

Mineral Industry Surveys

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COPPER IN FEBRUARY 2002

Average daily mine production in February rose by about 11% principally owing to increased production by Kennecott Utah Copper, where production had dropped sharply in January. Average daily refinery production rose by about 5% but remained 10% below the production level in February 2001. Average daily consumption rose by 10% yet remained 15% below consumption for February 2001. Copper inventories held in U.S.-based exchange warehouses continued to rise, increasing by 46,000 metric tons (t) to 958,000 t. This compares with inventories of 289,000 t at the end of February 2001.

Noranda Inc. announced that it would permanently close its Gaspé copper smelter in Murdochville, Quebec, effective April 30. In November, 2001, the company had announced plans to temporarily shutter the facility in April for a period of at least 6 months in response to weak markets and "economic conditions." However, after reviewing options, Noranda concluded that it could not identify an economically feasible solution that would enable the smelter to be more efficient and economically viable over the long term. The Gaspé smelter was a custom copper smelter that treated copper concentrate purchased from around the world, along with secondary copper

materials. In 2001, the smelter produced 109,000 t of copper in anodes and 220,000 t of sulfuric acid. The smelter, which employed 300 people, was commissioned in 1955 and underwent a final expansion to 350,000 metric tons per year of concentrate in 1998. Its associated mine was closed in 1999 following depletion of ore reserves (Noranda Inc., 2002). Although industry sources indicated that Noranda had been a minor purchaser of U.S. scrap in recent years, the closure was expected to significantly reduce North American demand for No. 2 copper scrap as well as lower grades of scrap and slag (Platts Metals Week, 2002). The Gaspé smelter was one of three Canadian smelters processing copper scrap. Canadian secondary smelter production paralleled the decline in U.S. secondary production, falling from a high of about 97,000 t in 1997 to only 42,000 t in 2001.

References Cited

- Noranda Inc., 2002, Noranda to permanently close Gaspé smelter: Murdochville, Quebec, Noranda Inc. press release, March 28, 2 p.
Platts Metals Week, 2002, Noranda to permanently close smelter, free up scrap: Platts Metals Week, v. 73, no. 13, April 1, p. 1, 11.

TABLE 1
SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES 1/

(Metric tons, unless otherwise specified)

	Source table 2/	2001 p/	2002		January - February
			January	February	
Production:					
Primary:					
Mine, recoverable	(2)	1,340,000	96,000 t/	96,700	193,000
Refinery:					
Electrolytic:					
Domestic	(4)	828,000	69,500	67,300	137,000
Foreign	(4)	185,000	9,620	8,050	17,700
Electrowon	(4)	631,000	50,600	48,100	98,700
Total	(4)	1,640,000	130,000	123,000	253,000
Secondary recoverable copper:					
Refineries	(5)	150,000	7,110	6,210	13,300
Ingot makers 3/	(5)	121,000	10,100	10,100	20,100
Brass and wire-rod mills	(5)	791,000	67,500	69,700	137,000
Foundries, etc. 3/	(5)	67,100	5,590	5,590	11,200
Smelter, total	(3)	945,000	70,800	60,400	131,000
Consumption:					
Apparent	(8)	2,520,000	226,000	NA	NA
Refined (reported)	(7)	2,620,000	193,000 t/	191,000	384,000
Purchased copper-base scrap	(9)	1,490,000	124,000	126,000	250,000
Stocks at end of period:					
Total refined	(11)	947,000	1,000,000	1,040,000	XX
Blister, etc.	(11)	93,600	71,100	66,100	XX
Prices:					
U.S. producer cathode (cents per pound) 4/	(12)	76.854	73.944	76.384	75.164
Imports: 5/					
Ores and concentrates 6/	(14)	122,000	10,000	NA	NA
Refined	(14)	991,000	82,500	NA	NA
Exports: 5/					
Ores and concentrates 6/	(15)	45,300	1,870	NA	NA
Refined	(15)	22,500	393	NA	NA

p/ Preliminary. t/ Revised. NA Not available. XX Not applicable.

1/ Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

2/ Numbers in parentheses refer to the detailed tables where these data are located.

3/ Monthly data and 2001 cumulative data estimated based on 2000 monthly average.

4/ Source: Platts Metals Week.

5/ Source: U.S. Census Bureau.

6/ Copper content.

