Zimbabwe	54 415	59 381	46 477	...	...
Bahamas	5 122	1 229	...	...	...
Barbados	...	2 676	1 956	1 942	...
Belize	760	694	947	699	...
Canada	2 095 067	1 202 752	1 045 908	1 010 444	940 130
Costa Rica	4 819	4 045	235	...	...
Dominica	732	872	696	...	...
El Salvador	3 301	4 937	2 626	1 394	...
Grenada	496	425	...	...	...
Guadeloupe	2 042	2 333	2 413	2 112	2 476
Guatemala	893	2 891	518	...	...
Jamaica	15 162	26 075	20 740	22 168	11 659
Martinique	2 594	2 542	2 377	2 578	2 494
Mexico	37 247	81 205	70 935	111 817	...
Netherlands Antilles	627	604	543	...	...
Panama	663	1 098	1 303	1 081	...
St. Lucia	712	861	655	624	617
St. Pierre & Miquelon	1 992	2 355	1 809	1 183	...
Trinidad & Tobago	16 863	13 893	14 395	9 646	...
USA	5 969 601	6 161 315	5 503 547	5 867 948	...

**Imports of Salt**

tonnes

Country	1990	1991	1992	1993	1994
Brazil	254 657	59 112	55 325	83 089	...
French Guiana	542	497	538	436	...
Paraguay	1 125	1 329	2 552	4 150	...
Suriname	2 885	2 624	...	...	...
Uruguay	67 816	75 052	51 504	87 288	...
Venezuela	38 002	96 311	117 947	285 832	...
Abu Dhabi	1 627	999	1 188	3 392	...
Bahrain	2 418	2 485	...	3 284	...
Bangladesh (b)	116 985	300 352	363 487	42 592	...
China	11 257	8 656	37 608	4 984	...
Cyprus	5 250	6 642	9 468	8 844	7 687
Hong Kong	148 674	143 578	138 847	126 520	126 745
India (c)	18 215	14 558	18 317	18 518	...
Indonesia	349 042	330 107	320 446	488 246	...
Japan	7 920 433	7 854 886	7 686 928	7 344 495	7 457 918
Korea, Dem. P.R. of (a)	*249 100	*118 600	*81 300	*89 900	...
Korea, Republic of	1 080 843	1 275 010	1 421 948	1 504 489	1 493 466
Kuwait	3 550	1 945	4 994	8 499	...
Macao	3 571	2 745	2 726	...	...
Malaysia	...	227 084	171 808	191 656	...
Oman	17 562	18 610	12 934	6 815	...
Philippines	111 265	80 931	78 673	67 825	...
Qatar	3 157	5 805	3 726	5 529	...
Saudi Arabia	16 739	12 662	18 875	...	...
Singapore	87 370	70 482	65 871	73 852	74 129
Taiwan	942 384	855 840	943 998	887 048	788 231
Thailand	828	934	760	686	...
Australia	7 232	6 051	7 144	9 034	...
Fiji	...	3 835	...	...	...
New Caledonia	551	773	713	795	849
New Zealand (b)	64 397	14 248	23 487	52 038	76 433
Solomon Islands	815	1 448	...	926	1 517

(a) BGS estimates, based on known exports from certain countries

(b) Years ended 30 June of that stated

(c) Years ended 31 March following that stated

(d) Data for the Federal Republic of Yugoslavia only

(e) As from 1992 data is for Serbia and Montenegro only

## Production of Sillimanite Minerals

tonnes

Country	1990	1991	1992	1993	1994
France					
Andalusite	*50 000	*50 000	*50 000	*45 000	*50 000
Spain					
Andalusite	*3 600	*3 600	*3 600	*3 000	*3 500
Czechoslovakia (e)	*75 000	*75 000	*70 000	...	...
Romania	*70 000	*70 000	*65 000	*60 000	...
Soviet Union (f)					
Kyanite (a)	*100 000	*100 000	*95 000	*95 000	...
South Africa					
Andalusite	283 677	209 824	230 333	187 708	206 291
Sillimanite	256	422	632	569	525
Zimbabwe					
Kyanite	160	2 463	1 990	875	*1 000
USA					
Kyanite (b)	*100 000	*85 000	*85 000	*85 000	*90 000
Brazil					
Kyanite (d)	642	265	440	*500	*500
China	*2 500	*2 500	*2 500	*2 500	*2 500
India					
Kyanite	38 851	30 020	10 100	11 400	*12 000
Sillimanite	18 240	11 757	18 800	14 900	*15 000
Australia					
Kyanite	*750	*800	*800	*800	*800
Sillimanite (c)	*100	*100	*100	*100	*100
World total	744 000	642 000	634 000	577 000	607 000

## Note(s):

- (1) In addition to the countries listed above as producing sillimanite minerals, synthetic mullite is known to be produced in Denmark, France, Hungary, Japan, former Yugoslavia, United Kingdom and the USA
- (a) May include other sillimanite minerals  
(b) Including related minerals  
(c) Excluding sillimanite clay  
(d) Including beneficiated and directly shipped material  
(e) Dissolved 31 December 1992. No information is available on which to estimate for individual countries  
(f) Dissolved in December 1991. No information is available on which to estimate for individual countries

**Exports of Sillimanite Minerals**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Sillimanite minerals	4 816	3 156	3 007	8 655	5 105
Belgium-Luxembourg					
Sillimanite minerals	52	147	142	118	...
Denmark					
Sillimanite minerals	—	17	—	160	41
France					
Sillimanite minerals	47 654	43 301	46 641	...	47 887
Germany, Federal Republic of					
Sillimanite minerals	12 920	9 979	13 175	8 800	...
Italy					
Sillimanite minerals	...	725	403	...	...
Netherlands					
Sillimanite minerals	1 364	2 207	3 342	4 059	...
Sweden					
Sillimanite minerals	3 623	2 365	933	82	...
South Africa					
Andalusite	148 360	124 081	156 521	127 299	139 844
Sillimanite	368	740	480	560	678
USA					
Kyanite & related minerals	33 211	32 073	37 763	*35 000	...
Japan					
Sillimanite minerals	5 159	5 512	6 903	6 757	5 255

Note(s):

(1) In this table 'Sillimanite minerals' is understood to include any or all of andalusite, kyanite, sillimanite and mullite

## Imports of Sillimanite Minerals

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Sillimanite minerals	58 219	51 390	53 597	53 994	61 893
Belgium-Luxembourg					
Sillimanite minerals	9 712	7 057	10 613	8 003	...
Denmark					
Sillimanite minerals	2 143	1 677	1 595	2 351	1 234
France					
Sillimanite minerals	8 098	7 333	7 347	...	7 161
Germany, Federal Republic of					
Sillimanite minerals	126 436	98 358	101 634	72 224	...
Italy					
Sillimanite minerals	26 792	22 554	21 897	...	...
Netherlands					
Sillimanite minerals	6 278	6 988	6 650	6 632	...
Spain					
Sillimanite minerals	17 857	12 287	12 916	19 170	...
Austria					
Sillimanite minerals	2 534	2 230	2 775	2 409	3 346
Finland					
Sillimanite minerals	1 623	1 091	1 420	2 081	...
Norway					
Sillimanite minerals	450	2 452	2 523	2 849	2 660
Sweden					
Sillimanite minerals	965	962	1 978	2 806	...
Switzerland					
Sillimanite minerals	754	379	402	475	363
Turkey					
Sillimanite minerals	...	...	...	5 426	7 101
Yugoslavia (c)					
Sillimanite minerals	1 485	(a) 463	147	...	...
Canada					
Sillimanite minerals	6 245	6 358	8 252	9 014	8 809
Mexico					
Sillimanite minerals	1 747	2 383	2 521	...	...
Mullite	2 231	2 201	2 615	...	...
USA					
Sillimanite minerals	18 104	5 601	7 550	12 992	*9 000
Hong Kong					
Sillimanite minerals	...	...	157 360	97 381	28 151
Japan					
Sillimanite minerals	34 825	27 351	32 146	26 606	27 067
Mullite	9 489	12 336	8 595	6 304	6 148
Korea, Republic of					
Sillimanite minerals	12 994	11 768	6 356	9 120	10 582
Mullite	4 919	5 944	9 354	6 720	4 895
Taiwan					
Sillimanite minerals	4 229	4 594	4 953	5 077	6 580
Mullite	15 788	16 101	1 418	2 232	1 071
Australia					
Sillimanite minerals (b)	4 168	5 822	13 890	26 226	...

Note(s):

(1) In this table 'Sillimanite minerals' is understood to include any or all of andalusite, kyanite, sillimanite and mullite

(a) Data for the Federal Republic of Yugoslavia only

(b) Years ended 30 June of that stated

(c) As from 1992 data is for Serbia and Montenegro only

**Mine Production of Silver**

kilograms (metal content)

Country	1990	1991	1992	1993	1994
United Kingdom	2 695	565	—	—	—
France	22 190	28 450	14 500	10 100	858
Germany, Federal Republic of	8 000	7 200	1 800	1 800	1 800
Greece	62 600	70 200	61 900	53 500	44 900
Irish Republic	8 800	10 500	13 100	13 000	17 400
Italy	14 000	13 600	12 000	5 000	13 700
Portugal	722	43 820	39 454	36 000	31 800
Spain	270 000	180 000	160 000	180 000	132 000
Bulgaria	*54 000	*37 300	*33 000	*30 000	*29 000
Croatia	—	—	*800	*500	*1 000
Czechoslovakia	*26 000	*28 000	*20 000	—	—
Finland	28 989	26 643	6 277	507	26 100
German Democratic Republic	20 000	—	—	—	—
Greenland	9 200	—	—	—	—
Macedonia	—	—	16 393	8 650	12 978
Poland	832 000	899 000	798 000	915 000	1 061 000
Romania	*24 000	*17 000	*17 000	*18 000	18 000
Russia	—	—	*800 000	*700 000	*800 000
Soviet Union	*1 380 000	*1 270 000	—	—	—
Sweden	242 685	239 321	210 319	255 257	276 042
Turkey	26 500	48 000	92 000	64 000	*60 000
Yugoslavia (a) (d)	105 300	(c) 92 000	66 420	25 144	*18 000
Algeria	*2 000	*3 500	*3 500	*3 000	*3 000
Ghana	1 100	1 200	1 200	1 200	*1 200
Morocco	241 108	296 075	213 286	309 155	327 539
Namibia	91 635	91 900	89 000	71 617	62 224
South Africa	160 719	171 555	182 723	192 418	195 754
Tunisia	*1 000	*1 000	*1 000	*1 000	*1 000
Zaire	84 000	*50 000	*35 000	*10 000	...
Zambia	18 500	14 200	18 300	18 100	*14 000
Zimbabwe	21 151	19 380	16 930	12 004	10 942
Canada	1 501 451	1 338 799	1 215 388	895 837	774 506
Dominican Republic	22 861	21 955	14 878	1 664	9 290
Honduras	30 866	42 033	35 353	24 171	27 634
Mexico	2 351 561	2 223 647	2 317 382	2 415 805	2 334 181
Nicaragua	1 030	1 543	2 271	2 236	2 628
USA	2 121 000	1 855 000	1 804 000	1 645 000	1 480 500
Argentina	82 657	69 959	45 374	42 743	38 056
Bolivia	310 543	337 010	282 350	332 768	352 083
Brazil	*60 000	*50 000	*50 000	52 500	52 500
Chile	654 603	676 339	1 024 823	970 068	959 210
Colombia	6 631	8 037	8 292	7 328	5 817
Peru (b)	1 761 700	1 769 700	1 613 900	1 630 600	1 666 400
China	150 000	180 000	200 000	220 000	225 000
India	32 200	31 900	47 000	51 000	*52 000
Indonesia	66 723	67 989	99 904	90 285	105 961
Iran	*38 000	*47 500	*60 000	*50 000	*60 000
Japan	149 920	170 676	178 330	136 886	133 713
Kazakhstan	—	—	*900 000	*600 000	408 400
Korea, Dem. P.R. of	*280 000	*300 000	*280 000	*250 000	*200 000
Korea, Republic of	16 400	3 100	4 723	4 712	8 600
Malaysia	12 556	13 440	15 325	14 008	13 342
Mongolia	21 200	*16 000	*18 000	*20 000	*21 000
Myanmar (a)	6 128	5 257	4 790	*2 395	5 600
Oman	10 300	8 700	6 900	2 900	4 700
Philippines	47 111	39 069	30 878	32 466	29 300
Saudi Arabia	16 237	16 175	16 410	17 780	17 200
Taiwan	3 926	—	—	—	—
Thailand	*20 500	*20 000	*10 000	*11 000	*10 000



**Mine Production of Silver**

kilograms (metal content)

Country	1990	1991	1992	1993	1994
United Kingdom	2 695	565	—	—	—
Australia	1 173 000	1 180 000	1 218 000	1 092 000	1 045 000
Fiji	775	485	1 255	1 112	1 406
New Zealand	4 914	11 371	22 413	25 797	*25 000
Papua New Guinea	114 543	124 484	95 498	96 095	77 800
World total	14 828 000	14 291 000	14 547 000	13 674 000	13 317 000

- (a) Smelter and/or refinery production
- (b) Recoverable
- (c) Excluding data from August to December for the Republic of Croatia
- (d) As from 1992 data is for Serbia and Montenegro only

**Exports of Silver**

kilograms

Country	1990	1991	1992	1993	1994
United Kingdom					
Metal	2 847 757	1 873 934	1 516 073	2 205 005	2 103 029
Belgium-Luxembourg					
Metal	1 283 609	1 149 307	1 545 299	923 450	...
Denmark					
Metal	43 220	41 215	34 579	19 712	13 565
of which: Re-exports	37 420	36 091	26 133	...	...
France					
Metal	1 015 259	1 098 455	748 796	...	916 209
Waste & scrap	269 666	213 990	208 346	...	...
Germany, Federal Republic of					
Metal	1 817 287	1 431 971	1 107 127	1 258 687	...
Greece					
Metal	2	336	...	...	...
Italy					
Metal	357 700	479 315	313 216	262 500	...
Netherlands					
Metal	105 970	95 918	82 069	79 976	...
Portugal					
Metal	426	6 000	7 000	2 397	...
Spain					
Metal	192 024	280 485	274 860	275 601	...
Austria					
Metal	50 403	144 442	108 725	47 698	45 608
Finland					
Metal	26 000	25 000	26 000	45 000	...
German Democratic Republic					
Metal (d)	*138 900	—	—	—	—
Norway					
Metal	33 339	33 633	54 832	55 992	77 286
Poland					
Metal	678 000	931 000	...	...	...
Russia					
Metal (d)	—	—	*29 900	*25 600	...
Sweden					
Metal	297 000	306 000	296 000	313 000	...
Switzerland					
Metal	1 767 463	2 376 014	2 495 963	2 512 270	2 382 396
Yugoslavia (g)					
Metal	74 000	(f) 35 000	11 000	...	...
Morocco					
Metal	201 024	199 542	150 000	...	...
Namibia					
Metal	90 325	89 000	90 000	72 000	62 000
South Africa					
Metal	158 773	130 260	181 493	166 019	178 525
Canada					
Ores & concentrates (e)	620 147	509 095	408 841	226 773	142 129
Metal	1 269 762	994 267	1 053 700	1 084 423	1 102 547
Dominican Republic					
Metal	22 861	21 955	14 878	1 664	9 290
Honduras					
Concentrates (e)	30 866	42 033	35 353	24 171	27 634
Mexico					
Ores & concentrates	2 374 656	2 002 569	2 864 110	1 912 013	...
Metal	1 904 028	1 760 000	1 552 000	...	...
USA					
Ores & concentrates (b)	21 929	229	8 505	2 269	196
Metal	922 921	1 472 712	1 430 485	...	...
Waste & scrap	1 258 484	837 440	769 187	891 693	1 208 895

## Exports of Silver

kilograms

Country	1990	1991	1992	1993	1994
Bolivia					
Ores & concentrates	1 232 102	769 016	*1 487 000	2 744 608	*2 350 000
Metal	46 376	41 353	42 242	97 637	86 536
Chile					
Metal	439 536	426 657	697 638	602 047	624 149
Peru					
Metal	496 000	519 400	625 200	575 400	581 600
Venezuela					
Metal	61 513	52 328	47 336	57 296	...
China					
Metal	7 153	11 721	34 134	12 692	...
Hong Kong					
Metal	31 126	55 009	67 240	70 372	86 187
of which: Re-exports	30 769	54 969	65 307	69 918	85 999
Waste & scrap	31 576	1 448	—	—	—
of which: Re-exports	31 114	1 447	—	—	—
Japan					
Metal	153 660	205 795	421 234	214 059	222 401
Waste & scrap	12 000	7 717	2 849	19 418	12 274
Kazakhstan					
Metal (d)	—	—	...	*606 500	*507 900
Korea, Dem. P.R. of					
Metal (d)	*24 400	*17 400	*12 300	*1 000	...
Korea, Republic of					
Metal	100 411	79 700	200 161	108 033	151 937
Malaysia					
Metal	...	8 451	1 074	13 354	...
Myanmar (c)					
Metal	4 852	3 826	2 244	...	...
Philippines					
Ores & concentrates (b)	27 270	21 096	18 185	...	...
Metal	1 104	—	19 889	...	...
Singapore					
Metal	136 782	125 636	258 126	258 208	566 727
of which: Re-exports	135 679	121 948	237 172	247 152	553 077
Taiwan					
Metal	740	941	1 619	3 664	4 979
Australia					
Metal (a)	225 989	235 092	250 203	234 035	...
New Zealand (a)					
Metal	12 688	10 278	1 208	762	3 727
Papua New Guinea					
Metal	114 543	124 484	95 498	96 095	...

