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(Data in thousand metric tons of copper content, unless otherwise noted)

Domestic Production and Use: Domestic mine production, which had remained unchanged in 1995, resumed the upward trend begun in 1984, rising to 1.9 million metric tons valued at about $4.5 billion. The five principal mining States, in descending order, Arizona, Utah, New Mexico, Nevada, and Montana, accounted for 98% of domestic production; copper was also recovered at mines in six other States. While copper was recovered at about 40 mines operating in the United States, 15 mines accounted for about 96% of production. Seven primary and 4 secondary smelters, 7 electrolytic and 6 fire refineries, and 14 solvent extraction-electrowinning operations were operating at yearend. Refined copper and direct melt scrap were consumed at about 35 brass mills; 15 rod mills; and 600 foundries, chemical plants, and miscellaneous consumers. Copper and copper alloy products were consumed[1] in building construction, 40%; electric and electronic products, 25%; industrial machinery and equipment, 12%; transportation equipment, 13%; and consumer and general products, 10%.

Salient Statistics—United States:	**1992**	**1993**	**1994**	**1995**	**1996[e]**
Production: Mine	1,760	1,800	1,850	1,850	1,900
Refinery: Primary[2]	1,710	1,790	1,840	1,930	2,000
Secondary[3]	433	460	392	352	330
Copper from all old scrap	555	543	500	442	400
Import for consumption:					
Ores and concentrates	102	37	82	127	120
Refined	289	343	470	429	550
All imports	593	637	763	808	950
Exports: Ores and concentrates	266	227	261	239	200
Refined	177	217	157	217	180
All exports	676	685	752	894	840
Consumption: Refined, reported	2,180	2,360	2,680	2,530	2,620
Apparent, primary and old scrap[4]	2,300	2,510	2,680	2,540	2,760
Price, average, cents per pound:					
Domestic producer, cathode	107.4	91.6	111.0	138.3	108
London Metal Exchange, high-grade	103.7	86.8	104.6	133.1	102
Stocks, yearend, refined[5]	205	153	119	163	170
Employment, mine and mill, thousands	13.6	13.3	13.1	13.8	14.0
Net import reliance[6] as a percent of apparent consumption	2	7	13	7	13

Recycling: Old scrap, converted to refined metal and alloys, provided 400,000 tons of copper, equivalent to 15% of apparent consumption. Purchased new scrap, derived from copper fabricating operations, yielded 880,000 tons of contained copper; 78% of the copper contained in new scrap was consumed at brass mills. Of the total copper recovered from scrap, copper smelters and refiners recovered 26%; ingot makers, 10%; brass mills, 57%; and miscellaneous manufacturers, foundries, and chemical plants, 7%. Copper in all old and new, refined or remelted scrap comprised 35% of U.S. copper supply.

Import Sources (1992-95): Canada unalloyed, 50%; Chile, 19%; Mexico, 13%; and other, 18%. Refined copper comprised 55% of imports of unwrought copper.

Tariff: Item	**Number**	**Most favored nation (MFN) 12/31/96**	**Canada 12/31/96**	**Mexico 12/31/96**	**Non-MFN[7] 12/31/96**
Unrefined copper; anodes	7402.00.0000	0.6% ad val.[8]	Free	0.4% ad val.[8]	6% ad val.[8]
Refined and alloys; unwrought	7403.00.0000	1% ad val.	Free	Free	6% ad val.
Copper powder	7406.10.0000	3.2% ad val.	1.0% ad val.	Free	49% ad val.
Copper wire (bare)	7408.11.6000	3.6% ad val.	0.8% ad val.	Free	28% ad val.

Depletion Allowance: 15% (Domestic), 14% (Foreign).

Government Stockpile: None. The stockpile of about 20,000 tons of refined copper was liquidated in 1993. The stockpile of about 8,100 tons of brass was liquidated in 1994.

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Events, Trends, and Issues: World mine production of copper rose significantly for the second consecutive year, increasing by about 5% in 1996. Most of the increase came from expanding capacity in South America, particularly Chile, where more than 400,000 tons of new capacity came on-stream. Domestic copper companies continued to invest in Chilean and Peruvian properties in an effort to expand production and reduce costs. In the United States, production was projected to rise about 3% owing to startup of the Robinson Mine in Nevada and underground mining at the Mission Complex in Arizona, and a full year of production at the Southside Extension of the Morenci Mine in Arizona.

According to data compiled by the International Copper Study Group, the world supply and demand for refined copper for the first 8 months of 1996 were nearly in balance. Combined inventories held at London Metal Exchange (LME) and Comex warehouses declined nominally from the low December 1995 level. This followed 2 years where a large apparent world supply deficit led to a large drawdown in reported inventories and record high average annual prices for 1995. Both world and U.S. demand for refined copper were projected to increase by 3% for 1996. Domestic net imports of refined copper rose by almost 75% as refined production was unable to keep pace with the growth in refined consumption. Refined production was below expectation as a new smelter in Utah, commissioned in 1995 to replace an existing smelter, continued to encounter startup problems that resulted in lower production from the associated refinery.

Copper prices remained relatively high during the first 5 months of 1996, the U.S. producer price for refined copper averaging about $1.22 per pound. However, the market exhibited a high degree of volatility amid speculation about a pending market surplus and market manipulation. In June, following revelation by a Japanese company that its head copper trader had amassed losses in excess of $1.8 billion from unauthorized trades over a 10-year period, prices fell sharply; the U.S. producer price was projected to average only $0.94 for the second half of the year. At yearend, the company and its trading partners were under investigation by authorities in the United States, Europe, and Japan.

World Mine Production, Reserves, and Reserve Base:

	Mine production		Reserves[9]	Reserve base[9]
	1995	1996[e]		
United States	1,850	1,900	45,000	90,000
Australia	437	440	7,000	23,000
Canada	726	700	10,000	23,000
Chile	2,490	3,000	88,000	163,000
China	370	400	3,000	8,000
Indonesia	444	480	11,000	15,000
Kazakstan	260	220	14,000	20,000
Mexico	332	350	15,000	27,000
Peru	381	430	7,000	24,000
Poland	384	380	20,000	36,000
Russia	591	620	20,000	30,000
Zaire	29	30	10,000	30,000
Zambia	329	350	12,000	34,000
Other countries	1,430	1,400	40,000	75 ,000
World total (rounded)	10,000	10,700	310,000	610,000

World Resources: Land-based resources are estimated at 1.6 billion tons of copper, and resources in deep-sea nodules are estimated at 0.7 billion tons.

Substitutes: Aluminum substitutes for copper in various products, such as electrical power cables, electrical equipment, automobile radiators, and cooling/refrigeration tubing. Titanium and steel are used in heat exchangers, and steel is used for artillery shell casings. Optical fiber substitutes for copper in some telecommunications applications. Plastics also substitute for copper in water pipe, plumbing fixtures, and many structural applications.

[e]Estimated.

[1]Some electrical components are included in each end use. Estimated after Copper Development Association, 1995.

[2]Includes production from imported ores and concentrates.

[3]From both primary and secondary refineries.

[4]Defined as primary refined production + copper from old scrap converted to refined metal and alloys + refined imports - refined exports ± changes in refined stocks.

[5]Held by industry, Government, and the Commodity Exchange, Inc.; Government stocks were liquidated in 1993.

[6]Defined as imports - exports + adjustments for Government and industry stock changes for refined copper.

[7]See Appendix B.

[8]Value of copper content.

[9]See Appendix C for definitions.