TABLE 2
MINE PRODUCTION OF RECOVERABLE COPPER
IN THE UNITED STATES 1/

(Metric tons)

Period	Arizona	Others 2/	Total
2001: p/			
January - February r/	144,000	83,000	227,000
February	68,400	41,600	110,000
March	68,200	43,100	111,000
April	69,800	40,600	110,000
May	78,700	43,600	122,000
June	76,000	39,500	115,000
July	72,800	37,000	110,000
August	73,000	35,900	109,000
September	73,000	33,600	107,000
October	76,800	36,600	113,000
November	72,500 r/	29,000	101,000 r/
December	75,700 r/	35,800	111,000 r/
Year	881,000 r/	458,000	1,340,000
2002:			
January	67,500 r/	28,500	96,000 r/
February	65,700	31,000	96,700
January - February	133,000	59,500	193,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes production from Alaska, Idaho, Missouri, Montana, Nevada, New Mexico, and Utah.

TABLE 3
COPPER PRODUCED AT SMELTERS IN THE
UNITED STATES, BY SOURCE 1/ 2/

(Metric tons, copper content)

Period	Domestic and foreign ores	Scrap	Total
2001: p/			
January - February	W	W	167,000
February	W	W	78,800
March	W	W	78,800
April	W	W	81,900
May	W	W	84,700
June	W	W	80,200
July	W	W	58,100
August	W	W	71,100
September	W	W	70,900
October	W	W	86,300
November	W	W	79,700
December	W	W	86,100
Year	W	W	945,000
2002:			
January	W	W	70,800
February	W	W	60,400
January - February	W	W	131,000

p/ Preliminary. W Withheld to avoid disclosing company proprietary data included in "Total."

1/ Includes blister, anode and black copper from primary or secondary sources

2/ Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 4
PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY 1/

(Metric tons)

Period	Primary materials				Scrap			Total refined
	Electrolytically refined 2/		Electrowon	Total	Electrolytically refined 2/	Fire refined	Total	
	Domestic 3/	Foreign						
2001: p/								
January - February	147,000 r/	31,500	88,300 r/	267,000 r/	W	W	32,200	299,000 r/
February	69,100	14,700	43,100	127,000	W	W	16,800	144,000
March	77,400	11,800	50,400	140,000	W	W	16,700	156,000
April	66,500	12,900	54,300	134,000	W	W	13,400	147,000
May	72,500	15,100	55,000	143,000	W	W	12,800	155,000
June	71,100	15,500	55,100	142,000	W	W	13,200	155,000
July	64,800	14,300	55,100	134,000	W	W	13,900	148,000
August	56,300	19,900	56,300	132,000	W	W	13,500	146,000
September	64,300	17,900	54,000	136,000	W	W	12,300	149,000
October	61,300	17,400	55,000	134,000	W	W	10,200	144,000
November	71,200	16,100	54,000	141,000	W	W	6,420	148,000
December	75,800	12,900	53,200	142,000	W	W	5,710	148,000
Year	828,000	185,000	631,000	1,640,000	W	W	150,000	1,790,000
2002:								
January	69,500	9,620	50,600	130,000	W	W	7,110	137,000
February	67,300	8,050	48,100	123,000	W	W	6,210	130,000
January - February	137,000	17,700	98,700	253,000	W	W	13,300	267,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Scrap Total."

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Based on source of material at smelter level.

3/ Includes fire-refined copper.

TABLE 5
COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP 1/

(Metric tons, copper content)