## Note(s):

- (1) This table excludes silver coin but includes silver shipped for minting  
(2) In this table the term 'metal' includes both unwrought and partly worked silver and alloys

- (a) Years ended 30 June of that stated  
(b) Ag content  
(c) Years ended 31 March following that stated  
(d) BGS estimates, based on known imports into certain countries  
(e) Ag content of all ores and concentrates  
(f) Data for the Federal Republic of Yugoslavia only  
(g) As from 1992 data is for Serbia and Montenegro only

**Imports of Silver**

kilograms

Country	1990	1991	1992	1993	1994
United Kingdom					
Metal	708 813	1 216 043	1 416 753	1 344 357	1 582 563
Belgium-Luxembourg					
Ores & concentrates	145 700	609 000	—	490 100	...
Metal	895 133	872 042	1 324 264	1 442 804	...
Denmark					
Metal	114 601	104 658	93 481	110 757	113 409
France					
Metal	941 867	976 214	922 167	...	1 175 202
Waste & scrap	320 519	353 886	100 352	...	...
Germany, Federal Republic of					
Metal	1 656 536	1 553 968	1 299 915	903 944	...
Greece					
Metal	98 830	85 703	95 000	86 000	...
Italy					
Metal	1 173 900	1 518 320	2 746 293	891 100	...
Netherlands					
Metal	157 741	142 552	121 575	106 248	...
Portugal					
Metal	104 673	111 000	131 000	77 631	...
Spain					
Ores & concentrates	283 000	912 000	472 000	371 000	...
Metal	1 041 478	1 304 167	698 885	302 491	...
Austria					
Metal	117 967	172 198	128 352	103 657	153 157
Bulgaria					
Metal (f)	*1 100	*9 500	*5 800	*10 500	...
Croatia					
Metal	—	—	£338 000	£358 000	...
Czechoslovakia					
Metal (f)	*13 600	*12 600	*8 800	—	—
Czech Republic					
Metal (f)	—	—	—	*5 300	...
Estonia					
Metal (f)	—	—	*16 100	*23 000	...
Faeroe Islands					
Metal	112	144	152	...	...
Finland					
Metal	149 000	77 000	125 000	89 000	...
German Democratic Republic					
Metal (f)	*241 200	—	—	—	—
Iceland					
Metal	532	700	604	...	...
Malta					
Metal	1 367	1 674	1 886	1 805	...
Norway					
Metal	81 111	49 247	82 522	80 638	95 821
Slovenia					
Metal (f)	—	—	*3 900	*3 600	...
Sweden					
Metal	249 000	142 000	171 000	175 000	...
Switzerland					
Metal	2 045 272	2 563 258	2 371 942	1 958 699	2 133 101
Turkey					
Metal (b)	68 000	30 000	12 887	13 660	12 317
Yugoslavia (c)					
Metal	11 000	(d) 1 000	0	...	...
Algeria					
Metal	6 870	...	...	...	...
Morocco					
Metal	1 064	11 286	...	...	...
South Africa					
Metal	14 113	16 021	103 281	18 673	16 783
Tunisia					
Metal	4 486	5 622	...	...	...

## Imports of Silver

kilograms

Country	1990	1991	1992	1993	1994
Canada					
Ores & concentrates (g)	338 923	163 335	183 024	173 255	158 980
Metal	110 734	152 633	162 059	258 453	175 330
Costa Rica					
Metal	868	339	877	...	...
Jamaica					
Metal	75	21	285	129	375
Panama					
Metal	1 423	1 670	1 709	2 396	...
Trinidad & Tobago					
Metal	773	504	...	...	...
USA					
Metal	2 766 020	2 690 038	3 228 346	2 556 336	*2 500 000
Waste & scrap	507 649	1 451 874	1 765 448	1 272 486	1 071 689
Argentina					
Metal	4 801	2 857	8 051	5 035	24 568
Brazil					
Metal	242 297	125 772	86 256	...	...
Chile					
Metal	2 007	...	512	1 713	758
Colombia					
Metal	3 124	...	...	...	...
Venezuela					
Metal	1 318	12 453	9 731	20 055	...
Abu Dhabi					
Metal	2 681	4 277	379	2 673	...
China					
Metal	7 936	15 802	307 138	46 271	...
Cyprus					
Metal	14 227	11 174	17 185	9 287	11 478
Hong Kong					
Metal	130 021	239 980	158 628	300 495	157 682
India (a)					
Metal	21 035	34 528	39 820	53 550	...
Indonesia					
Metal	7 742	5 347	4 606	1 098	...
Israel					
Metal (f)	*33 100	*43 700	*48 600	*58 500	...
Japan					
Ores & concentrates	6 390 000	8 998 000	1 107 000	—	5 116 000
Metal	1 547 669	1 050 491	769 392	664 953	1 153 245
Waste & scrap	111 678	263 655	319 682	504 810	685 257
Jordan					
Metal	—	187	519	23	...
Korea, Republic of					
Metal	122 949	287 487	276 343	236 023	302 527
Malaysia					
Metal	111 746	59 614	28 588	...	...
Philippines					
Metal	753	777	1 440	...	...
Saudi Arabia					
Metal	4 835	4 911	9 000	...	...
Singapore					
Metal	1 119 919	734 866	1 302 244	1 976 291	902 527
Taiwan					
Metal	120 985	143 048	219 673	163 450	214 059
Thailand					
Metal	85 552	236 295	1 394 380	1 479 155	...

**Imports of Silver**

kilograms

Country	1990	1991	1992	1993	1994
Australia Metal (e)	913	137	262	243	...
New Zealand (e) Metal	37 351	29 274	28 667	41 850	51 946

## Note(s):

- (1) This table excludes silver coin but includes silver shipped for minting  
(2) In this table the term 'metal' includes both unwrought and partly worked silver and alloys

- (a) Years ended 31 March following that stated  
(b) Including gilt  
(c) As from 1992 data is for Serbia and Montenegro only  
(d) Data for the Federal Republic of Yugoslavia only  
(e) Years ended 30 June of that stated  
(f) BGS estimates, based on known exports from certain countries  
(g) Ag content of all ores and concentrates

## Production of Sulphur and Pyrites

tonnes (sulphur content)

Country		1990	1991	1992	1993	1994
United Kingdom						
Recovered (c)		80 700	60 100	53 900	61 200	...
Recovered (d)		138 000	143 000	177 000	202 000	200 000
Belgium						
Recovered (c) (d)		*310 000	*300 000	*300 000	*300 000	*300 000
Denmark						
Recovered (d)		12 118	6 264	6 982	10 357	7 131
France						
Recovered (d)		1 149 000	1 026 000	1 000 000	1 105 000	1 084 000
Germany, Federal Republic of						
Recovered (c)		282 000	198 000	23 000	*20 000	*20 000
Recovered (d)		858 000	905 258	1 016 000	*980 000	880 000
Recovered (e)		—	84 000	100 000	*100 000	*100 000
Greece						
Pyrites (45%)		41 347	35 332	31 395	*22 391	...
Recovered (d)		*140 000	*131 000	*125 000	*125 000	...
Italy						
Pyrites (43%)		310 243	211 782	174 000	145 000	...
Recovered (d)		*297 000	*280 000	*290 000	*300 000	...
Netherlands						
Recovered (c)		*125 000	*125 000	*125 000	*125 000	*125 000
Recovered (d)		285 000	*290 000	*290 000	*290 000	*290 000
Portugal						
Pyrites (44%)		44 820	5 669	*5 000	*5 000	*5 000
Recovered		*3 000	*4 000	*4 000	*4 000	*4 000
Spain						
Pyrites (47%)		748 000	580 000	555 000	408 000	436 000
Recovered (c) (d) (e)		*399 000	*359 000	*350 000	*360 000	...
Austria						
Recovered		*42 000	*26 000	*17 000	*17 000	...
Bulgaria						
Pyrites (42%)		*70 000	*60 000	*60 000	*50 000	*60 000
Recovered		*60 000	*50 000	*50 000	*50 000	*50 000
Croatia						
Recovered (c) (d)		—	—	*3 000	*3 000	*3 000
Czechoslovakia						
Pyrites (42%)		*50 000	*50 000	*50 000	—	—
Recovered		55 570	54 628	67 846	—	—
Sulphur ore		*6 000	*6 000	*6 000	—	—
Czech Republic						
Recovered		—	—	—	*20 000	...
Finland						
Pyrites (44%)		290 157	249 721	293 464	292 644	...
Recovered (c)		*237 000	*227 000	*225 000	*225 000	...
Recovered (d)		37 101	31 164	37 319	32 162	...
German Democratic Republic						
Recovered		*260 000	—	—	—	—
Hungary						
Pyrites		*1 000	*900	*900	*900	...
Recovered		*10 000	18 785	26 709	*28 552	30 890
Macedonia						
Recovered		—	—	*6 000	*6 000	*6 000
Norway						
Pyrites (50%)		149 435	159 499	124 637	43 779	809
Recovered (c) (d)		*90 000	*90 000	*90 000	*90 000	*90 000
Poland						
Frasch (g)		4 660 364	3 934 531	2 917 000	1 893 000	2 141 000
Recovered (c)		200 000	200 000	*200 000	*200 000	*200 000
Recovered (d)		28 000	28 000	*25 000	*25 000	*25 000
Anhydrite		*10 000	*10 000	*10 000	*10 000	*10 000
Romania						
Pyrites (42%)		*350 000	*350 000	*300 000	224 000	...
Recovered		*310 000	*250 000	*200 000	*200 000	...

**Production of Sulphur and Pyrites**

tonnes (sulphur content)

Country		1990	1991	1992	1993	1994
Russia						
Recovered (c)		—	—	*250 000	*200 000	...
Recovered (d)		—	—	*1 800 000	*1 800 000	*1 800 000
Sulphur ore		—	—	*100 000	*100 000	*100 000
Slovakia						
Pyrites	(42%)	—	—	—	*40 000	...
Soviet Union						
Pyrites	(46%)	*1 900 000	*1 700 000	—	—	—
Frasch		*1 000 000	*900 000	—	—	—
Recovered (c)		*1 200 000	*1 100 000	—	—	—
Recovered (d)		*2 925 000	*2 600 000	—	—	—
Sulphur ore		*2 000 000	*1 800 000	—	—	—
Sweden						
Pyrites	(48%)	120 873	42 790	17 828	—	—
Recovered (c)		*125 000	*125 000	*125 000	*125 000	...
Sulphur ore		41 930	37 961	52 998	...	...
Turkey						
Pyrites	(45%)	64 643	*59 000	*40 000	*33 000	...
Recovered (d) (e)		*21 000	*22 000	*22 000	*22 000	*22 000
Sulphur ore		25 618	*28 983	*21 000	*20 000	...
Ukraine						
Sulphur ore		—	—	*1 200 000	*1 000 000	...
Yugoslavia (i)						
Pyrites	(42%)	219 240	200 000	*3 000	*3 000	*3 000
Recovered (c) (d)		*178 000	*162 000	*131 000	*131 000	*131 000
Algeria						
Recovered (d)		*20 000	*20 000	*20 000	*20 000	*20 000
Egypt						
Recovered (d)		*2 500	*2 500	*2 500	*2 500	*2 500
Libya						
Recovered (d)		*14 000	*14 000	*14 000	*14 000	*14 000
Namibia						
Pyrites	(50%)	69 463	63 560	82 095	56 852	60 817
South Africa						
Pyrites	(48%)	451 584	292 539	296 200	322 714	*300 000
Recovered (c) (d) (h)		236 792	228 145	221 496	252 754	*200 000
Zaire						
Recovered (c)		*23 500	*16 000	*11 000	*7 000	...
Zambia (j)						
Pyrites	(42%)	30 063	33 300	32 300	*34 000	...
Recovered (c)		*71 000	*69 000	*75 000	*75 000	...
Zimbabwe						
Pyrites	(42%)	28 035	29 337	27 865	30 487	29 831
Recovered		*5 000	*5 000	*5 000	*5 000	*5 000
Canada						
Recovered (c)		899 000	872 000	931 000	897 000	990 000
Recovered (d)		6 873 495	6 937 884	*7 000 000	7 552 000	8 154 000
Cuba						
Recovered (d)		*5 000	*4 000	*5 000	*5 000	*5 000
Mexico						
Frasch		1 440 580	1 040 268	709 767	101 660	...
Recovered (c)		*290 000	*280 000	*280 000	*280 000	*270 000
Recovered (d)		701 113	754 097	775 216	810 000	876 000
Netherlands Antilles						
Recovered (d)		19 469	25 513	*25 000	...	...
Trinidad & Tobago						
Recovered (d)		*5 000	*5 000	*5 000	*5 000	*5 000
USA						
Pyrites (a)	(40%)	4 000	4 000	3 000	3 000	...
Frasch		3 726 000	2 869 000	2 320 000	*2 300 000	2 913 000
Recovered (c)		1 294 000	1 302 000	1 292 000	1 387 000	(k) *1 400 000
Recovered (d)		6 536 000	6 645 000	7 048 000	*7 200 000	7 188 000



## Production of Sulphur and Pyrites

tonnes (sulphur content)

Country	1990	1991	1992	1993	1994
Bolivia (f)					
Sulphur ore	2 101	2 795	15	—	252
Brazil					
Pyrites	51 859	71 903	42 866	...	...
Recovered (c)	165 891	163 576	184 057	175 000	211 000
Recovered (d)	58 322	46 826	58 513	*60 000	*50 000
Chile					
Recovered (c)	187 000	278 000	306 000	338 000	*500 000
Sulphur ore (b)	28 582	16 884	24 034	937	1000
Colombia					
Recovered (d)	*8 000	9 308	*9 200	8 800	*9 000
Sulphur ore	39 686	46 624	44 969	42 596	*43 000
Ecuador					
Recovered (d)	*10 000	*10 000	*10 000	*10 000	*10 000
Sulphur ore	*4 000	*4 000	*4 000	*4 000	*4 000
Peru					
Recovered (c)	*66 000	*66 000	*66 000	*66 000	*66 000
Venezuela					
Recovered (d)	105 760	82 855	*85 000	...	...
Abu Dhabi					
Recovered (d)	*90 000	*74 000	*224 000	*249 000	...
Bahrain					
Recovered (d)	*48 000	38 000	59 400	57 700	55 282
China					
Pyrites (45%)	4 400 000	4 940 000	4 500 000	5 329 000	5 300 000
Recovered	*650 000	*650 000	*650 000	*700 000	*650 000
Sulphur ore	*320 000	*320 000	*320 000	*261 800	...
India					
Pyrites (37%)	21 000	41 000	30 000	36 000	...
Recovered (c)	*125 000	*130 000	*130 000	*130 000	...
Recovered (d)	*10 000	*12 000	*13 000	*14 000	...
Indonesia					
Sulphur ore	3 628	*3 600	*3 600	*3 600	...
Iran					
Recovered (c)	*45 000	*50 000	*50 000	*50 000	...
Recovered (d)	*635 000	*650 000	*700 000	*750 000	*860 000
Iraq					
Frasch	*800 000	*250 000	*500 000	*600 000	...
Recovered (d)	*380 000	*50 000	*100 000	*200 000	...
Israel					
Recovered (d)	*64 000	*66 000	*60 000	*60 000	...
Japan					
Pyrites (49%)	53 363	30 000	31 000	29 000	...
Recovered (c) (g)	1 336 000	1 382 000	1 350 000	1 390 000	*1 500 000
Recovered (d)	1 268 000	1 244 000	1 250 000	1 250 000	...
Kazakhstan					
Sulphur ore	—	—	*200 000	*150 000	...
Korea, Dem. P.R. of					
Pyrites (40%)	*200 000	*210 000	*210 000	*210 000	...
Recovered (c)	*30 000	*30 000	*30 000	*30 000	...
Korea, Republic of					
Recovered (c)	*221 000	*229 000	*260 000	*263 000	...
Recovered (d)	*65 000	*65 000	*100 000	*200 000	...
Kuwait					
Recovered (d)	*300 000	*30 000	*150 000	*175 000	...
Oman					
Recovered (d)	*30 000	*40 000	*40 000	*40 000	...
Pakistan					
Recovered	*25 000	*26 000	*26 000	*27 000	...
Philippines					
Pyrites (46%)	134 316	155 000	64 000	114 000	63 792
Recovered (c)	*120 000	*119 000	*111 000	*147 000	...
Qatar					
Recovered (d)	*52 000	*52 000	*52 000	*52 000	...
Saudi Arabia					
Recovered (d)	1 435 000	2 000 000	1 630 000	*1 600 000	*1 400 000

**Production of Sulphur and Pyrites**

tonnes (sulphur content)

Country	1990	1991	1992	1993	1994
Singapore					
Recovered (d)	*65 000	*75 000	*75 000	*75 000	...
Syria					
Recovered (d)	29 652	30 000	*30 000	*30 000	...
Taiwan					
Recovered	95 533	125 819	118 621	153 076	...
Turkmenistan					
Sulphur ore	—	—	*300 000	*200 000	...
Australia					
Recovered (c)	*228 000	*223 000	*223 000	*228 000	...
Recovered (d)	*70 000	*70 000	*75 000	*85 000	...
Total Pyrites	9 800 000	9 600 000	7 000 000	7 500 000	7 400 000
Total Frasch	11 600 000	9 000 000	6 400 000	4 900 000	5 800 000
Total Recovered	34 900 000	34 200 000	33 100 000	34 400 000	35 100 000
Total Sulphur ore	2 500 000	2 300 000	2 300 000	1 800 000	1 800 000
World total (all forms)	58 800 000	55 000 000	48 800 000	48 600 000	50 100 000

Note(s):

(1) Pyrites: nominal sulphur content is shown in parentheses

- (a) Including hydrogen sulphide and liquid sulphur dioxide
- (b) Including caliche at 45% S content
- (c) From smelter gases
- (d) From petroleum refining and/or natural gas
- (e) Other
- (f) Exports
- (g) Including S content of sulphur ore
- (h) Including production from synthetic fuels
- (i) As from 1992 data is for Serbia and Montenegro only
- (j) Years ended 31 March following that stated
- (k) Including S content of pyrites

## Imports of Sulphur and Pyrites

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Pyrites	14 325	8 373	268	1 295	2 960
Sulphur					
Crude	470 862	439 315	359 210	274 604	...
Sublimed & precipitated	376	117	203	2 858	999
Belgium-Luxembourg					
Pyrites	85 356	78 625	6 501	229	...
Sulphur					
Crude	447 778	436 148	476 805	303 109	...
Sublimed & precipitated	390	638	54	21 286	...
Denmark					
Sulphur					
Crude	52 867	27 386	27 182	23 181	31 898
Sublimed & precipitated	41	65	15	909	30
France					
Pyrites	2 865	840	1 243	712	7 151
Sulphur					
Crude	651 213	526 822	263 261	274 324	89 672
Refined	10 769	32 708	28 840	...	281 919
Sublimed & precipitated	353	348	647	1 233	1 065
Germany, Federal Republic of					
Pyrites	84 310	120 976	103 683	105 380	...
Sulphur					
Crude	97 648	68 160	37 551	39 242	...
Sublimed & precipitated	5 891	506	547	462	...
Greece					
Sulphur					
Crude	90 179	187 196	77 541	96 167	...
Sublimed & precipitated	15	75	139	156	...
Irish Republic					
Sulphur					
Crude	381	480	2 170	156	...
Sublimed & precipitated	31	28	3	...	...
Italy					
Pyrites	94 974	47 463	7 413	9 776	...
Sulphur					
Crude	174 421	191 412	152 293	80 117	...
Sublimed & precipitated	1 415	1 036	677	58	...
Netherlands					
Pyrites	1 203	463	390	268	...
Sulphur					
Crude	188 336	130 343	119 538	72 047	...
Sublimed & precipitated	278	154	142	374	...
Portugal					
Sulphur	14 830	16 566	10 049	10 900	...
Spain					
Sulphur					
Crude	51 343	47 418	53 895	97 012	...
Sublimed & precipitated	1 316	49	98	1 257	...
Austria					
Pyrites	819	642	702	625	661
Sulphur					
Crude	59 329	48 268	59 141	38 565	20 745
Sublimed & precipitated	2 657	374	349	13 458	28 552
Bulgaria					
Sulphur	42 000	73 000	47 000	—	...
Croatia					
Sulphur					
Crude	—	—	222 879	47 138	...
Sublimed & precipitated	—	—	504	280	...
Czechoslovakia					
Sulphur	396 000	199 000	138 982	—	—
Czech Republic					
Sulphur	—	—	—	48 482	...
Finland					
Sulphur	21 197	7 395	811	16 152	...

**Imports of Sulphur and Pyrites**

tonnes

Country	1990	1991	1992	1993	1994
Hungary					
Pyrites	20 000	—	—	—	...
Sulphur	47 573	19 000	19 616	12 397	9 295
Norway					
Pyrites	19 340	30	14 373	146 451	251 611
Sulphur					
Crude	3 652	2 981	2 174	1 796	633
Sublimed & precipitated	106	485	476	127	32
Poland					
Sulphur	...	2 000	14 539	28 096	...
Romania					
Sulphur	262 000	167 000	116 216	107 328	...
Russia					
Sulphur	—	—	50 334	770	...
Slovakia					
Sulphur	—	—	—	27 977	...
Slovenia					
Sulphur	—	—	41 931	34 818	...
Soviet Union					
Sulphur (a)	*949 700	*642 900	—	—	—
Sweden					
Pyrites	225 251	167 760	134 855	190	...
Sulphur					
Crude	5 416	5 757	16 538	106 487	...
Sublimed & precipitated	10 803	7 680	6 921	449	...
Switzerland					
Pyrites	212	209	203	247	244
Sulphur					
Crude	56 164	51 381	30 020	27 657	33 681
Sublimed & precipitated	52	37	128	14	47
Turkey					
Pyrites	15 053	4 604	11 825	115	64
Sulphur					
Crude	160 873	123 525	148 182	170 067	136 819
Sublimed & precipitated	304	344	352	91	181
Yugoslavia (e)					
Pyrites	3 633	(d) 8 743	—	...	...
Sulphur					
Crude	140 056	(d) 2 332	5 693	...	...
Refined	4 746	(d) 1 903	1 018	...	...
Sublimed & precipitated	50	(d) 181	41	...	...
Algeria					
Sulphur					
Crude	48 285	71 949	74 028	...	...
Sublimed & precipitated	1	900	...	...	...
Egypt					
Sulphur	57 891	86 244	210 761	81 293	...
Ethiopia					
Sulphur	1 601	30	...	...	...
Gabon					
Sulphur	2 200	2 200	2 000	2 000	...
Kenya					
Sulphur	700	500	7 247	...	...
Morocco					
Sulphur	2 739 592	2 228 027	2 650 700	2 588 000	...
Niger					
Sulphur	23 800	18 200	20 000	24 000	...
Nigeria					
Sulphur	1 400	1 200	1 000	...	...
Senegal					
Sulphur	237 204	200 000	200 000	235 000	...
South Africa					
Sulphur					
Crude	328 334	280 195	249 858	401 084	296 762
Sublimed & precipitated	444	54	...	385	67 733

## Imports of Sulphur and Pyrites

tonnes

Country	1990	1991	1992	1993	1994
Tunisia					
Sulphur	1 286 606	1 154 746	1 414 761	1 270 000	...
Zimbabwe					
Sulphur	19 903	34 759	17 324	20 000	...
Canada					
Pyrites	2 860	6 710	9 475	9 594	11 339
Sulphur					
Crude	13 247	9 026	8 645	7 532	3 123
Sublimed & precipitated	1 620	1 268	948	1 061	1 280
Cuba					
Sulphur	*50 000	*150 000	*100 000	100 000	...
El Salvador					
Sulphur	2 127	4 296	2 802	691	...
Guatemala					
Sulphur	1 951	1 156	2 379	...	...
Jamaica					
Sulphur	6 010	6 033	6 031	6 055	3 334
Mexico					
Sulphur					
Crude	517 155	249 969	249 000	125 499	201 333
Sublimed & precipitated	372	772	843	447	...
USA					
Pyrites	32 061	2 046	198	870	...
Sulphur					
Crude	2 557 272	3 013 412	2 724 192	2 041 704	1 572 000
Sublimed & precipitated	13 870	7 840	428	377	...
Argentina					
Sulphur	82 034	105 200	55 509	68 051	...
Brazil					
Sulphur	923 355	1 065 649	861 660	1 088 919	...
Chile					
Sulphur	64 854	40 459	32 749	37 019	43 365
Colombia					
Sulphur	34 975	34 255	43 639	45 253	...
Ecuador					
Sulphur	265	1 799	133	42	...
Paraguay					
Sulphur	1 504	2 517	1 698	697	...
Peru					
Sulphur	3 649	3 360	3 000	6 687	...
Suriname					
Sulphur	851	1 216	*1 000	...	...
Uruguay					
Sulphur	14 000	13 723	12 600	13 773	13 186
Venezuela					
Sulphur	161	252	192	198	...
Bangladesh (b)					
Sulphur	43 057	41 915	33 746	27 007	...
China					
Sulphur					
Crude	92	26 290	460	21 373	...
Sublimed & precipitated	37 863	24 655	44 605	68 341	...
Cyprus					
Sulphur	1 758	1 356	1 190	2 384	601 660
Hong Kong					
Sulphur					
Crude	623	881	444	61 313	22 712
Sublimed	574	572	614	1 350	637
India (c)					
Sulphur					
Crude	1 199 153	1 082 155	1 398 379	1 264 367	...
Sublimed & precipitated	1 275	1 115	1 374	1 427	...

**Imports of Sulphur and Pyrites**

tonnes

Country	1990	1991	1992	1993	1994
Indonesia					
Sulphur					
Crude	143 192	320 052	188 667	193 875	...
Sublimed & precipitated	117 131	22 653	140 785	32 762	...
Israel					
Sulphur	47 566	130 422	44 386	...	...
Japan					
Pyrites	317 550	321 293	303 426	164 996	167 395
Sulphur	939	453	726	345	854
Jordan					
Sulphur					
Crude	38 410	281 154	64 811	182 153	...
Sublimed & precipitated	62 444	22 720	50 884	40	...
Korea, Republic of					
Sulphur					
Crude	517 345	472 320	532 189	391 641	439 129
Sublimed & precipitated	1 766	1 253	1 897	1 496	207
Malaysia					
Sulphur					
Crude	8 000	23 990	24 505	28 973	...
Sublimed & precipitated	...	8 534	9 040	...	...
Pakistan (b)					
Sulphur	27 154	23 461	34 550	36 461	...
Philippines					
Sulphur					
Crude	10 070	10 982	8 068	17 355	...
Sublimed & precipitated	10 215	4 079	17 042	...	...
Singapore					
Sulphur					
Crude	235	919	346	126	117
Sublimed & precipitated	195	101	207	130	138
Sri Lanka					
Sulphur					
Crude	525	1 024	735	17 716	865
Sublimed & precipitated	666	697	323	1 323	1 142
Taiwan					
Sulphur					
Crude	114 827	129 775	40 687	30 758	10 935
Sublimed & precipitated	116 400	96 207	82 083	137 942	169 193
Thailand					
Sulphur					
Crude	12 648	4 130	31 680	78 769	...
Refined	69 780	92 744	57 391	35 237	...
Sublimed & precipitated	255	198	174	187	...
Australia					
Sulphur	312 000	62 000	97 000	72 000	92 000
New Zealand (b)					
Sulphur					
Crude	156 722	83 775	122 411	188 781	214 513
Sublimed & precipitated	128	129	125	293	255

(a) BGS estimates, based on known exports from certain countries

(b) Years ended 30 June of that stated

(c) Years ended 31 March following that stated

(d) Data for the Federal Republic of Yugoslavia only

(e) As from 1992 data is for Serbia and Montenegro only

## Exports of Sulphur and Pyrites

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Sulphur					
Crude	3 863	3 440	6 191	2 692	1 937
Sublimed & precipitated	2 184	1 583	1 640	2 888	2 200
Belgium-Luxembourg					
Pyrites	206	166	3 139	1 080	...
Sulphur					
Crude	29 325	16 549	21 092	11 929	...
Sublimed & precipitated	34	112	49	178	...
Denmark					
Sulphur	3 379	5 155	5 798	4 958	7 684
France					
Sulphur					
Crude	501 702	365 575	464 021	477 405	618 777
Refined	7 472	5 068	8 872	...	11 499
Sublimed & precipitated	430	588	426	962	656
Germany, Federal Republic of					
Pyrites	1 274	991	82 164	2 857	...
Sulphur					
Crude	718 606	682 649	728 018	787 716	...
Sublimed & precipitated	8 546	302	365	1 068	...
Greece					
Sulphur	302	6 962	5 938	187	...
Italy					
Pyrites	5 752	5 230	12 170	7 160	...
Sulphur					
Crude	27 521	33 478	69 163	55 123	...
Sublimed & precipitated	238	1 855	592	2 098	...
Netherlands					
Sulphur	148 042	135 135	171 957	165 120	...
Spain					
Pyrites	13 651	7 685	20 953	37 195	...
Sulphur					
Crude	44 846	62 137	40 367	12 814	...
Sublimed & precipitated	1 690	1 689	334	1 261	...
Albania					
Pyrites	(c) *15 000	...	...	...	...
Austria					
Sulphur					
Crude	186	164	332	115	227
Sublimed & precipitated	301	6	4 385	15 441	13 468
Finland					
Pyrites (c)	*351 900	*331 900	*290 600	*309 200	...
Hungary					
Sulphur					
Crude	17 000	10 000	47	2 128	...
Sublimed & precipitated	...	...	15 393	13 215	12 957
Norway					
Pyrites	48 565	69 528	—	—	—
Sulphur					
Crude	10	1	—	152	4 417
Sublimed & precipitated	3 664	5 865	6 361	8 359	2 670
Poland					
Sulphur	3 815 000	2 812 000	2 625 000	2 294 000	...
Soviet Union					
Pyrites	174 000	...	—	—	—
Sulphur (c)	*2 500	*2 500	—	—	—
Sweden					
Sulphur					
Crude	38 299	29 757	39 468	20 442	...
Sublimed & precipitated	841	643	246	150	...
Switzerland					
Sulphur	15 791	28 975	15 793	219	16 571
Yugoslavia (d)					
Pyrites	32 724	(a) 20 196	4 313	...	...

**Exports of Sulphur and Pyrites**

tonnes

Country	1990	1991	1992	1993	1994
Namibia					
Pyrites (e)	84 097	0	0	0	4 116
South Africa					
Sulphur	17 412	15 861	17 444	4 607	2 508
Canada					
Pyrites	119 722	3	1	454	1 641
Sulphur	6 057 556	5 303 666	5 653 525	4 193 886	4 983 257
Mexico					
Sulphur	1 330 909	1 335 874	1 013 318	691 000	...
Netherlands Antilles					
Sulphur	19 469	25 513	*25 000	*25 000	...
USA					
Sulphur					
Crude	688 963	943 166	735 080	502 791	(f) 885 000
Refined	111 694	89 942	51 175	33 292	...
Sublimed & precipitated	128 493	258 788	180 447	120 346	...
Bolivia					
Sulphur	2 310	2 952	15	—	253
Colombia					
Sulphur	3 482	2 355	1 796	1 680	...
Venezuela					
Sulphur	16 712	978	673	560	...
Bahrain					
Sulphur	39 906	44 754	...	25 611	...
China					
Pyrites	207 079	195 388	146 969	1 496	...
Sulphur					
Crude	85	486	804	3 459	...
Sublimed & precipitated	6	316	318	289	...
Cyprus					
Pyrites	1 630	—	—	—	—
Iran					
Sulphur	175 409	(c) *176 000	222 444	362 832	...
Japan					
Sulphur					
Crude	385 385	358 370	390 306	408 502	748 273
Sublimed & precipitated	1 532	1 579	1 848	1 899	2 013
Korea, Republic of					
Sulphur					
Crude	6 400	5 589	4 966	16 225	27 942
Sublimed & precipitated	603	373	634	3 028	606
Kuwait					
Sulphur	342 922	—	35 000	225 095	...
Qatar					
Sulphur	51 045	—	68 397	63 531	...
Saudi Arabia					
Sulphur					
Crude	639 395	452 219	779 479	...	...
Sublimed & precipitated	1 012 604	1 055 731	1 296 960	...	...
Singapore					
Sulphur					
Crude	35 729	18 848	1 791	462 703	34 971
Sublimed & precipitated	19 981	11 626	38 448	34 814	27 261
Taiwan					
Sulphur					
Crude	94	350	312	11 225	15 633
Sublimed & precipitated	26	134	161	225	372
Thailand					
Sulphur					
Crude	1 824	766	343	419	...
Sublimed & precipitated	35	16	30	10	...



**Exports of Sulphur and Pyrites**

tonnes

Country	1990	1991	1992	1993	1994
Australia Sulphur (b)	1 149	1 541	30 812	2 996	...

- (a) Data for the Federal Republic of Yugoslavia only
- (b) Years ended 30 June of that stated
- (c) BGS estimates, based on known imports into certain countries
- (d) As from 1992 data is for Serbia and Montenegro only
- (e) S content
- (f) Sulphur; all forms

**Production of Talc**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	14 781	10 818	5 216	5 317	5 275
France	287 000	310 000	350 000	280 000	280 000
Germany, Federal Republic of	21 400	22 700	23 500	21 200	*20 000
Greece	1 114	1 012	*700	750	*500
Italy	151 566	162 102	183 830	142 000	125 000
Portugal	11 535	10 794	9 166	9 054	*9 000
Spain	*70 000	*70 000	*70 000	*65 000	*65 000
Austria	133 971	161 425	145 664	136 640	130 602
Finland	273 214	261 350	322 859	347 859	453 000
Hungary	675	625	*1 000	*1 000	*1 000
Macedonia	—	—	*15 000	*10 000	*10 000
Norway	*100 000	*80 000	*60 000	*50 000	*50 000
Romania	*20 000	*10 000	6 330	*6 500	*6 500
Soviet Union (g)	*500 000	*450 000	*400 000	*350 000	...
Sweden	15 021	19 159	*10 000	—	—
Turkey	5 557	3 186	3 281	*4 000	*4 000
Yugoslavia (f)	20 069	(e) *17 000	—	—	—
Egypt (d)	6 340	8 340	8 319	4 746	4 125
South Africa					
Talc	11 179	8 235	10 266	8 798	8 202
Wonderstone (pyrophyllite)	2 759	4 448	3 053	4 287	5 507
Zambia	160	89	366	350	*350
Zimbabwe	1 767	1 676	2 203	1 349	2 049
Canada	148 000	123 000	104 000	108 000	130 000
Mexico	13 477	11 883	19 559	14 376	*15 000
USA					
Talc	1 185 142	1 037 196	997 268	968 000	935 000
Pyrophyllite	82 025	...	...	...	...
Argentina					
Talc	17 994	23 060	21 580	18 084	*17 800
Pyrophyllite	1 491	2 261	3 020	1 962	...
Brazil					
Talc (b)	231 796	*250 000	*250 000	*250 000	*250 000
Agalmatolite (b)	107 577	*110 000	*110 000	*110 000	*110 000
Pyrophyllite (b)	30 400	*70 000	*140 000	...	...
Chile	898	548	1 493	5 058	5 375
Colombia	10 390	11 773	13 340	19 660	16 000
Peru	*9 000	*10 100	*10 000	*10 000	19 974
Uruguay	1 412	716	1 052	*1 000	*1 000
Venezuela	*32 000	*32 000	*32 000	*32 000	...
China	2 545 000	*2 600 000	*2 650 000	*2 700 000	*2 400 000
India					
Pyrophyllite	*80 000	84 577	*85 000	*81 600	*82 000
Steatite	406 000	424 000	*425 000	*360 000	*360 000
Iran (a)	31 087	6 676	23 707	18 000	*18 000
Japan					
Talc	61 550	65 633	61 120	57 000	56 000
Pyrophyllite	890 168	903 823	771 078	732 000	660 000
Korea, Dem. P.R. of	*170 000	*170 000	*170 000	*180 000	*180 000
Korea, Republic of					
Talc	181 660	170 563	149 862	53 900	*60 000
Pyrophyllite	657 611	573 208	602 580	645 000	*650 000
Nepal (c)	1 798	3 500	3 170	1 340	*1 500
Pakistan	30 177	33 643	23 676	46 846	*45 000
Taiwan	22 123	18 518	6 085	5 015	4 290
Thailand	33 650	48 265	39 424	50 410	*43 000

**Production of Talc**

tonnes

Country	1990	1991	1992	1993	1994
Australia (d)					
Talc	234 579	173 803	179 678	*172 273	...
Pyrophyllite	2 965	1 032	1 260	*1 175	...
World total	8 900 000	8 700 000	8 600 000	8 300 000	8 000 000

- (a) Years ended 20 March following that stated  
(b) Including beneficiated and directly shipped material  
(c) Years ended 15 July of that stated  
(d) Years ended 30 June of that stated  
(e) Excluding data from August to December for the Republic of Croatia  
(f) As from 1992 data is for Serbia and Montenegro only  
(g) Dissolved in December 1991. No information is available on which to estimate for individual countries

**Exports of Talc**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	1 774	1 925	2 078	3 604	5 022
Belgium-Luxembourg	59 074	67 865	56 875	51 183	...
France	147 109	156 799	159 058	128 621	144 106
Germany, Federal Republic of	7 353	7 278	5 350	5 269	...
Greece	646	637	273	23	...
Italy	42 144	38 219	46 260	50 532	...
Netherlands	19 449	25 858	27 088	42 134	...
Spain	10 330	7 531	9 571	11 891	...
Austria	119 546	125 532	130 156	125 146	129 944
Czechoslovakia (a)	*3 800	*3 700	*8 400	—	—
Finland	105 782	(a) *78 000	(a) *90 600	(a) *111 500	...
Norway	43 570	33 926	35 562	35 132	35 835
Sweden	12 160	17 388	20 553	20 552	...
Switzerland	179	153	252	499	403
Turkey	84	125	169	220	277
Canada	40 119	34 325	32 214	29 194	31 694
USA	200 276	178 711	176 795	145 315	154 000
Brazil	1 598	1 957	1 547	2 012	...
China	869 855	948 296	1 048 450	1 063 926	1 240 000
Hong Kong (c)	42 136	41 623	26 984	13 803	7 372
India (b)	14 402	15 308	16 551	13 028	...
Japan	3 160	3 547	4 012	4 171	5 210
Jordan	1 178	20	88	—	...
Korea, Dem. P.R. of (a)	*7 200	*7 100	*13 600	*10 400	...
Korea, Republic of					
Talc	33 055	21 392	9 011	806	1 622
Pyrophyllite	256 058	257 321	216 759	223 593	247 285
Singapore	1 358	895	1 857	2 988	4 391
of which: Re-exports	1 240	812	1 811	2 875	4 356
Taiwan	1 741	1 033	681	1 988	1 912
Thailand	3 074	7 216	2 090	3 088	...
Australia (d)	169 558	168 835	152 007	119 828	...