Period	Refineries 2/		Ingot makers 3/		Brass and wire-rod mills		Foundries, etc. 3/		Total 4/
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
	2001: p/								
January - February	6,320	25,900 r/	4,980 r/	15,100 r/	133,000 r/	5,180 r/	2,450 r/	8,730 r/	201,000 r/
February	3,470	13,400	2,490	7,560	65,700	2,630	1,230	4,360	101,000
March	3,120	13,600	2,490	7,560	67,200	2,260	1,230	4,360	102,000
April	2,680	10,700	2,490	7,560	66,700	1,770	1,230	4,360	97,500
May	2,240	10,500	2,490	7,560	65,700	297	1,230	4,360	94,400
June	2,730	10,500	2,490	7,560	62,600	1,060	1,230	4,360	92,600
July	3,470	10,400	2,490	7,560	57,300	969	1,230	4,360	87,800
August	3,240	10,300	2,490	7,560	62,600	1,790	1,230	4,360	93,500
September	2,800	9,480	2,490	7,560	61,500	1,140	1,230	4,360	90,500
October	3,180	7,060	2,490	7,560	67,800	1,790	1,230	4,360	95,400
November	2,030	4,380	2,490	7,560	63,100	1,640	1,230	4,360	86,800
December	1,710	4,000	2,490	7,560	64,500	1,880	1,230	4,360	87,800
Year	33,500	117,000	29,900	90,700	772,000	19,800	14,700	52,400	1,130,000
2002:									
January	3,100	4,010	2,490	7,560	65,800	1,790	1,230	4,360	90,300
February	2,480	3,730	2,490	7,560	67,900	1,820	1,230	4,360	91,600
January - February	5,580	7,740	4,980	15,100	134,000	3,610	2,450	8,730	182,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Electrolytically refined and fire-refined scrap based on source of material at smelter level.

3/ Monthly data and 2001 cumulative data estimated based on 2000 annual data.

4/ Does not include an estimate, based on reported 2000 data, of 3,790 tons per month from new scrap and 2,380 tons per month from old scrap of copper recovered from scrap other than copper-base.

TABLE 6
PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD MILL SEMIFABRICATES 1/

(Metric tons, gross weight)

Period	Production		Shipments		Stocks, end of period	
	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills
2001: p/						
January - February r/	256,000	326,000	253,000	323,000	XX	XX
February	129,000	151,000	127,000	150,000	57,900	37,800
March	133,000	163,000	132,000	169,000	59,000	31,900
April	127,000	152,000	127,000	148,000	58,800	31,600
May	125,000	152,000	127,000	154,000	57,300	30,000
June	125,000	150,000	129,000	150,000	53,200	30,300
July	108,000	158,000	108,000	156,000	53,100	30,100
August	128,000	163,000	128,000	163,000	52,800	30,000
September	122,000	158,000	121,000	159,000	53,800	28,800
October	124,000	164,000	123,000	165,000	55,100	25,700
November	117,000	157,000	118,000	155,000	55,300	27,500
December	116,000	139,000	115,000	140,000	56,700	26,700
Year	1,480,000	1,880,000	1,480,000	1,880,000	XX	XX
2002:						
January	124,000	143,000	126,000	143,000 r/	52,600	25,600 r/
February	121,000	142,000	123,000	142,000	51,500	25,800
January - February	245,000	285,000	249,000	284,000	XX	XX

p/ Preliminary. r/ Revised. XX Not applicable.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 7
CONSUMPTION OF REFINED COPPER 1/

(Metric tons)

Period and item	Wire-rod mills	Brass mills	Other plants 2/	Total
2001: p/				
January - February	354,000 r/	115,000 r/	10,700	481,000 r/
February	163,000	57,500	5,360	226,000
March	175,000	62,900	5,360	243,000
April	160,000	53,500	5,360	219,000
May	156,000	55,600	5,360	217,000
June	157,000	54,600	5,360	217,000
July	161,000	44,700	5,360	211,000
August	160,000	52,000	5,360	217,000
September	155,000	47,300	5,360	208,000
October	164,000	47,000	5,360	217,000
November	151,000	46,300	5,360	202,000
December	135,000	44,700	5,360	185,000
Year	1,930,000	624,000	64,300	2,620,000
2002:				
January	140,000 r/	47,700	5,360	193,000 r/
February:				
Cathodes	138,000	36,500	1,210	176,000
Wire bars	--	--	W	W
Ingots and ingot bars	--	1,520	1,760	3,280
Cakes and slabs	884	W	W	884
Billets and other	--	9,260	2,400	11,700
Total	139,000	47,300	5,360	191,000
January - February	278,000	95,000	10,700	384,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Billets and other." -- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers is estimated based on 2000 annual data.