(a) BGS estimates, based on known imports into certain countries

(b) Years ended 31 March following that stated

(c) Re-exports

(d) Years ended 30 June of that stated

## Imports of Talc

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	83 413	85 361	84 826	127 484	71 506
Belgium-Luxembourg	91 722	82 132	108 598	113 170	...
Denmark	10 279	10 268	11 748	10 973	11 424
France	25 377	24 490	24 589	49 013	44 958
Germany, Federal Republic of	197 506	219 661	234 114	239 743	...
Greece	2 622	3 797	3 114	4 106	...
Irish Republic	1 117	1 757	1 100	1 037	...
Italy	45 699	34 025	39 667	43 364	...
Netherlands	73 985	73 791	83 187	73 020	...
Portugal	11 952	10 859	11 525	9 308	...
Spain	32 505	41 725	37 196	31 381	...
Austria	9 953	10 832	12 341	12 599	15 262
Croatia	—	—	674	593	...
Czechoslovakia (a)	*1 100	*600	*300	—	—
Czech Republic (a)	—	—	—	*4 500	...
Finland	458	340	412	962	...
German Democratic Republic (a)	*2 300	—	—	—	—
Hungary	4 375	...	3 439	...	...
Norway	9 462	13 050	14 844	21 023	18 544
Poland	11 367	12 577	...	...	...
Russia (a)	—	—	*8 700	*5 100	...
Soviet Union (a)	*19 500	*10 100	—	—	—
Sweden	25 276	26 668	26 309	24 797	...
Switzerland	15 261	14 510	12 471	12 458	14 256
Turkey	1 322	1 235	1 441	2 032	1 962
Yugoslavia (d)	4 360	(c) 1 322	1 020	...	...
Algeria	342	612	108	...	...
Egypt	...	...	2 188	2 228	...
Morocco	1 566	2 045	2 175	...	...
South Africa	4 654	6 300	5 303	6 723	5 666
Tunisia	1 146	1 231	2 058	...	...
Canada	44 978	44 996	47 351	47 973	52 925
Costa Rica	1 235	1 097	1 616	...	...
El Salvador	452	437	745	411	...
Guatemala	357	501	524	...	...
Honduras	310	288	166	...	...
Jamaica	758	671	633	663	688
Mexico	97 178	105 675	103 290	103 312	...
Panama	435	574	657	789	...
Trinidad & Tobago	...	629	524	757	...
USA	63 255	68 383	76 010	97 525	115 000
Argentina	432	1 207	1 825	1 062	...
Brazil	381	766	2 494	1 702	...
Chile	...	3 021	3 580	3 851	4 279
Colombia	2 273	1 456	2 371	2 934	...
Ecuador	972	...	762	654	...
Peru	278	454	202	397	...
Venezuela	2 870	10 169	14 671	5 071	...
Bangladesh (b)	3 438	...	...	...	...
China	207	289	1 376	2 189	...
Cyprus	356	515	419	207	245
Hong Kong	52 127	40 782	24 043	16 658	12 879
Indonesia	43 770	28 890	39 567	59 610	...
Israel (a)	*2 500	*2 000	*1 700	*2 400	...
Japan	666 040	698 683	629 347	588 777	601 793
Jordan	1 105	940	1 685	1 731	...
Korea, Republic of	1 721 903	178 349	203 615	264 258	310 952
Malaysia	...	18 142	27 750	...	...
Pakistan (b)	783	1 183	1 025	7 858	...
Philippines	11 103	11 392	9 618	...	...

**Imports of Talc**

tonnes

Country	1990	1991	1992	1993	1994
Saudi Arabia	5 227	5 752	6 607	...	...
Singapore	6 119	7 164	9 909	11 700	15 662
Sri Lanka	2 059	1 246	2 020	1 836	1 854
Syria	1 368	...	3 032	...	...
Taiwan	62 663	81 256	103 818	151 026	180 200
Thailand	36 612	37 078	47 798	57 374	...
Australia (b)	631	529	562	628	...
New Zealand (b)	1 491	1 571	1 436	1 892	1 970

(a) BGS estimates, based on known exports from certain countries

(b) Years ended 30 June of that stated

(c) Data for the Federal Republic of Yugoslavia only

(d) As from 1992 data is for Serbia and Montenegro only

## Production of Tantalum and Niobium Minerals

tonnes

Country		1990	1991	1992	1993	1994
Spain						
Tantalite	(—, 25%)	*10	*8	*8	*6	*6
Nigeria						
Columbite	(43%, 6%)	45	36	*40	*40	*40
Rwanda						
Columbite-tantalite	(30%,23%)	110	200	188	706	...
Zaire						
Columbite-tantalite	(27%,27%)	36	57	29	20	*4
Zimbabwe						
Columbite-tantalite	(11%,28%)	35	111	94	48	7
Canada						
Pyrochlore	(42%, —)	5 600	5 600	5 500	5 700	5 600
Tantalite	(3%,30%)	287	310	160	103	93
Brazil						
Pyrochlore	(42%, —)	32 217	33 450	*32 000	*22 000	*26 000
Columbite-tantalite	(20%, 30%)	310	290	*200	*175	*175
Djalmaite	(1%, 50%)	9	*10	15	...	...
Malaysia						
Struverite	(—, 10%)	316	401	397	1 077	277
Thailand						
Columbite-tantalite	(17%, 25%)	9	3	—	—	—
Struverite	(—, 6%)	122	—	—	—	—
Australia						
Columbite-tantalite	(20%, 33%)	573	668	925	313	*250
World total concentrates		39 700	41 100	39 600	30 200	33 200
Nb content		*16 100	*16 700	*16 100	*12 000	*13 600
Ta content		*460	*540	*540	*490	370

## Note(s):

- (1) Niobium and tantalum minerals are believed to be produced also in the former Soviet Union and China, and minor quantities in Argentina, Burundi, French Guiana, Namibia and Zambia
- (2) The figures in this table refer to gross tonnage of tantalum and niobium concentrates
- (3) Estimated average niobium and tantalum contents are given in the form (Nb%,Ta%) for each country and each mineral, relating where possible to the later years
- (4) Niobium and tantalum are also recovered from tin slags. This source is particularly important in the case of tantalum and in recent years is believed to have accounted for over 60% of all tantalum recovered
- (5) No detailed information on the production of tantalum bearing tin slags is available but the major producers are Thailand and Malaysia, with small amounts from Australia, Brazil, Nigeria, Portugal, South Africa and Zaire

**Exports of Tantalum and Niobium**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Tantalum	39	79	134	122	146
France					
Tantalum	27	33	43	31	78
Germany, Federal Republic of					
Niobium & tantalum ores	364	124	133	407	...
Tantalum	93	95	83	131	...
Italy					
Tantalum	12	3	7	7	...
Austria					
Tantalum	56	34	48	39	29
Zaire					
Columbite-tantalite	*100	...	...	...	...
Canada					
Niobium & tantalum ores (a)	*4 700	*5 200	*5 300	*4 200	...
USA					
Tantalum ores & concentrates	576	11	17	11	...
Tantalum	313	328	227	342	...
Brazil					
Columbite-tantalite	156	54	70	116	...
Japan					
Tantalum	28	33	44	90	85
Malaysia					
Columbite & tantalite	...	140	150	40	10
Tin slags	3 636	45	—	126	3 365
Singapore					
Tin slags	1 491	424	981	265	136
of which: Re-exports	1 100	117	652	0	40
Taiwan					
Tantalum	21	16	19	3	35
Thailand					
Tantalum ores & concentrates	726	861	111	100	...
Tin slags	800	668	—	...	...
Australia					
Columbite-tantalite (b)	231	421	468	320	...
Tantalum (b)	123	1 117	207	131	...

Note(s):

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) BGS estimates, based on known imports into certain countries

(b) Years ended 30 June of that stated



**Imports of Tantalum and Niobium**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Niobium & tantalum ores	1 432	1 721	1 957	321	0
Tantalum	84	133	418	530	620
France					
Tantalum	34	35	39	42	81
Germany, Federal Republic of					
Tantalum	196	144	137	467	...
Italy					
Tantalum	1	2	3	35	...
Austria					
Tantalum	42	92	53	33	37
USA					
Tantalum concentrates	1 047	930	1 367	1 324	...
Niobium concentrates	1 950	1 607	2 428	2 348	...
Tantalum	99	139	108	177	...
Niobium	2	1	1	111	...
Japan					
Niobium ores & concentrates	1 171	1 347	1 169	2 045	1 480
Tantalum	55	76	61	61	78

## Note(s):

- (1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

**Mine Production of Tin**

tonnes (metal content)

Country	1990	1991	1992	1993	1994
United Kingdom	3 389	2 326	2 044	2 232	1 922
Portugal	1 381	3 133	3 011	5 300	4 300
Spain	49	19	7	2	4
Czechoslovakia	336	10	—	—	—
German Democratic Republic	1 806	—	—	—	—
Russia	—	—	7 700	7 700	10 500
Soviet Union	*13 000	*12 000	—	—	—
Namibia	921	17	11	6	1
Niger	38	19	40	30	*20
Nigeria	338	400	400	300	300
Rwanda	734	898	735	600	200
South Africa	1 140	1 042	592	452	43
Uganda	20	47	20	20	2
Zaire	1 555	1 200	700	700	500
Zimbabwe	839	797	716	658	82
Canada	4 035	*4 500	—	—	—
USA	*100	*100	*100	*100	—
Argentina	123	—	—	—	—
Bolivia	17 249	16 830	16 516	18 634	16 027
Brazil	39 149	29 253	27 500	27 900	22 500
Peru (a)	5 134	6 559	10 195	13 687	20 046
China	*35 800	42 000	43 800	49 115	54 076
Indonesia	31 290	33 418	29 389	28 585	30 610
Kazakhstan	—	—	*100	*100	*100
Laos	400	300	*300	*300	*200
Malaysia	28 468	20 710	14 339	10 384	6 458
Mongolia	200	300	100	100	100
Myanmar	*500	*500	*500	*600	*400
Thailand	14 385	10 755	8 268	4 700	3 100
Vietnam	*800	*800	3 400	3 500	*4 000
Australia	7 425	5 380	6 611	8 057	7 444
World total	211 000	193 000	177 000	184 000	183 000

(a) Recoverable

## Smelter Production of Tin

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	6 122	1 661	—	—	—
Netherlands	6 100	5 000	200	200	200
Portugal	100	100	100	100	100
Spain	1 349	1 700	2 400	2 000	200
Czechoslovakia	613	118	—	—	—
German Democratic Republic	2 862	—	—	—	—
Russia	—	—	25 800	14 500	12 200
Soviet Union	*14 000	*18 000	—	—	—
Nigeria	320	400	400	300	300
South Africa	2 100	1 600	600	500	100
Zimbabwe	839	797	716	658	82
Mexico	5 004	2 262	2 594	1 644	*1 700
Argentina	90	100	130	29	...
Bolivia (a)	13 364	14 659	14 393	18 551	20 019
Brazil	37 580	29 500	27 000	26 000	19 400
China	35 800	36 000	39 600	51 600	61 900
Indonesia	30 389	30 415	28 151	30 415	31 100
Japan	816	716	821	804	706
Korea, Republic of	2 500	2 300	1 000	1 100	0
Malaysia	49 002	42 722	45 598	40 100	38 000
Myanmar	286	157	*100	*100	*100
Singapore	*600	*200	—	—	—
Thailand	15 512	11 255	10 679	8 276	7 629
Vietnam	1 808	3 440	3 727	2 345	*2 300
Australia	312	268	240	222	315
World total	227 000	203 000	204 000	200 000	196 000

(a) Refined, including alloys

**Exports of Tin**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Concentrates	1 426	1 445	3 516	4 437	3 466
Unwrought	5 661	2 897	242	423	1 171
Unwrought alloys	1 107	1 078	628	1 763	1 538
Scrap	448	1 882	798	1 004	1 378
Belgium-Luxembourg					
Unwrought	2 766	2 767	5 589	6 074	...
Unwrought alloys	873	707	106	426	...
Scrap	14	48	69	93	...
Denmark					
Scrap	686	905	450	211	175
France					
Unwrought	130	19	61	95	27
Unwrought alloys	28	80	160	224	424
Scrap	258	324	637	756	1 298
Germany, Federal Republic of					
Unwrought	893	1 099	1 025	485	...
Unwrought alloys	1 505	861	1 414	2 788	...
Scrap	316	1 078	374	323	...
Irish Republic					
Scrap	1 858	1 683	938	101	...
Italy					
Unwrought (a)	1 021	242	72	207	...
Scrap	75	78	42	140	...
Netherlands					
Unwrought	1 677	1 082	337	349	...
Unwrought alloys	876	795	830	1 375	...
Scrap	367	685	738	728	...
Portugal					
Concentrates	5 231	9 497	6 764	12 987	...
Spain					
Unwrought (a)	408	167	172	358	...
Finland					
Scrap	185	224	188	163	...
Sweden					
Unwrought (a)	134	131	114	125	...
Switzerland					
Unwrought (a)	109	64	299	143	124
Scrap	86	70	164	100	178
Namibia					
Concentrates	1 322	16	16	0	...
Niger					
Concentrates (b)	40	20	20	...	...
Nigeria					
Unwrought (a)	110	100	120	...	...
Rwanda					
Concentrates	1 028	946	844	649	...
South Africa					
Unwrought (a)	254	—	—	—	...
Zaire					
Concentrates	*1 500	*1 500	*1 500	...	...
Canada					
Concentrates (b)	2 828	3 716	401	—	37
Scrap	529	460	486	847	638
Jamaica					
Scrap	299	260	122	38	58
USA					
Unwrought (a)	2 327	2 999	4 569	4 858	...
of which: Re-exports	1 669	2 297	2 700	2 259	...
Scrap	22 629	12 221	13 050	8 772	...

## Exports of Tin

tonnes

Country	1990	1991	1992	1993	1994
Bolivia					
Concentrates	8 256	6 706	6 056	2 846	2 508
Unwrought	12 852	14 276	14 262	14 394	15 380
Brazil					
Unwrought (a)	27 641	18 110	19 366	22 062	17 643
Peru					
Concentrates	11 326	*15 000	*22 000	23 024	...
China					
Concentrates	9 583	11 295	7 448	3 100	...
Unwrought (a)	10 135	15 692	30 273	40 703	44 379
Hong Kong					
Concentrates (d)	9 088	9 097	7 567	4 057	*2 200
Unwrought (a)	4 511	7 105	15 963	17 885	11 448
of which: Re-exports	4 269	7 097	15 887	17 694	11 421
Indonesia					
Concentrates	368	339	370	74	...
Unwrought (a)	28 995	27 704	27 710	17 875	...
Japan					
Unwrought (a)	311	276	321	301	170
Korea, Republic of					
Unwrought (a)	169	416	210	46	735
Scrap	482	435	582	466	—
Malaysia					
Unwrought (a)	54 015	44 449	46 852	36 920	...
Scrap	...	422	1 350	431	...
Myanmar					
Concentrates (c)	250	150	12	...	...
Singapore					
Concentrates (d)	1 301	1 359	820	777	1 757
Unwrought	26 856	26 953	26 066	27 446	31 904
of which: Re-exports	24 904	26 235	25 314	24 199	30 378
Scrap	277	275	520	1 031	1 484
of which: Re-exports	59	33	34	101	556
Thailand					
Unwrought (a)	11 881	6 255	7 350	3 497	...
Australia					
Concentrates	14 952	9 660	11 782	14 639	13 363
Unwrought (a)	188	454	240	216	214
Scrap (e)	335	462	1 176	1 981	...

## Note(s):

(1) In this table the term 'unwrought' tin corresponds to item 687.1 of the Standard International Trade Classification (Revision 3) and comprises ingots, pigs, unwrought bars, sticks, etc.

(a) Including alloys

(b) Sn content

(c) Years ended 31 March following that stated

(d) Re-exports

(e) Years ended 30 June of that stated

**Imports of Tin**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Concentrates	13 443	3 616	11	5	3
Unwrought	3 824	4 714	8 932	13 004	13 067
Unwrought alloys	2 272	2 166	1 443	1 538	1 645
Scrap	720	2 153	1 384	322	1 037
Belgium-Luxembourg					
Concentrates	755	170	70	3	...
Unwrought	2 122	2 558	2 513	1 803	...
Unwrought alloys	209	184	347	602	...
Scrap	652	1 248	1 552	1 498	...
Denmark					
Unwrought (a)	121	69	35	36	30
France					
Unwrought	8 290	8 195	8 549	7 669	9 154
Unwrought alloys	490	381	470	506	656
Germany, Federal Republic of					
Concentrates	115	45	63	—	...
Unwrought	19 777	19 650	21 856	18 382	...
Unwrought alloys	1 808	1 511	1 105	725	...
Scrap	485	653	659	1 213	...
Greece					
Unwrought (a)	676	597	260	249	...
Irish Republic					
Unwrought (a)	153	69	95	197	...
Italy					
Unwrought	6 974	5 392	5 520	5 436	...
Unwrought alloys	190	85	110	224	...
Netherlands					
Concentrates	10 586	6 180	—	—	...
Unwrought	2 358	2 263	3 763	3 908	...
Unwrought alloys	697	463	222	1 433	...
Scrap	393	476	236	455	...
Portugal					
Unwrought (a)	536	748	938	649	...
Spain					
Concentrates	1 989	1 878	2 739	2 466	...
Unwrought (a)	2 752	3 224	3 194	4 369	...
Austria					
Unwrought (a)	560	686	831	945	855
Croatia					
Unwrought (a)	—	—	224	148	...
Czechoslovakia					
Unwrought (a)	2 424	2 100	*800	—	—
Finland					
Unwrought (a)	63	42	65	88	...
Hungary					
Unwrought & semi-manufactures	372	550	430	176	346
Norway					
Unwrought	420	434	421	433	398
Unwrought alloys	102	80	70	81	70
Poland					
Unwrought	890	767	1 005	(a) (g) *2 700	...
Romania					
Unwrought (a)	...	...	524	615	...
Russia					
Unwrought (a) (g)	—	—	*3 300	*13 900	...
Slovakia					
Unwrought	—	—	—	478	...
Sweden					
Unwrought	433	311	237	425	...
Unwrought alloys	381	221	266	161	...
Scrap	167	164	100	82	...
Switzerland					
Unwrought (a)	1 220	941	720	943	676

## Imports of Tin

tonnes

Country	1990	1991	1992	1993	1994
Turkey					
Unwrought (a)	1 436	1 174	855	898	835
Yugoslavia (e)					
Unwrought (a)	1 110	(b) 206	217	...	...
Algeria					
Unwrought (a)	138	*250	*185	...	...
Egypt					
Unwrought & scrap	*300	*129	206	...	...
Morocco					
Unwrought (a)	170	127	175	116	...
South Africa					
Unwrought (a)	47	2 631	1 359	2 118	2 425
Canada					
Unwrought	3 760	3 337	3 587	4 510	4 677
Mexico					
Concentrates	8 732	6 764	3 739	4 021	1 098
Unwrought	506	719	549	516	1 255
Scrap	265	277	88	58	...
USA					
Unwrought	33 810	29 102	27 347	33 689	32 412
Unwrought alloys	6 335	8 430	10 070	7 071	8 783
Scrap	1 114	1 055	922	2 553	1 925
Argentina					
Unwrought	544	689	775	972	1 162
Chile					
Unwrought	298	537	474	513	546
Colombia					
Unwrought (a)	397	319	276	366	...
Peru					
Unwrought (a)	152	130	*120	162	...
Venezuela					
Unwrought (a)	343	628	701	449	...
Hong Kong					
Concentrates	8 710	8 367	9 505	3 166	969
Unwrought (a)	7 022	9 425	16 684	19 008	14 259
India (f)					
Unwrought (a)	2 089	1 540	1 485	2 972	...
Scrap	2 163	972	102	285	...
Iran (d)					
Unwrought	410	663	558	247	...
Japan					
Unwrought	32 771	34 349	27 539	27 665	27 577
Unwrought alloys	3 526	4 329	3 613	1 766	3 226
Korea, Republic of					
Concentrates	4 228	2 535	250	20	—
Unwrought (a)	6 050	6 606	7 394	9 364	10 687
Malaysia					
Concentrates	38 511	51 038	56 014	41 282	...
Unwrought (a)	1 936	4 689	4 998	5 242	...
Philippines					
Unwrought (a)	850	975	730	509	...
Singapore					
Concentrates	4 214	1 350	667	1 008	1 551
Unwrought	3 846	5 272	5 473	4 006	3 010
Scrap	365	376	212	756	551
Taiwan					
Unwrought (a)	5 165	7 349	7 447	7 683	9 689

**Imports of Tin**

tonnes

Country	1990	1991	1992	1993	1994
Australia					
Unwrought (a) (c)	905	772	798	922	...
New Zealand (c)					
Unwrought (a)	103	96	53	78	133

## Note(s):

(1) In this table the term 'unwrought' tin corresponds to item 687.1 of the Standard International Trade Classification (Revision 3) and comprises ingots, pigs, unwrought bars, sticks, etc.

- (a) Including alloys
- (b) Data for the Federal Republic of Yugoslavia only
- (c) Years ended 30 June of that stated
- (d) Years ended 20 March following that stated
- (e) As from 1992 data is for Serbia and Montenegro only
- (f) Years ended 31 March following that stated
- (g) BGS estimates, based on known exports from certain countries



## Production of Titanium Minerals

tonnes

Country	1990	1991	1992	1993	1994
Portugal					
Ilmenite	43	9	—	—	—
Norway					
Ilmenite	788 522	615 416	708 149	713 113	826 391
Soviet Union					
Ilmenite	*430 000	*400 000	—	—	—
Rutile	*9 500	*9 000	—	—	—
Ukraine					
Ilmenite	—	—	*200 000	*180 000	...
Sierra Leone					
Ilmenite	54 639	60 371	60 331	62 900	...
Rutile	144 401	154 800	149 000	150 332	...
South Africa					
Ilmenite (b)	*1 142 000	*1 374 000	*1 502 000	*1 516 000	*1 314 000
Rutile	64 056	75 000	75 000	100 000	*90 000
Canada (a)					
Ilmenite (b)	*3 200 000	*2 000 000	*2 200 000	*2 100 000	*2 200 000
USA					
Ilmenite	*240 000	*250 000	*270 000	*300 000	*320 000
Rutile	29 000	27 000	29 000	*25 000	*30 000
Brazil					
Ilmenite	101 264	69 064	76 558	*80 000	*80 000
Rutile	2 350	*2 000	*2 000	*2 000	*2 000
China					
Ilmenite	184 000	229 000	304 900	*226 000	...
India					
Ilmenite	*280 000	311 537	*300 000	*300 000	*300 000
Rutile	*11 000	13 635	*10 000	*10 000	...
Malaysia					
Ilmenite	530 237	336 347	337 744	278 950	116 696
Sri Lanka					
Ilmenite	74 350	62 823	*60 000	*70 000	...
Rutile	7 580	3 085	*3 200	*3 000	...
Thailand					
Ilmenite	10 554	17 071	2 922	20 715	...
Leucoxene	120	4	45	...	...
Australia					
Ilmenite	1 602 000	1 476 000	1 786 000	1 804 000	1 746 000
Rutile	245 000	193 000	183 000	186 000	226 000
Leucoxene	19 000	20 000	20 000	21 000	33 000
World total					
Ilmenite (Wt. of concs)	8 600 000	7 200 000	7 800 000	7 700 000	7 500 000
Rutile (Wt. of concs)	513 000	478 000	451 000	476 000	511 000
All forms (TiO <sub>2</sub> content)	*4 343 000	*3 772 000	*4 021 000	*3 982 000	3 917 000

## Note(s):

(1) The figures in this table refer to gross tonnage of titanium concentrates

(2) Some ilmenite is converted to synthetic rutile in Australia, India, Japan, Taiwan and USA

(a) Canada produces some ilmenite which is sold as such and not processed into slag, but tonnages are small

(b) Processed into slag. In 1994 South Africa produced 773000 tonnes (85% TiO<sub>2</sub>) and Canada produced 764000 tonnes (80% TiO<sub>2</sub>)

## Exports of Titanium

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Metal	4 702	3 846	6 366	6 002	7 816
Oxides	144 693	171 552	170 543	165 471	174 301
Belgium-Luxembourg					
Metal	250	225	396	290	...
Oxides	96 997	109 956	112 184	170 075	...
France					
Titanium minerals	38	867	162	23	4 877
Metal	2 725	1 940	2 300	2 083	2 169
Oxides	147 471	167 779	176 265	168 434	168 672
Germany, Federal Republic of					
Ilmenite	288	741	141	110	...
Other titanium minerals	2 828	2 157	1 621	1 498	...
Metal	2 240	2 113	3 920	3 551	...
Oxides	187 494	220 186	224 368	209 952	...
Italy					
Titanium minerals	10 589	22	3	—	...
Metal	693	939	955	1 463	...
Oxides (b)	*24 300	*26 700	*26 200	*34 900	...
Netherlands					
Ilmenite	1 689	1 618	13 400	31 763	...
Other titanium minerals	28 637	27 786	29 014	11 875	...
Metal	176	167	276	656	...
Oxides	28 639	(b) *29 200	(b) *37 100	(b) *48 100	...
Spain					
Oxides	17 441	17 226	29 230	42 774	...
Austria					
Metal	1 740	294	196	675	92
Oxides	1 475	1 151	1 132	1 094	1 328
Czechoslovakia					
Oxides (b)	*3 400	*5 400	*8 900	—	—
Czech Republic					
Oxides (b)	—	—	—	*9 500	...
Finland					
Oxides (b)	*50 000	*45 500	*47 100	*61 000	...
Norway					
Titanium minerals	576 419	387 682	431 795	454 122	559 078
Oxides (b)	*13 800	*20 000	*29 900	*21 900	...
Russia					
Metal	—	—	1 265	5 170	...
Slovenia					
Oxides (b)	—	—	*6 900	*14 500	...
Soviet Union					
Metal (b)	*1 900	*4 100	—	—	—
Sweden					
Metal	768	451	759	567	...
Oxides	925	1 787	1 545	2 204	...
Switzerland					
Metal	256	355	317	240	258
Oxides	766	595	463	537	647
Yugoslavia (f)					
Oxides	15 358	(a) —	—	...	...
Sierra Leone					
Rutile	142 000	143 900	147 600	143 500	...
South Africa					
Titanium minerals (b)	*103 700	*115 400	*126 800	*225 400	...
Titanium slag (b)	*450 000	*534 000	*661 200	*540 900	...
Oxides (b)	*600	*200	*5 100	*7 200	...
Canada					
Titanium minerals & slag (b)	*949 800	*752 100	*949 500	*925 600	...
Metal	1 038	681	441	320	517
Oxides	48 039	48 243	53 000	51 085	72 272
Mexico					
Oxides	25 472	24 967	36 105	44 461	57 440

## Exports of Titanium

tonnes

Country	1990	1991	1992	1993	1994
USA					
Titanium minerals	20 060	28 960	35 644	15 917	19 000
Metal	16 011	12 420	8 330	8 225	9 657
Oxides	270 943	190 360	272 611	291 254	352 300
Brazil					
Titanium minerals	2 690	597	633	656	...
China					
Titanium minerals	(b) *28 800	(b) *21 500	13 475	16 707	...
Metal	634	115	579	203	...
Oxides	11 870	12 806	10 638	14 928	...
Hong Kong					
Oxides (c)	8 698	9 030	13 071	14 822	22 028
India (e)					
Ilmenite	82 430	98 150	68 295	140 050	...
Other titanium minerals	...	2 808	4 254	26 705	...
Japan					
Titanium minerals	67	0	12 907	20 006	11 446
Metal	13 188	8 551	8 976	8 910	11 548
Oxides	90 979	92 568	75 684	74 806	...
Korea, Republic of					
Titanium minerals	136 440	111 135	87 485	147 341	108 040
Oxides	5 952	6 521	7 377	7 820	11 878
Malaysia					
Ilmenite	203 504	202 743	157 722	132 422	129 017
Singapore					
Oxides	1 542	18 595	11 217	10 761	10 353
of which: Re-exports	1 233	3 130	7 378	10 006	7 625
Sri Lanka					
Ilmenite	67 000	20 000	43 000	20 021	55 243
Rutile	6 760	140	2 035	22 621	882
Taiwan					
Oxides	4 964	2 451	3 576	4 665	25 200
Thailand					
Ilmenite	13 033	14 168	19 412	10 130	...
Australia					
Ilmenite	1 041 000	976 000	944 000	962 000	1 083 000
Rutile	186 000	174 000	196 000	182 000	210 000
Leucoxene	26 000	11 000	11 000	12 000	18 000
Oxides (d)	67 129	56 415	100 637	112 487	...

## Note(s):

- (1) So far as possible, the term 'oxides', as used in this table, includes oxides and oxide based pigments classified under Standard International Trade Classification (Revision 3) items 522.56 and 533.1
  - (2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- (a) Data for the Federal Republic of Yugoslavia only  
 (b) BGS estimates, based on known imports into certain countries  
 (c) Re-exports  
 (d) Years ended 30 June of that stated  
 (e) Years ended 31 March following that stated  
 (f) As from 1992 data is for Serbia and Montenegro only

**Imports of Titanium**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Ilmenite	247 902	197 930	184 458	223 757	104 384
Other titanium minerals	126 713	98 686	135 730	83 535	172 846
Titanium slag	55 930	57 866	58 991	63 672	67 668
Metal	17 840	13 043	13 855	12 948	15 670
Oxides	38 818	46 502	58 090	58 960	69 448
Belgium-Luxembourg					
Ilmenite	48 900	68 835	75 004	26 120	...
Other titanium minerals	56 806	18 398	27 327	75 564	...
Metal	789	691	1 221	957	...
Oxides	40 997	49 136	57 426	54 612	...
Denmark					
Oxides	12 085	12 031	13 461	12 737	16 017
France					
Ilmenite	46 628	36 093	85 564	...	53 598
Other titanium minerals	151 715	79 224	116 795	(f) 177 670	129 167
Titanium slag	110 535	139 624	112 820	...	131 337
Metal	5 288	3 566	3 834	2 888	3 252
Oxides	60 023	69 876	77 509	76 174	90 329
Germany, Federal Republic of					
Ilmenite	494 344	398 534	466 794	249 987	...
Other titanium minerals	22 798	16 589	15 075	27 428	...
Titanium slag	262 990	247 401	296 308	233 409	...
Metal	5 986	4 299	6 222	4 871	...
Oxides	120 096	133 197	147 756	149 506	...
Greece					
Oxides	12 172	14 526	15 772	16 555	...
Irish Republic					
Oxides	1 315	1 194	1 249	751	...
Italy					
Ilmenite	...	25	41 093	...	...
Other titanium minerals	985	4 066	3 533	...	...
Titanium slag	81 687	61 867	57 277	...	...
Metal	3 961	3 273	2 445	3 372	...
Oxides	67 266	76 226	90 192	100 299	...
Netherlands					
Ilmenite	3 420	10 136	43 920	42 001	...
Other titanium minerals	56 579	47 760	74 129	50 642	...
Metal	787	474	556	1 336	...
Oxides	53 018	46 443	46 412	66 497	...
Portugal					
Oxides	12 817	13 480	14 905	7 441	...
Spain					
Ilmenite	94 142	110 629	106 977	110 571	...
Other titanium minerals	2 331	3 575	2 177	149	...
Metal	1 508	1 535	1 333	625	...
Oxides	24 915	32 400	44 690	51 080	...
Austria					
Metal	641	312	301	176	208
Oxides	14 294	13 877	15 523	15 330	16 965
Bulgaria					
Titanium minerals (b)	*1 900	*1 300	*1 300	*1 200	...
Croatia					
Oxides	—	—	1 858	1 684	...
Czechoslovakia					
Oxides (b)	*2 000	*1 900	*1 900	—	—
Finland					
Titanium minerals (b)	*46 100	*52 400	*36 500	*20 000	...
Oxides	3 717	3 934	4 911	5 042	...
German Democratic Republic					
Oxides (b)	*15 100	—	—	—	—
Norway					
Titanium minerals	234	265	24 617	39 518	38 997
Oxides	7 801	7 544	6 070	7 195	7 959

## Imports of Titanium

tonnes

Country	1990	1991	1992	1993	1994
Romania					
Titanium minerals (b)	*3 200	*1 900	*2 000	*500	...
Oxides (b)	*6 000	*1 100	*1 700	*2 000	...
Soviet Union					
Titanium minerals (b)	*12 000	*6 400	—	—	—
Oxides (b)	*11 700	*10 600	—	—	—
Sweden					
Titanium minerals	1 203	663	265	850	...
Metal	1 134	691	1 236	1 066	...
Oxides	25 572	25 713	23 608	28 192	...
Switzerland					
Oxides	17 470	17 190	17 589	18 672	20 399
Turkey					
Titanium minerals	3 208	4 456	3 273	3 261	3 933
Oxides	23 367	23 752	27 695	34 718	30 349
Yugoslavia (g)					
Titanium minerals	23 701	(a) —	255	...	...
Oxides	3 604	(a) 934	1 079	...	...
Algeria					
Oxides	11 628	7 932	...	...	...
Morocco					
Oxides	2 423	4 600	...	...	...
South Africa					
Oxides	731	1 670	4 971	7 544	10 371
Zimbabwe					
Oxides	1 192	...	...	...	...
Canada					
Titanium minerals	27 523	43 304	6 988	13 782	34 963
Metal	2 541	1 614	1 280	1 773	1 842
Oxides	18 194	30 558	40 451	69 745	111 299
Mexico					
Ilmenite	121 952	106 202	*100 000	109 764	113 442
Rutile sand	1 509	2 400	2 327	...	...
Oxides	5 288	8 388	15 322	15 812	...
USA					
Ilmenite	374 725	240 897	338 764	388 872	379 700
Rutile (c)	274 605	263 188	315 571	361 486	332 000
Titanium slag	373 409	385 236	606 899	485 517	472 000
Metal	5 608	4 389	7 749	8 721	15 594
Oxides	147 592	165 974	169 360	172 025	176 300
Argentina					
Titanium minerals	1 199	1 336	1 880	1 772	...
Oxides	...	...	21 795	22 968	...
Brazil					
Rutile	2 141	1 443	1 571	1 833	...
Oxides	22 451	21 004	29 746	35 653	...
Chile					
Oxides	4 834	5 313	6 633	8 053	8 662
Colombia					
Oxides	8 643	8 360	12 393	12 986	...
Uruguay					
Oxides	2 101	1 047	1 768	1 736	2 117
Venezuela					
Oxides	10 180	15 765	14 481	13 521	...
China					
Titanium minerals	...	...	5 839	2 496	...
Metal	80	399	1 156	1 869	...
Oxides	27 319	25 176	40 469	45 054	54 093
Hong Kong					
Oxides	16 046	18 233	24 737	23 705	32 530
India (d)					
Oxides	17 002	8 476	5 908	13 508	...