TABLE 8
U.S. APPARENT CONSUMPTION OF COPPER 1/

(Metric tons)

Period	Refined copper production	Copper in old scrap 2/	Refined general imports 3/	Refined exports 3/	Stock change during period	Apparent consumption
2001: p/						
January - February	267,000 r/	60,200 r/	211,000	3,250	29,600 r/	506,000 r/
February	127,000	30,500	88,200	2,070	5,960	238,000
March	140,000	30,400	101,000	2,880	70,400	197,000
April	134,000	27,000	107,000	1,890	70,600	195,000
May	143,000	25,400	72,400	1,020	13,700	226,000
June	142,000	26,100	89,000	815	46,200	210,000
July	134,000	25,900	95,800	1,650	109,000	145,000
August	132,000	26,600	80,900	2,590	31,000	206,000
September	136,000	25,200	114,000	1,190	88,900	185,000
October	134,000	23,400	78,600	4,630	35,400	196,000
November	141,000	20,600	148,000	5,290	65,500	239,000
December	142,000	20,400	101,000	571	52,200	210,000
Year	1,640,000	311,000	1,200,000	25,800	613,000	2,520,000
2002:						
January	130,000	20,300	134,000	393	57,200	226,000
February	123,000	20,100	NA	NA	37,500	NA
January - February	253,000	40,400	NA	NA	94,800	NA

p/ Preliminary. r/ Revised. NA Not available.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Includes reported monthly production of copper from old scrap of copper-base, an estimate for annual reporters, and a monthly average of copper from non-copper-base materials based on 2000 data.

3/ Source: U.S. Census Bureau.

TABLE 9
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/

(Metric tons, gross weight)

Period	Smelters and refineries		Ingot makers 2/		Brass and wire-rod mills 3/		Foundries, etc. 2/		Total scrap used
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2001: p/									
January - February	12,100 r/	30,500 r/	7,340 r/	20,800 r/	168,000 r/	5,340	4,360 r/	9,470 r/	258,000 r/
February	6,610	15,600	3,670	10,400	82,500	2,700	2,180	4,740	128,000
March	6,430	14,000	3,670	10,400	85,100	2,330	2,180	4,740	129,000
April	6,460	14,800	3,670	10,400	84,600	1,820	2,180	4,740	129,000
May	3,400	17,400	3,670	10,400	84,000	338	2,180	4,740	126,000
June	3,400	16,200	3,670	10,400	79,900	1,120	2,180	4,740	122,000
July	3,590	16,500	3,670	10,400	72,200	1,010	2,180	4,740	114,000
August	3,530	16,900	3,670	10,400	79,400	1,840	2,180	4,740	123,000
September	3,530	15,900	3,670	10,400	77,800	1,190	2,180	4,740	119,000
October	3,620	15,700	3,670	10,400	85,700	1,840	2,180	4,740	128,000
November	3,530	14,700	3,670	10,400	79,600	1,660 r/	2,180	4,740	121,000
December	3,520	13,500	3,670	10,400	81,500	1,930	2,180	4,740	121,000
Year	53,100	186,000	44,000	125,000	978,000	20,400 r/	26,200	56,800	1,490,000
2002:									
January	4,090	13,500	3,670	10,400	83,100	1,840	2,180	4,740	124,000
February	3,950	13,500	3,670	10,400	85,600	1,880	2,180	4,740	126,000
January - February	8,040	27,100	7,340	20,800	169,000	3,720	4,360	9,470	250,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Monthly data and 2001 cumulative data estimated from 2000 annual data.

3/ Consumption at brass and wire-rod mills assumed equal to receipts.

TABLE 10
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/ 2/

(Metric tons, gross weight)

Scrap type and processor	2001 p/			2002		
	January - February	December	Year	January	February	January - February
No. 1 wire and heavy:						
Smelters and refiners	12,800 r/	4,300	69,400	4,310	4,330	8,620
Brass and wire-rod mills	77,400 r/	36,100	430,000	36,700	38,300	73,400
No. 2 mixed heavy and light:						
Smelters and refiners	23,400 r/	5,880	120,000	6,420	6,270	12,800
Brass and wire-rod mills	1,100	348	5,340	291	211	582
Total unalloyed scrap:						
Smelters and refiners	36,200 r/	10,200	190,000	10,700	10,600	21,500
Brass and wire-rod mills	78,500 r/	36,400	436,000	37,000	38,500	74,000
Red brass: 3/						
All plants	9,830 r/	4,650	59,800	4,460	4,490	8,910
Leaded yellow brass:						
All plants	61,500 r/	28,200	353,000	29,100	29,500	58,300
Yellow and low brass:						
All plants	20,300 r/	10,500	126,000	10,600	10,600	21,200
Cartridge cases and brass:						
Smelters and refiners	W	W	W	W	W	W
Brass mills	9,430	6,250	66,700	6,180	6,720	12,400
Auto radiators:						
Smelters and refiners	8,080 r/	3,620	47,200	3,620	3,620	7,240
Bronzes:						
Smelters and refiners	1,840 r/	922	11,100	922	922	1,840
Brass mills	1,520	955	8,560	954	958	1,910
Nickel-copper alloys:						
All plants	3,430 r/	1,050	13,400	1,210	1,260	2,420
Low grade and residues:						
Smelters and refiners	10,400 r/	1,120	50,100	1,120	1,120	2,240
Other alloy scrap: 4/						
Smelters and refiners 5/	1,880 r/	138	8,890	138	138	276
Brass mills	997	565	5,740	565	565	1,130
Total alloyed scrap:						
Smelters and refiners	34,600 r/	11,000	188,000	11,000	11,000	21,900
Brass mills	94,700 r/	47,000	563,000	47,900	48,900	95,900
Total scrap:						
Smelters and refiners	70,700 r/	21,100	378,000	21,700	21,600	43,400
Brass and wire-rod mills	173,000 r/	83,400	998,000	84,900	87,500	170,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Other alloy scrap: Smelters and refiners."

1/ Does not include: consumption by foundries, chemical plants, and miscellaneous manufacturers, estimated to total about 6,920 tons of scrap per month in 2000; monthly data include estimates of about 15,500 tons of scrap per month consumed by ingot makers and several smelters that report on an annual basis.

2/ Data are rounded to no more than three significant digits; may not add to totals shown.

3/ Includes composition turnings, silicon bronze, zincy bronze, railroad car boxes, cocks and faucets, gilding metal, and commercial bronze.

4/ Includes refinery brass, beryllium copper, phosphor copper, and aluminum bronze.

5/ Includes items indicated by symbol W.

TABLE 11
COPPER STOCKS AT END OF PERIOD 1/

(Metric tons)

Period	Crude copper 2/	Refined copper					LME 6/	Total refined
		Refineries 3/	Wire rod mills 3/	Brass mills 3/	Other 4/	Comex 5/		
2001: p/								
February	105,000	18,700	23,000	28,100	4,680	81,600	208,000	364,000
March	102,000	22,600	27,600	31,700	4,680	95,400	252,000	434,000
April	95,600	27,500	26,500	34,700	4,680	115,000	297,000	505,000
May	98,100	28,100	27,300	23,100	4,680	137,000	298,000	519,000
June	92,500	26,600	30,200	20,900	4,680	150,000	333,000	565,000
July	89,500	20,000	30,800	23,400	4,680	160,000	435,000	674,000
August	93,400	18,400	28,900	24,300	4,680	170,000	459,000	705,000
September	88,700	17,700	28,200	22,300	4,680	181,000	540,000	794,000
October	104,000	19,700	25,700	21,300	4,680	191,000	566,000	829,000
November	85,400	23,900	24,500	25,900	4,680	215,000	601,000	895,000
December	93,600	25,200	29,900	26,600	4,680	244,000	617,000	947,000
2002:								
January	71,100	26,300	34,700	26,300	4,680	258,000	654,000	1,000,000
February	66,100	28,700	23,900	26,300	4,680	275,000	683,000	1,040,000

p/ Preliminary.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Copper content of blister and other materials in transit and in process of refining.

3/ Stocks of refined copper as reported; no estimates are made for nonrespondents.

4/ Monthly estimates based on reported and 2000 annual data, comprising stocks at ingot makers, chemical plants, foundries, and miscellaneous manufacturers.

5/ Commodity Exchange Inc., New York.

6/ London Metal Exchange Ltd., U.S. warehouses.

TABLE 12
AVERAGE PRICE OF COPPER IN THE UNITED STATES AND
ON THE LONDON METAL EXCHANGE

(Cents per pound)

Period	U.S. producers delivered price cathode 1/	Comex first position 2/	LME cash price Grade A
2001:			
February	86.323	82.005	80.069
March	84.384	80.066	78.856
April	80.578	76.260	75.467
May	81.166	76.848	76.288
June	75.501	72.573	72.943
July	72.261	69.438	69.166
August	71.559	67.341	66.407
September	69.628	65.428	64.682
October	67.422	63.204	62.460
November	70.560	66.093	64.747
December	72.050	67.832	66.740
Year	76.854	72.567	71.574
2002:			
January	73.944	69.786	68.202
February	76.384	72.226	70.831
January - February	75.164	71.006	69.517

1/ Listed as "U.S. producer cathode."