**Imports of Titanium**

tonnes

Country	1990	1991	1992	1993	1994
Indonesia					
Oxides	22 277	22 499	29 039	34 429	...
Israel					
Oxides	3 575	4 086	5 378	6 361	...
Japan					
Titanium minerals	757 595	576 003	484 602	514 931	399 800
Metal	786	1 084	1 481	2 316	4 622
Oxides	65 170	61 061	62 550	75 526	90 666
Jordan					
Oxides	1 449	1 968	2 674	2 958	...
Korea, Republic of					
Rutile sand	8 068	7 431	7 584	9 246	11 446
Titanium minerals	31 804	92 054	101 260	88 207	76 803
Metal	1 633	1 592	1 527	2 964	2 978
Oxides	40 686	45 895	54 612	63 817	80 540
Malaysia					
Titanium minerals	...	23 058	16 713	...	...
Oxides	...	19 172	23 122	15 100	...
Pakistan (e)					
Oxides	5 070	4 373	5 964	6 151	...
Philippines					
Titanium minerals	1 427	1 007	1 980	...	...
Oxides	12 852	12 033	15 059	15 900	...
Saudi Arabia					
Titanium minerals	...	27 540	30 143	...	...
Oxides	7 125	7 977	7 458	...	...
Singapore					
Oxides	5 784	14 726	28 600	27 058	11 662
Taiwan					
Titanium minerals	18 617	20 014	11 949	23 234	47 313
Metal	254	630	553	697	724
Oxides	56 878	67 250	63 879	73 492	89 327
Thailand					
Rutile	3 222	3 889	3 211	3 723	...
Other titanium minerals	2 575	5 184	4 366	3 120	...
Oxides	20 952	24 759	32 583	34 634	...
Australia (e)					
Titanium minerals	22 033	38	2	544	...
Oxides	2 153	1 506	2 863	3 448	...
New Zealand (e)					
Oxides	8 015	6 428	7 535	7 873	9 006

## Note(s):

- (1) Significant quantities of titanium slag are traded, but it is not always possible to identify this material in national trade accounts
- (2) So far as possible, the term 'oxides', as used in this table, includes oxides and oxide based pigments classified under Standard International Trade Classification (Revision 3) items 522.56 and 533.1
- (3) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

- (a) Data for the Federal Republic of Yugoslavia only
- (b) BGS estimates, based on known exports from certain countries
- (c) Including synthetic rutile
- (d) Years ended 31 March following that stated
- (e) Years ended 30 June of that stated
- (f) Including ilmenite
- (g) As from 1992 data is for Serbia and Montenegro only

## Mine Production of Tungsten

tonnes (metal content)

Country	1990	1991	1992	1993	1994
United Kingdom	42	9	—	—	—
Portugal (c)	1 405	971	1 126	770	60
Austria	1 043	994	1 134	80	—
Czechoslovakia	25	*25	*20	—	—
Russia	—	—	*4 000	*3 500	*4 000
Soviet Union	*8 800	*8 000	—	—	—
Turkey	*350	—	—	—	—
Rwanda	156	243	*238	1	...
Uganda	25	51	34	31	8
Zaire (b)	17	*15	*15	*15	...
Mexico	183	194	162	*150	*150
USA	400	200	50	*50	*50
Bolivia	1 014	1 065	851	287	462
Brazil (a)	316	223	205	*100	*100
Peru	1 118	981	631	316	203
China	32 370	31 960	25 520	23 000	*20 000
India	6	*15	*15	*15	*20
Japan	218	240	298	66	—
Kazakhstan	—	—	*200	*150	92
Korea, Dem. P.R. of	*1 000	*1 000	*500	*500	*500
Korea, Republic of	1 361	780	247	*200	—
Mongolia	*500	*300	—	—	—
Myanmar (b)	351	275	375	155	*150
Tajikistan	—	—	*200	*150	*150
Thailand (c)	269	227	92	18	20
Uzbekistan	—	—	*300	*300	*300
Australia (c)	1 086	237	159	23	23
World total	52 100	48 000	36 400	29 900	26 300

(a) Mainly scheelite

(b) Including tin-wolframite concentrates

(c) Wolframite and scheelite

**Exports of Tungsten**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Metal	876	1 080	656	573	779
Carbide	461	169	94	52	116
Belgium-Luxembourg					
Metal	156	148	161	233	...
France					
Metal	275	298	416	725	508
Carbide	189	153	236	...	237
Germany, Federal Republic of					
Metal	1 895	2 167	1 931	1 256	...
Italy					
Metal	131	327	173	72	...
Netherlands					
Tungsten ore	214	—	149	1 282	...
Metal	804	415	244	346	...
Portugal					
Tungsten ore	2 216	2 878	1 530	2 413	...
Spain					
Tungsten ore	—	132	—	—	...
Austria					
Metal	1 032	1 047	639	646	819
Sweden					
Tungsten ore	110	217	48	—	...
Metal	12	17	11	10	...
Carbide	9	24	346	456	...
Switzerland					
Metal	94	74	125	119	53
Turkey					
Tungsten ores & concentrates	36	11 096	—	—	—
Rwanda					
Tungsten ores & concentrates	283	277	128	141	...
Mexico					
Tungsten ores & concentrates	333	493	96	100	124
USA					
Tungsten ores & concentrates	89	8	33	66	44
Metal	2 264	1 846	1 199	1 207	*1 500
Ammonium paratungstate (a)	374	770	470	166	250
Carbide	1 080	839	749	1 250	1 322
Bolivia					
Tungsten ore	1 716	2 083	1 491	670	826
Peru					
Tungsten ores & concentrates	1 849	*1 400	*1 300	702	...
China					
Tungsten ores & concentrates	16 450	6 071	2 325	699	...
Metal	336	420	637	254	1 133
Ammonium paratungstate	8 265	9 197	...	9 226	...
Carbide (d)	*240	*200	*120	*150	...
Hong Kong					
Tungsten ore (c)	2 516	1 836	3 052	379	2 611
Israel					
Metal (d)	*240	*220	*270	*200	...
Japan					
Metal	733	1 279	1 050	759	1 348
Korea, Republic of					
Metal	265	538	505	440	352
Carbide	690	633	681	463	727
Myanmar (b)					
Tungsten ores & concentrates	*600	*500	*400	*300	...



**Exports of Tungsten**

tonnes

Country	1990	1991	1992	1993	1994
Singapore					
Tungsten ore (c)	713	1 401	804	687	850
Metal	138	133	125	193	117
Thailand					
Tungsten ore	590	840	218	234	...
Australia					
Tungsten ores & concentrates	1 810	1 272	503	40	...

## Note(s):

- (1) Significant amounts of tungsten are traded in the forms of ammonium paratungstate (APT) and carbide. Though statistics are included where available, most countries do not separately distinguish these forms in their trade accounts
  - (2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- (a) W content  
 (b) Years ended 31 March following that stated  
 (c) Re-exports  
 (d) BGS estimates, based on known imports into certain countries

**Imports of Tungsten**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Tungsten ore	111	38	7	8	32
Metal	717	577	667	962	1 226
Carbide	294	237	272	118	298
Belgium-Luxembourg					
Metal	229	460	352	398	...
Carbide	164	166	150	139	...
France					
Metal	262	470	237	315	398
Carbide	257	268	244	...	427
Germany, Federal Republic of					
Tungsten ore	1 394	566	396	107	...
Metal	1 609	2 225	1 353	1 535	...
Carbide	887	876	758	692	...
Italy					
Metal	276	127	144	274	...
Carbide	343	253	263	...	...
Netherlands					
Tungsten ore	453	—	—	217	...
Metal	771	337	98	175	...
Spain					
Metal	50	35	36	75	...
Austria					
Tungsten ore	691	439	110	600	3 014
Metal	1 112	678	712	455	563
Finland					
Metal	51	7	16	37	...
Soviet Union					
Tungsten concentrates	*9 700	*3 900	—	—	—
Sweden					
Tungsten ore	314	410	342	18	...
Metal	247	162	205	244	...
Carbide	475	18	94	116	...
Switzerland					
Metal	83	88	95	62	88
Turkey					
Metal	25	25	19	—	—
South Africa					
Tungsten ores & concentrates	220	60	—	—	—
Metal	34	21	10	81	43
Carbide	157	30	46	64	210
Canada					
Metal	128	144	161	132	168
Carbide	290	290	348	388	421
Mexico					
Metal	198	39	36	289	189
USA					
Tungsten ore	11 854	14 411	4 411	3 008	5 387
Metal	1 725	3 443	2 419	1 942	...
Ammonium paratungstate (a)	462	842	378	1 176	848
Carbide	736	486	444	326	290
Hong Kong					
Tungsten ore	2 031	516	1 303	—	1 162
India (c)					
Tungsten ore	358	406	507	560	...
Metal	59	72	82	136	...
Indonesia					
Metal	71	133	80	96	...
Japan					
Tungsten ore	2 589	1 200	717	459	236
Metal	348	591	320	278	807
Korea, Dem. P.R. of					
Tungsten ore (d)	*450	*100	*100	*130	...

**Imports of Tungsten**

tonnes

Country	1990	1991	1992	1993	1994
Korea, Republic of					
Tungsten ores & concentrates	3 007	3 412	5 274	41	—
Metal	64	64	72	75	141
Malaysia					
Metal	628	160	296	...	...
Singapore					
Tungsten ore	978	1 334	409	254	858
Metal	117	128	139	200	176
Taiwan					
Metal	624	132	143	140	136
Australia (b)					
Metal	82	41	50	48	...

## Note(s):

- (1) Significant amounts of tungsten are traded in the forms of ammonium paratungstate (APT) and carbide. Though statistics are included where available, most countries do not separately distinguish these forms in their trade accounts
  - (2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys
- (a) W content
  - (b) Years ended 30 June of that stated
  - (c) Years ended 31 March following that stated
  - (d) BGS estimates, based on known exports from certain countries

## Vanadium

**Mine Production of Vanadium**

tonnes (metal content)

Country	1990	1991	1992	1993	1994
Russia	—	—	*11 000	*10 000	*10 000
Soviet Union	*9 000	*8 500	—	—	—
South Africa	17 106	15 478	14 035	15 052	*15 700
USA	*1 800	*1 000	*2 700	*1 100	*1 500
China	*4 500	*4 500	*4 700	*5 000	*5 000
World total	32 400	29 500	32 400	31 200	32 200

## Note(s):

(1) This table includes vanadium in slag products but excludes vanadium recovered as a byproduct of the refining and burning of heavy oils

## Exports of Vanadium

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Metal	22	31	36	16	31
Belgium-Luxembourg					
Vanadiferous residues	4 433	7 107	6 157	3 649	...
Pentoxide	66	18	21	25	...
Vanadium-titanium pig iron	—	—	49	1	...
Denmark					
Vanadium-titanium pig iron	38	348	199	1	16
France					
Vanadiferous residues	132	177	120	...	49
Pentoxide	35	43	140	...	361
Vanadium-titanium pig iron	6	100	16	...	—
Metal	3	29	1	2	21
Germany, Federal Republic of					
Vanadiferous residues	171	1 507	1 343	2 596	...
Pentoxide	220	46	66	78	...
Vanadium-titanium pig iron	150	51	77	47	...
Metal	401	239	262	254	...
Italy					
Vanadiferous residues	...	36	282	...	...
Austria					
Pentoxide	384	365	258	1 149	163
Soviet Union					
Vanadiferous residues	6 600	...	—	—	—
South Africa					
Pentoxide (b)	26 789	24 956	28 054	21 344	...
Metal (a)	*240	*150	*770	*730	...
USA					
Pentoxide	2 570	1 805	1 126	1 021	2 408
China					
Pentoxide	(a) *3 400	(a) *2 100	4 196	6 752	...

Note(s):

- (1) In this table the term 'pentoxide' also includes vanadium oxides and hydroxides, if any
- (2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) BGS estimates, based on known imports into certain countries

(b) Includes V<sub>2</sub>O<sub>5</sub> content of vanadiferous residues

## Vanadium

**Imports of Vanadium**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Pentoxide	226	135	46	98	134
Metal	257	193	256	253	61
Belgium-Luxembourg					
Pentoxide	5 657	3 329	3 551	2 853	...
France					
Pentoxide	282	178	183	...	231
Vanadium-titanium pig iron	—	1	1	...	43
Metal	85	15	65	90	30
Germany, Federal Republic of					
Vanadiferous residues	25 923	23 624	13 734	80	...
Pentoxide	597	260	896	3 744	...
Metal	19	46	139	2	...
Italy					
Vanadiferous residues	184	478	822	...	...
Pentoxide	40	74	128	...	...
Austria					
Vanadiferous residues	18 908	26 058	11 349	50	455
Pentoxide	972	804	734	3 269	1 603
Canada					
Pentoxide	838	851	1 305	1 325	1 532
USA					
Vanadiferous residues	50 464	4 793	3 578	5 303	2 390
Pentoxide	1 004	352	424	138	430
Metal	115	102	734	817	570
Brazil					
Pentoxide	740	657	420	...	...
Japan					
Pentoxide	4 796	4 613	3 538	4 559	4 501
Metal	104	136	110	74	134
Korea, Republic of					
Pentoxide	113	151	201	228	297

Note(s):

- (1) In this table the term 'pentoxide' also includes vanadium oxides and hydroxides, if any
- (2) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

## Mine Production of Zinc

tonnes (metal content)

Country	1990	1991	1992	1993	1994
United Kingdom	6 673	1 078	...	...	...
France	23 921	27 122	16 500	13 800	—
Germany, Federal Republic of	58 100	54 000	14 300	—	—
Greece	26 700	30 000	26 200	22 000	17 000
Irish Republic	166 400	187 500	194 100	194 100	194 000
Italy	42 400	37 400	31 000	7 100	22 900
Spain	257 500	264 600	206 300	170 200	150 400
Austria	17 661	16 354	15 787	20 014	—
Bosnia & Herzegovina	—	—	*2 000	*350	...
Bulgaria	35 300	30 100	29 400	*25 000	25 100
Czechoslovakia	7 400	7 800	*6 200	—	—
Czech Republic	—	—	—	1 500	—
Finland	53 923	57 310	32 817	22 529	16 900
Georgia	—	—	*2 000	*2 000	*2 000
Greenland	48 000	—	—	—	—
Macedonia	—	—	*15 535	*17 972	15 363
Norway	17 296	19 631	21 498	15 093	15 586
Poland	178 000	176 000	186 000	151 000	151 000
Romania	*36 000	*26 300	*25 800	*27 800	33 200
Russia	—	—	207 700	224 600	...
Slovakia	—	—	—	2 900	—
Slovenia	—	—	1 550	...	...
Soviet Union	*624 000	*580 000	—	—	—
Sweden	164 128	161 170	171 539	168 617	159 858
Turkey	39 066	32 879	27 500	*32 500	35 100
Yugoslavia (b)	83 788	74 000	19 781	9 704	...
Algeria	4 300	4 300	4 000	3 600	2 800
Morocco	21 249	27 290	22 462	65 383	75 900
Namibia	40 507	35 638	36 192	36 355	33 414
South Africa	74 792	64 425	71 928	77 096	76 361
Tunisia	7 400	5 200	2 200	1 320	12 900
Zaire	61 800	42 400	22 300	*10 000	600
Zambia	37 564	24 800	19 200	19 700	1 000
Canada	1 203 161	1 156 582	1 324 675	1 004 367	1 008 342
Honduras	28 971	38 280	32 702	24 276	23 611
Mexico	322 487	300 706	289 119	366 432	358 953
USA	543 200	546 600	551 600	513 100	597 600
Argentina	38 664	39 253	40 978	31 395	26 915
Bolivia	103 849	129 778	143 936	122 638	100 742
Brazil	158 025	130 000	149 000	*170 000	*170 000
Chile	25 146	30 998	29 730	29 435	30 178
Peru (a)	583 934	627 824	602 614	664 552	682 367
China	618 900	750 000	758 100	729 300	755 000
India	70 000	104 900	152 800	156 300	147 800
Iran	14 800	31 100	65 000	60 800	72 900
Japan	127 273	133 004	134 510	118 599	100 653
Kazakhstan	—	—	*250 000	*210 000	*185 000
Korea, Dem. P.R. of	*100 000	*120 000	*120 000	*120 000	*90 000
Korea, Republic of	22 792	22 039	21 883	13 800	7 100
Myanmar	1 700	1 000	1 000	800	1 300
Philippines	53	—	—	—	—
Saudi Arabia	2 500	4 000	—	—	—
Thailand	74 759	91 761	75 328	69 500	65 800
Uzbekistan	—	—	*30 000	*30 000	...
Vietnam	*10 000	*15 000	*15 000	*12 000	*11 900
Australia	933 000	1 023 000	1 025 000	1 030 000	955 000
World total	7 100 000	7 300 000	7 200 000	6 800 000	6 700 000

(a) Recoverable

(b) As from 1992 data is for Serbia and Montenegro only

**Production of Slab Zinc**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	93 309	100 651	96 813	102 391	101 300
Belgium (a)	356 533	385 053	310 620	399 567	...
France	264 132	299 497	318 800	309 800	308 600
Germany, Federal Republic of	337 600	345 700	383 100	380 900	359 900
Italy	248 100	256 000	252 600	253 600	199 300
Netherlands	(b) 208 537	(b) 211 082	(b) 218 410	206 700	212 600
Portugal	5 500	2 100	2 200	3 500	3 500
Spain	252 700	262 200	351 900	341 600	298 700
Austria	28 313	16 310	5 973	6 838	—
Bulgaria	75 457	58 730	57 820	67 000	76 700
Finland	163 063	172 020	162 798	170 299	173 200
German Democratic Republic	*12 700	—	—	—	—
Macedonia	—	—	52 728	51 931	41 984
Norway	124 804	129 254	129 487	133 656	131 921
Poland	132 131	126 067	135 000	149 100	154 300
Romania	11 500	8 700	11 600	14 071	21 600
Russia	—	—	186 400	204 000	138 000
Soviet Union	*640 000	*540 000	—	—	—
Turkey	20 100	17 400	18 800	18 500	18 500
Ukraine	—	—	*7 000	*12 000	14 000
Yugoslavia (d)	113 705	(c) 87 372	14 182	6 985	4 000
Algeria	23 600	29 500	31 500	33 400	33 400
South Africa	92 300	91 500	83 200	96 200	92 800
Zaire	38 203	28 200	18 800	4 152	600
Zambia	10 800	6 600	7 300	4 700	100
Canada	591 786	660 552	671 702	661 881	692 919
Mexico	199 295	189 082	151 615	209 931	209 200
USA	358 412	375 733	399 490	381 754	355 400
Argentina	34 217	38 566	37 292	33 570	38 014
Brazil	154 086	163 000	187 414	*195 000	209 200
Peru	117 634	154 572	126 399	168 398	181 780
China	763 100	612 000	718 900	891 300	925 500
India	79 093	85 600	128 100	141 700	142 300
Japan	687 461	730 829	729 454	695 687	665 502
Kazakhstan	—	—	*230 000	*230 000	*185 000
Korea, Dem. P.R. of	*110 000	*130 000	*120 000	*120 000	*100 000
Korea, Republic of	257 043	285 830	255 929	276 384	271 100
Thailand	63 257	62 435	61 314	58 881	71 300
Uzbekistan	—	—	*80 000	*70 000	*40 000
Australia	303 000	324 000	332 000	316 000	323 000
World total	7 000 000	7 000 000	7 100 000	7 400 000	7 200 000

(a) Including alloys

(b) Sales

(c) Excluding data from August to December for the Republic of Croatia

(d) As from 1992 data is for Serbia and Montenegro only



## Exports of Zinc

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Ores & concentrates	21 927	2 398	122	120	57
Unwrought	7 671	15 469	13 073	19 147	18 221
Unwrought alloys	11 414	14 763	13 781	15 798	21 946
Scrap	25 636	25 919	23 526	30 471	26 558
Belgium-Luxembourg					
Ore	50 881	40 128	56 017	192 055	...
Unwrought	136 794	130 677	158 001	182 655	...
Unwrought alloys	45 160	72 480	49 462	114 785	...
Scrap	18 881	14 450	15 510	10 133	...
Denmark					
Unwrought (a)	681	215	46	0	65
Scrap	4 916	4 272	4 616	4 730	7 115
France					
Ore	24 620	12 208	7 600	12 555	7 791
Unwrought	74 081	81 443	146 765	183 718	129 894
Unwrought alloys	9 393	5 008	3 567	1 839	3 952
Scrap	19 411	21 098	25 267	18 605	20 669
Germany, Federal Republic of					
Ore	*70 600	35 456	50 182	5 781	29 540
Unwrought	75 000	73 921	117 948	105 168	103 211
Unwrought alloys	22 832	28 335	25 890	15 145	...
Scrap	26 419	28 825	28 341	18 568	19 587
Greece					
Ores & concentrates	53 391	53 541	70 073	85 699	...
Scrap	232	733	2 013	545	...
Irish Republic					
Ores & concentrates	319 139	357 817	402 805	408 051	...
Italy					
Ore	20 918	1 079	6 387	65	48
Unwrought	51 151	34 771	34 254	16 424	17 025
Unwrought alloys	5 430	5 186	6 925	8 476	11 210
Scrap	3 857	2 476	1 257	2 587	...
Netherlands					
Unwrought	156 814	140 255	143 306	131 555	...
Unwrought alloys	5 605	8 339	7 276	13 133	...
Scrap	23 621	21 473	20 688	17 079	...
Portugal					
Unwrought (a)	263	1 908	17 077	8 968	...
Spain					
Ore	133 263	105 880	116 641	121 905	...
Unwrought (a)	137 077	144 472	239 110	212 073	...
Austria					
Ore	—	3 738	28 767	26 096	4 040
Unwrought (a)	5 626	1 850	3 007	2 899	3 570
Scrap	2 527	2 652	3 114	2 094	1 922
Bulgaria					
Unwrought (a) (b)	*21 200	*21 700	*24 700	*12 000	...
Croatia					
Scrap	—	—	529	590	...
Czechoslovakia					
Ore (b)	*6 000	*4 000	*9 800	—	—
Finland					
Unwrought	134 959	148 919	138 759	137 582	...
Unwrought alloys	5 138	4 458	3 648	3 531	...
Scrap	5 172	6 795	7 780	6 127	...
Greenland					
Ores & concentrates	95 544	—	—	—	—
Hungary					
Scrap	3 153	...	2 825	1 895	2 359
Norway					
Ore	5 708	5 561	4 607	0	546
Unwrought	106 122	109 278	109 257	122 293	119 626
Unwrought alloys	8 032	3 982	4 020	4 594	4 882
Scrap	1 299	2 675	2 524	710	646

**Exports of Zinc**

tonnes

Country	1990	1991	1992	1993	1994
Poland					
Unwrought	31 314	25 992	60 105	(b) *61 300	...
Russia					
Ores & concentrates	—	14 500	24 637	40 300	...
Unwrought (a)	—	—	3 961	48 535	...
Slovenia					
Ores & concentrates	—	—	6 239	3 463	...
Soviet Union					
Unwrought (a) (b)	*30 300	*18 100	—	—	—
Sweden					
Ore	313 305	322 221	328 931	361 800	...
Unwrought (a)	855	225	512	268	...
Scrap	5 371	5 891	6 135	6 150	...
Switzerland					
Unwrought (a)	916	364	132	495	639
Scrap	1 238	1 267	1 440	1 531	1 941
Turkey					
Ores & concentrates	12 755	16 615	13 088	12 867	17 332
Yugoslavia (d)					
Concentrates	13 330	(g) —	—	...	...
Unwrought (a)	53 429	(g) 8 630	1 790	...	...
Algeria					
Unwrought (a)	14 252	12 984	8 742	...	...
Morocco					
Ore	33 325	36 082	38 000	111 780	...
Namibia					
Concentrates	79 840	65 517	75 246	71 361	...
South Africa					
Ores & concentrates (c)	10 975	3 737	—	9 770	2 514
Unwrought	1 816	3 900	3 300	7 600	...
Tunisia					
Ore	17 700	10 000	5 200	4 566	...
Zaire					
Unwrought	37 500	*30 200	5 400	3 700	...
Zambia					
Unwrought	6 067	6 300	6 100	4 500	4 000
Canada					
Ores & concentrates (c)	700 910	571 501	694 505	447 128	382 489
Unwrought	452 914	520 533	510 087	493 391	552 733
Unwrought alloys	3 409	8 130	6 139	4 772	7 504
Scrap	38 295	33 327	31 972	40 846	54 925
Honduras					
Ores & concentrates (c)	28 971	38 280	32 702	24 276	23 611
Mexico					
Ores & concentrates	238 982	252 253	300 734	287 343	316 072
Unwrought	93 291	88 890	55 000	88 699	80 464
USA					
Ore (c)	380 932	490 216	546 041	405 350	...
of which: Re-exports	160 486	151 511	234 009	70 435	...
Unwrought (a)	7 043	6 333	6 030	9 092	6 312
Scrap	88 475	73 179	57 024	33 851	39 647
Argentina					
Ores & concentrates	11 855	7 158	5 164	—	*30
Unwrought	14 005	14 458	7 934	5 132	9 808
Bolivia					
Ore	210 366	267 599	286 969	242 087	208 787
Brazil					
Unwrought	34 202	49 032	280 817	70 370	59 548
Chile					
Concentrates	49 672	59 848	50 486	73 548	50 700
Peru					
Concentrates	981 407	876 052	930 753	959 161	976 000
Unwrought (a)	64 677	94 726	70 534	84 882	97 100

## Exports of Zinc

tonnes

Country	1990	1991	1992	1993	1994
China					
Ores & concentrates	76 228	76 960	65 312	117 489	...
Unwrought (a)	16 711	6 284	84 860	205 565	278 003
Hong Kong					
Unwrought (a)	57 606	57 816	66 270	92 719	98 357
of which: Re-exports	56 576	56 799	64 302	85 104	87 610
Scrap	9 536	9 333	10 343	11 058	23 481
of which: Re-exports	5 596	7 327	8 328	10 260	22 553
Indonesia					
Scrap	271	—	346	78	...
Japan					
Unwrought	21 254	18 147	30 124	32 467	38 635
Unwrought alloys	4 400	4 242	4 316	3 605	2 503
Scrap	8 519	8 141	8 459	7 130	4 702
Kazakhstan					
Ore	—	—	13 370	10 640	...
Unwrought	—	—	74 000	84 000	...
Korea, Dem. P.R. of					
Unwrought (a) (b)	*54 400	*57 900	*37 800	*25 400	...
Korea, Republic of					
Unwrought (a)	56 310	27 626	58 408	107 407	84 910
Malaysia					
Scrap	...	1 139	1 670	2 819	...
Myanmar (e)					
Concentrates	5 500	3 871	2 500	...	...
Philippines					
Concentrates	1 284	—	—	...	...
Scrap	866	514	186	...	...
Saudi Arabia					
Scrap	3 138	911	2 700	...	...
Singapore					
Unwrought	22 604	12 920	12 896	12 106	24 700
of which: Re-exports	22 210	11 954	12 337	11 601	24 312
Scrap	1 364	1 001	591	628	2 561
Taiwan					
Unwrought (a)	2 410	1 080	5 869	3 762	4 226
Thailand					
Unwrought (a)	6 059	10	—	3	...
Australia					
Ores & concentrates	1 217 000	1 406 000	1 489 000	1 414 000	1 385 000
Unwrought	244 000	253 000	259 000	259 000	257 000
Scrap (f)	3 665	4 023	4 771	5 730	...
New Zealand (f)					
Scrap	876	389	879	1 333	924

## Note(s):

(1) In this table the term 'unwrought' zinc corresponds to item 686.1 of the Standard International Trade Classification (Revision 3) and comprises blocks, pigs, slabs, etc.

- (a) Including alloys
- (b) BGS estimates, based on known imports into certain countries
- (c) Zn content
- (d) As from 1992 data is for Serbia and Montenegro only
- (e) Years ended 31 March following that stated
- (f) Years ended 30 June of that stated
- (g) Data for the Federal Republic of Yugoslavia only

**Imports of Zinc**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Ores & concentrates	278 301	207 171	185 766	213 502	243 051
Unwrought	123 641	120 120	122 639	118 921	124 578
Unwrought alloys	4 682	1 987	2 792	8 129	5 743
Scrap	5 028	2 634	2 848	4 944	3 759
Belgium-Luxembourg					
Ore	626 045	692 011	428 254	400 268	...
Unwrought (a)	35 156	46 464	150 940	192 253	...
Scrap	20 354	17 870	19 376	10 957	...
Denmark					
Unwrought	13 651	13 587	16 341	12 053	11 601
Unwrought alloys	2 295	2 752	1 841	378	926
Scrap	244	182	113	477	510
France					
Ore	595 386	630 641	624 440	547 373	632 892
Unwrought	88 933	82 204	97 872	92 398	115 493
Unwrought alloys	21 566	22 033	27 523	37 131	50 897
Scrap	9 753	5 971	5 768	3 994	7 068
Germany, Federal Republic of					
Ore	592 604	624 814	640 414	697 969	612 295
Unwrought	222 750	270 008	283 247	254 482	247 756
Unwrought alloys	19 519	22 584	23 275	19 955	...
Scrap	25 349	17 855	20 399	14 081	13 838
Greece					
Unwrought (a)	22 319	17 198	13 215	15 257	...
Irish Republic					
Unwrought (a)	1 769	2 031	1 120	1 917	...
Scrap	254	108	21	4	...
Italy					
Ore	400 711	411 633	443 267	412 192	505 945
Unwrought	76 905	71 238	82 483	88 745	92 311
Unwrought alloys	15 380	16 653	15 279	12 655	18 345
Scrap	5 840	5 577	10 392	13 390	...
Netherlands					
Ore	465 923	410 911	457 031	407 843	...
Unwrought	25 493	24 831	29 160	153 541	...
Unwrought alloys	694	1 128	522	277	...
Scrap	5 055	5 664	5 210	5 391	...
Portugal					
Unwrought (a)	17 653	17 416	17 579	14 532	...
Scrap	2 418	2 240	225	627	...
Spain					
Ore	142 988	130 553	401 067	378 437	...
Unwrought	3 986	6 542	1 826	1 275	...
Unwrought alloys	4 003	4 966	4 487	5 207	...
Scrap	1 511	2 332	933	193	...
Austria					
Ore	19 376	12 206	6 301	3 559	199
Unwrought	9 920	20 324	36 462	40 924	42 783
Unwrought alloys	6 378	7 289	7 055	6 304	7 667
Scrap	808	1 023	1 294	926	1 269
Bulgaria					
Ore (h)	*57 700	*41 500	*56 600	*30 500	...
Croatia					
Unwrought (a)	—	—	1 664	1 428	...
Czechoslovakia					
Unwrought (a)	54 000	...	23 355	—	—
Czech Republic					
Unwrought (a)	—	—	—	18 684	...
Finland					
Ore	266 689	236 902	259 342	274 978	...
Unwrought (a)	110	573	2 697	598	...
German Democratic Republic					
Ore (h)	*39 100	—	—	—	—
Unwrought (a) (h)	*17 400	—	—	—	—

## Imports of Zinc

tonnes

Country	1990	1991	1992	1993	1994
Hungary					
Unwrought (g)	12 911	...	13 001	10 772	13 133
Iceland					
Unwrought (a)	171	167	163	139	...
Norway					
Ore	158 829	160 116	171 760	170 678	149 168
Unwrought (a)	935	435	556	2 169	2 174
Scrap	1 607	5 619	3 864	2 177	2 703
Poland					
Unwrought	947	860	475	(a) (h) *3 100	...
Romania					
Unwrought (a)	(h) *1 500	(h) *1 700	6 073	3 161	...
Russia					
Ore	—	32 214	128	128 543	...
Unwrought (a)	—	—	4 455	1 387	...
Slovakia					
Unwrought (a)	—	—	—	24 392	...
Slovenia					
Unwrought (a)	—	—	6 413	6 581	...
Scrap	—	—	673	594	...
Soviet Union					
Ore	(h) *42 200	...	—	—	—
Unwrought (a) (h)	*10 000	*1 000	—	—	—
Sweden					
Unwrought	40 304	33 364	29 993	29 136	...
Unwrought alloys	3 042	2 091	2 147	7 061	...
Scrap	92	205	60	177	...
Switzerland					
Unwrought	23 112	19 632	18 130	17 685	18 655
Unwrought alloys	3 010	2 597	2 110	2 429	2 832
Turkey					
Unwrought	(a) 29 841	(a) 20 714	(a) 31 481	27 506	23 531
Yugoslavia (k)					
Concentrates	55 430	(i) 19 187	7 787	...	...
Unwrought (a)	50 515	(i) 2 865	1 704	...	...
Algeria					
Ores & concentrates	25 837	...	63 768	...	...
Egypt					
Unwrought (b)	...	8 004	7 643	...	...
Kenya					
Unwrought (a)	6 736	...	6 445	...	...
Morocco					
Unwrought (a)	5 700	5 132	4 832	6 316	...
South Africa					
Unwrought (a)	5 528	2 477	4 318	1 046	348
Scrap	299	411	...	99	195
Tunisia					
Unwrought (a)	4 063	4 554	4 482	2 927	...
Canada					
Ores & concentrates (c)	170 918	176 805	151 679	108 957	152 305
Unwrought	9 482	4 687	5 679	8 699	12 490
Scrap	1 614	655	1 526	1 974	1 049
Costa Rica					
Unwrought (a)	4 741	3 623	4 660	...	...
El Salvador					
Unwrought (a)	737	683	534	822	...
Guatemala					
Unwrought (a)	834	550	244	...	...
Honduras					
Unwrought (a)	863	1 551	578	...	...
USA					
Ore (c)	240 785	170 616	488 956	116 287	29 543
Unwrought (a)	632 477	549 369	644 491	723 753	794 035
Scrap	31 720	31 596	31 176	38 079	51 676

**Imports of Zinc**

tonnes

Country	1990	1991	1992	1993	1994
Argentina					
Unwrought	1 742	4 567	4 612	8 998	5 532
Brazil					
Ores & concentrates	86 715	111 903	119 358	118 104	...
Unwrought (a)	12 735	10 955	8 943	11 976	*9 900
Chile					
Unwrought (a)	4 697	4 748	6 931	7 711	7 621
Colombia					
Unwrought (a)	8 750	13 926	15 062	18 097	...
Ecuador					
Unwrought (a)	2 649	3 909	2 529	2 679	...
Uruguay					
Unwrought	1 455	1 717	1 383	1 747	1 622
Venezuela					
Unwrought	9 271	12 727	14 206	11 016	...
Unwrought alloys	4 369	4 156	4 628	8 097	...
China					
Unwrought (a)	4 141	11 705	42 153	40 100	...
Hong Kong					
Unwrought	38 777	27 210	29 506	39 000	36 338
Unwrought alloys	36 041	60 588	57 472	71 711	76 562
Scrap	6 407	6 592	8 605	10 543	26 344
India (d)					
Ores & concentrates	42 155	15 073	60 170	45 996	...
Unwrought	74 158	38 365	19 927	24 600	...
Unwrought alloys	1 537	231	236	253	...
Scrap	551	638	148	492	...
Indonesia					
Unwrought	47 884	48 160	56 008	68 109	...
Unwrought alloys	7 431	8 562	11 890	9 499	...
Scrap	195	326	342	867	...
Iran (e)					
Unwrought	16 749	14 419	16 948	13 679	...
Israel					
Unwrought (a)	...	9 116	10 021	8 292	...
Japan					
Ore	1 186 231	1 156 089	1 233 112	1 181 060	992 025
Unwrought	140 470	142 194	105 831	84 248	64 156
Unwrought alloys	14 333	12 342	9 557	8 822	8 718
Scrap	409	338	248	843	1 472
Jordan					
Unwrought	1 121	868	1 336	2 074	...
Korea, Dem. P.R. of					
Ores & concentrates (h)	*7 800	*19 100	*10 500	*100 200	...
Korea, Republic of					
Ores & concentrates	485 327	468 242	471 588	462 011	576 231
Unwrought (a)	25 283	22 353	25 079	46 501	71 999
Scrap	543	327	24	192	122
Macao					
Unwrought	620	128	40	...	...
Malaysia					
Unwrought	18 167	22 223	20 216	(a) 34 435	...
Unwrought alloys	6 915	8 150	10 220	...	...
Pakistan (f)					
Unwrought	29 396	17 876	13 305	13 254	...
Philippines					
Unwrought (a)	29 485	31 038	39 064	41 418	...
Saudi Arabia					
Unwrought	6 662	(a) 9 123	10 148	...	...
Singapore					
Unwrought	56 210	36 039	73 874	134 549	167 146
Scrap	550	1 042	1 254	2 567	4 735
Sri Lanka					
Unwrought (a)	1 319	1 603	1 206	1 630	1 678

**Imports of Zinc**

tonnes

Country	1990	1991	1992	1993	1994
Taiwan					
Unwrought	72 279	125 946	128 828	170 832	170 234
Unwrought alloys	13 449	30 790	15 610	21 928	22 320
Scrap	155 345	134 190	125 200	79 139	68 872
Thailand					
Ores & concentrates	1 000	33 865	40 428	43 209	...
Unwrought	827	5 260	8 492	20 681	...
Unwrought alloys	3 910	5 988	3 271	5 319	...
Australia (f)					
Ores & concentrates	32 295	23 767	22 176	23 578	...
Scrap	587	119	828	792	...
New Zealand (f)					
Unwrought (a)	25 550	17 428	18 731	20 926	21 404

## Note(s):

(1) In this table the term 'unwrought' zinc corresponds to item 686.1 of the Standard International Trade Classification (Revision 3) and comprises blocks, pigs, slabs, etc.

- (a) Including alloys
- (b) Including scrap
- (c) Zn content
- (d) Years ended 31 March following that stated
- (e) Years ended 20 March following that stated
- (f) Years ended 30 June of that stated
- (g) Including semi-manufactures
- (h) BGS estimates, based on known exports from certain countries
- (i) Data for the Federal Republic of Yugoslavia only
- (j) Data for the Russian Federation only
- (k) As from 1992 data is for Serbia and Montenegro only

**Production of Zirconium Minerals**

tonnes

Country	1990	1991	1992	1993	1994
Soviet Union	*85 000	*65 000	—	—	—
Ukraine	—	—	*75 000	*70 000	...
South Africa (a)	*170 000	*240 000	*250 000	230 000	*210 000
USA	102 073	103 140	108 156	111 000	*125 000
Brazil (b)	16 905	18 590	16 874	*20 000	*20 000
China	16 542	*16 500	*16 500	*16 500	*10 000
India	*17 500	*18 200	*18 000	*20 000	*20 000
Malaysia	4 279	5 579	2 608	2 184	1 656
Sri Lanka	19 727	26 123	13 368	14 401	...
Thailand	490	2 573	1 723	707	3
Australia	437 000	292 000	355 000	414 000	511 000
World total	870 000	788 000	857 000	899 000	982 000

Note(s) :

(1) In this table the term 'zirconium minerals' is understood to mean zircon, unless otherwise stated

(a) Including baddeleyite (ZrO<sub>2</sub>)

(b) Including caldasite rock containing zircon and baddeleyite



## Exports of Zirconium

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Concentrates	888	1 357	1 262	2 429	2 457
Metal	143	56	245	83	99
Belgium-Luxembourg					
Concentrates	626	144	172	367	...
Metal	31	45	39	27	...
France					
Concentrates	857	816	713	692	1 659
Germany, Federal Republic of					
Concentrates	2 821	1 879	1 016	2 379	...
Metal	97	82	158	80	...
Italy					
Concentrates	4 301	4 827	8 945	9 858	...
Metal	553	1 223	947	610	...
Netherlands					
Concentrates	24 263	21 041	21 664	10 349	...
Spain					
Concentrates	1 425	32	96	265	...
Zirconium sand	1 601	2 061	3 430	1 574	...
Sweden					
Metal	109	101	172	76	...
South Africa					
Concentrates (a)	*122 300	*139 400	*145 300	*178 100	...
USA					
Concentrates	31 280	31 490	32 418	36 001	...
Metal	1 318	1 415	1 731	1 502	...
Brazil					
Concentrates	4 051	4 002	1 006	...	...
Hong Kong					
Concentrates (d)	...	...	47 970	37 025	55 991
Malaysia					
Concentrates	3 249	4 698	1 698	1 006	1 841
Australia					
Concentrates	332 000	324 000	(b) 310 000	(c) 348 000	504 000

## Note(s):

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) BGS estimates, based on known imports into certain countries

(b) Standard grade only

(c) Standard grade January-June, all grades thereafter

(d) Re-exports

**Imports of Zirconium**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom					
Concentrates	35 685	36 388	37 708	57 432	39 728
Metal	140	122	147	1 385	399
Belgium-Luxembourg					
Concentrates	1 756	1 142	1 836	2 898	...
Metal	189	212	287	209	...
France					
Concentrates	49 714	46 167	43 273	38 545	56 158
Metal	296	208	449	281	187
Germany, Federal Republic of					
Metal	468	418	474	309	...
Italy					
Concentrates	56 399	85 198	66 656	98 431	...
Metal	63	200	86	58	...
Netherlands					
Concentrates	52 737	52 198	33 753	33 503	...
Portugal					
Concentrates	1 795	1 828	1 479	...	...
Spain					
Concentrates	29 594	41 226	52 930	52 149	...
Zirconium sand	9 171	9 951	8 668	...	...
Austria					
Concentrates	1 606	1 434	729	1 003	1 404
Bulgaria					
Concentrates (a)	*1 300	*500	*500	*500	...
Finland					
Concentrates	1 001	1 721	2 776	1 111	...
German Democratic Republic					
Concentrates (a)	*1 500	—	—	—	—
Soviet Union					
Concentrates (a)	*8 200	*2 700	—	—	—
Sweden					
Metal	300	525	264	214	...
Turkey					
Concentrates	613	61	428	305	278
Zirconium sand	...	...	...	11 787	14 340
Canada					
Concentrates	9 841	7 102	8 172	9 521	12 622
Metal	289	270	286	341	337
Mexico					
Zirconium sand	5 644	7 981	9 651	...	...
USA					
Concentrates	26 783	34 688	42 772	70 035	...
Metal	410	520	557	395	...
Brazil					
Concentrates	4 749	3 768	5 098	9 994	...
China					
Concentrates	...	...	99 192	98 607	...
Metal	...	...	488	484	...
Hong Kong					
Concentrates	...	...	51 978	42 217	63 313
Indonesia					
Concentrates	329	985	1 469	3 284	...
Japan					
Concentrates	119 008	148 343	129 703	112 916	129 226
Metal	683	676	624	605	610
Korea, Republic of					
Concentrates	24 515	21 445	11 820	9 841	13 109
Metal	67	74	88	77	111
Malaysia					
Concentrates	...	2 075	2 612	...	...
Philippines					
Zirconium sand	490	511	419	...	...

**Imports of Zirconium**

tonnes

Country	1990	1991	1992	1993	1994
Taiwan					
Concentrates	7 064	8 004	9 645	11 193	15 971
Zirconium sand	6 008	8 297	9 147	7 314	10 409
Thailand					
Concentrates	1 108	1 904	1 204	1 261	...

Note(s):

(1) Metal traded in ferro-alloy form is included under Iron, Steel and Ferro-alloys

(a) BGS estimates, based on known exports from certain countries

**Production of Beryl**

tonnes

Country	1990	1991	1992	1993	1994
Portugal	*4	*4	*4	*4	*4
Russia Soviet Union	— *1 600	— *1 300	*1 100 —	*800 —	*800 —
Madagascar	3	*3	7	*5	3
Namibia	25	6	0	15	0
Zambia	2	1	1	*1	1
Zimbabwe	28	29	23	32	*30
USA	4 548	4 339	4 826	4 939	4 330
Argentina	25	27	*30	*30	...
Brazil	*850	*850	*850	*850	*850
China	*1 400	*1 400	*1 400	*1 400	*1 400

**Production of Borates**

tonnes

Country	1990	1991	1992	1993	1994
Soviet Union	*180 000	*160 000	—	—	—
Turkey	1 198 730	1 120 810	1 038 054	1 124 484	1 892 356
USA (a)	1 094 000	1 240 000	1 009 000	1 055 000	1 110 000
Argentina	144 020	115 644	124 955	146 349	*140 000
Bolivia	3 076	7 932	18 131	11 990	10 433
Chile	131 753	97 135	202 716	117 072	79 083
Peru	19 917	26 390	26 613	36 472	41 987
China (b)	*75 000	*93 000	*127 000	*100 000	*120 000
Kazakhstan	—	—	*100 000	*90 000	*80 000

Note(s):

(1) In addition to the countries listed, the Federal Republic of Germany and Iran are believed to produce borates

(a) Sold or used by producers

(b) B<sub>2</sub>O<sub>3</sub> equivalent

**Production of Germanium Metal**

tonnes

Country	1990	1991	1992	1993	1994
Austria	5	—	—	—	—
Soviet Union (b)	*12	*15	*12	*10	...
USA (a)	*18	*15	*13	*10	*10
China	*10	*12	*7	1	...
Japan	3	3	3	3	...

Note(s):

(1) Significant quantities of germanium are also believed to be recovered from imported or domestic material in Belgium, France, Federal Republic of Germany and to a lesser extent in Italy

(a) Including production of secondary metal

(b) Dissolved in December 1991. No information is available on which to estimate for individual countries

**Production of Primary Magnesium Metal**

tonnes

Country	1990	1991	1992	1993	1994
France	14 600	14 000	13 600	10 980	*10 000
Italy	5 937	3 919	1 211	—	—
Norway	48 222	44 300	30 400	27 300	*30 000
Russia	—	—	*40 000	*30 000	*25 000
Soviet Union	*88 000	*80 000	—	—	—
Ukraine	—	—	*10 000	*9 000	*10 000
Yugoslavia (b)	5 788	(a) 5 360	4 055	—	—
Canada	26 726	35 500	25 800	*28 000	29 200
USA	139 333	131 288	136 947	132 144	128 475
Brazil	8 700	7 800	7 300	9 700	8 800
China	5 900	6 000	10 500	13 200	11 016
Japan	12 843	11 559	7 119	7 471	*5 000
Kazakhstan	—	—	*20 000	*20 000	*10 000

(a) Excluding data from August to December for the Republic of Croatia

(b) As from 1992 data is for Serbia and Montenegro only

**Production of Nepheline Syenite**

tonnes

Country	1990	1991	1992	1993	1994
Norway	305 000	*300 000	*350 000	*300 000	*300 000
Russia	—	—	*1 000 000	*1 394 000	...
Soviet Union	1 650 000	*1 600 000	—	—	—
South Africa	...	20 966	174 864	...	...
Canada	535 000	484 000	554 000	550 000	544 000

**Production of Perlite**

tonnes

Country	1990	1991	1992	1993	1994
Greece	*600 000	655 899	*575 000	*600 000	*400 000
Italy	*71 000	*70 000	*65 000	*65 000	65 000
Armenia	—	—	*50 000	*10 000	*5 000
Czechoslovakia (a)	41 702	40 719	*40 000	—	—
Hungary	95 572	87 750	40 290	65 801	*71 000
Slovakia	—	—	—	*35 000	*40 000
Soviet Union	*150 000	*80 000	—	—	—
Turkey	138 510	133 942	192 500	213 000	*250 000
Mexico	42 439	48 860	42 637	34 568	*35 000
USA	659 000	711 000	762 000	691 000	664 000
Argentina	22 502	25 211	16 514	9 367	...
Iran	2 266	6 275	5 000	*6 000	*6 000
Japan	*203 000	*203 000	*203 000	*200 000	*200 000
Philippines	3 150	2 894	*2 800	*19 800	*20 000
Australia	*5 000	*5 000	*5 000	*5 000	*5 000
New Zealand	1 972	1 674	2 000	814	...

Note(s):

(1) In addition to the countries listed, Algeria, Bulgaria, Canada, China, Iceland, Mozambique and former Yugoslavia are believed to produce perlite

(a) Expanded

**Production of Selenium Metal**

tonnes

Country	1990	1991	1992	1993	1994
Belgium	*250	*250	*250	*250	*250
Germany, Federal Republic of	*125	*110	*125	*120	...
Finland	37	37	32	32	29
Sweden	29	23	37	*25	...
Yugoslavia (c)	59	(b) 64	58	28	...
Zambia (d)	23	22	32	*29	*25
Canada	369	227	345	542	627
Mexico	12	3	0	0	...
USA	287	260	243	283	*290
Chile (a)	37	66	63	69	43
Peru	9	12	14	17	21
Japan	495	537	573	541	...

Note(s):

(1) In addition to the countries listed, Australia, India, and former Soviet Union are believed to produce selenium metal

(a) Exports

(b) Excluding data from August to December for the Republic of Croatia

(c) As from 1992 data is for Serbia and Montenegro only

(d) Years ended 31 March following that stated

**Production of Strontium Minerals**

tonnes

Country	1990	1991	1992	1993	1994
United Kingdom	24 734	2 000	2 000	*2 000	—
Spain	80 352	*75 000	*65 000	*50 000	...
Turkey	73 790	70 000	37 940	*35 000	...
Algeria	*5 400	*5 400	*5 400	*5 400	*5 400
Mexico	66 254	62 180	61 097	71 903	111 769
Argentina (a)	3 112	3 176	2 237	4 806	...
Iran (b)	34 140	28 500	13 138	17 082	...
Pakistan	1 786	1 472	1 448	1 684	...

Note(s):

(1) In addition to the countries listed, China, Federal Republic of Germany, Poland and former Soviet Union are believed to produce strontium minerals

(a) May contain unbeneficiated material

(b) Years ended 20 March following that stated

**Production of Tellurium Metal**

tonnes

Country	1990	1991	1992	1993	1994
Canada	12	16	25	27	30
USA	36	50	50	50	50
Peru	8	13	19	18	28
Japan	50	57	57	47	47

Note(s):

(1) In addition to the countries listed, Australia, Federal Republic of Germany and former Soviet Union are believed to produce tellurium metal

**Mine Production of Uranium**

tonnes (metal content)

Country	1990	1991	1992	1993	1994
France	2 935	2 479	2 880	1 539	890
Portugal	111	27	29	33	24
Spain	164	195	186	183	254
Czechoslovakia	2 142	1 778	1 539	—	—
Czech Republic	—	—	—	*1 000	...
Russia	—	—	*2 900	*2 900	...
Soviet Union	*10 500	*10 500	—	—	...
Ukraine	—	—	*1 000	*1 000	...
Yugoslavia (a)	53	5	—	—	...
Gabon	709	678	594	509	467
Namibia	3 325	2 450	1 685	1 668	1 911
Niger	2 832	2 964	2 965	2 913	2 964
South Africa	2 438	1 725	1 671	1 703	1 616
Canada	8 770	8 161	9 298	9 154	9 719
USA	3 430	3 040	2 200	1 200	1 300
Argentina	9	18	124	126	64
Brazil	5	—	—	*50	*50
China	*800	*800	*800	*800	...
India	*210	*200	*230	*290	*200
Kazakhstan	—	—	*3 000	*2 800	2 240
Uzbekistan	—	—	2 700	*3 000	...
Australia	3 530	3 776	2 334	2 256	2 208
World total	42 000	38 800	36 100	33 100	32 600
World total (U <sub>3</sub> O <sub>8</sub> equivalent)	49 500	45 800	42 600	39 100	38 500

(a) As from 1992 data is for Serbia and Montenegro only

**Production of Vermiculite**

tonnes

Country	1990	1991	1992	1993	1994
Russia	—	—	*60 000	*50 000	*40 000
Soviet Union	*95 000	*85 000	—	—	—
Egypt (c)	28	157	217	457	1 659
Kenya	3 440	2 300	2 279	*2 300	*2 300
South Africa	220 311	214 656	170 399	211 143	223 478
Zimbabwe	2 135	2 319	4 300	5 032	8 184
Mexico	132	117	125	300	*300
USA (a)	209 000	180 000	190 000	190 000	177 000
Argentina	10	190	100	38	...
Brazil (b)	31 645	24 680	*20 000	*20 000	*34 000
India	1 769	1 768	*1 610	*1 410	*1 500
Japan	*15 000	*15 000	*15 000	*15 000	*15 000

Note(s):

(1) In addition to the countries listed, Australia and Malawi are believed to produce vermiculite

(a) Sold or used by producers

(b) Including beneficiated and directly shipped material

(c) Years ended 30 June of that stated



**Production of Wollastonite**

tonnes

Country	1990	1991	1992	1993	1994
Finland	29 628	27 829	27 928	26 656	28 000
Mexico	11 442	13 877	27 392	35 800	*36 000
USA	*100 000	*110 000	*120 000	*120 000	*130 000
China	*60 000	*70 000	*100 000	*120 000	...
India	61 386	61 358	*62 000	...	...

Note(s):

- (1) In addition to the countries listed, Japan, Namibia and Turkey are believed to produce wollastonite