2/ Listed as "Comex high grade first position."

Sources: Platts Metals Week and American Metal Market.

TABLE 13
NEW YORK AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

Month	Brass mills No. 1 scrap	Refiners No. 2 scrap	Dealers (New York)	
			No. 2 scrap	Red brass turnings and borings
2001:				
February	77.84	65.97	53.00	42.00
March	76.16	63.74	53.09	42.00
April	72.98	61.36	51.16	42.00
May	72.82	61.95	51.86	42.00
June	68.29	57.99	51.52	42.00
July	66.46	57.50	50.00	42.00
August	64.33	55.37	46.00	39.00
September	63.39	54.46	46.00	40.00
October	61.39	52.78	44.48	38.39
November	63.45	53.82	40.09	37.09
December	65.87	54.47	41.47	37.00
Year	69.62	58.96	48.76	40.63
2002:				
January	67.36	55.62	41.19	38.10
February	69.42	57.29	43.00	37.00
January - February	68.39	56.46	42.10	37.55

Source: American Metal Market.

TABLE 14
U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY CLASS 1/

(Metric tons, copper content)

Country or territory	Ore and concentrate		Matte, ash and precipitates		Blister and anodes		Refined	
	2002		2002		2002		2002	
	2001	January	2001	January	2001	January	2001	January
Brazil	--	--	--	--	--	--	12,000	5,010
Canada	7,210	--	43	18	79,700	6,980	270,000	30,400
Chile	51,800	--	--	--	87,700	922	174,000	7,110
Indonesia	20,000	--	--	--	--	--	--	--
Italy	--	--	--	--	12,200	--	--	--
Kazakhstan	--	--	--	--	--	--	82,400	2,060
Mexico	2,550	--	317	--	48,900	1,010	131,000	10,800
Namibia	--	--	--	--	6,840	--	--	--
Peru	40,200	--	--	--	22,600	--	280,000	26,000
Philippines	--	--	--	--	4,990	--	999	--
Russia	--	--	--	--	115	--	22,800	--
Spain	--	--	--	--	4,420	--	--	--
Taiwan	--	--	560	77	--	--	34	--
Turkey	--	10,000	--	--	--	--	--	--
Other	--	--	25	--	3,510 r/	--	17,400 r/	1,240
Total	122,000	10,000	945	95	271,000	8,910	991,000	82,500

r/ Revised. -- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 15
U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS 1/

(Metric tons, copper content)

Country or territory	Ore and concentrate		Matte, ash and precipitates		Blister and anodes		Refined	
	2002		2002		2002		2002	
	2001	January	2001	January	2001	January	2001	January
Belgium	18	--	--	--	1,550	--	30	--
Canada	30,300	1,600	6,860	312	13,800	1,820	6,520	162
China	2,310	19	3	--	87	26	8,520	--
France	1	--	64	--	2,130	20	62	--
Germany	443	--	50	--	982	20	169	--
Hong Kong	87	5	2	--	2,470	307	2,330	--
Israel	836	--	18	--	65	4	6	2
Italy	20	--	--	--	376	--	27	--
Japan	19	--	8	1,160	216	--	460	(2/)
Korea, Republic of	699	153	1,090	--	1,320	73	78	105
Mexico	9,130	--	15,300	3,670	22	9	821	10
Singapore	159	60	(2/)	--	407	48	14	--
Taiwan	347	4	50	6	1,130	100	146	--
United Kingdom	280	--	49	--	451	--	457	82
Venezuela	501	--	--	--	5	--	140	--
Other	173 r/	25	405 r/	10	1,040 r/	9	2,740 r/	32
Total	45,300	1,870	23,900	5,160	26,000	2,440	22,500	393

r/ Revised. -- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 16
U.S. COPPER SCRAP TRADE 1/

(Metric tons, gross weight)

Country or territory	Imports				Exports			
	Unalloyed		Alloyed		Unalloyed		Alloyed	
	2001	2002 January	2001	2002 January	2001	2002 January	2001	2002 January
Belgium	--	--	388	--	1,260	169	1,470	271
Canada	10,600	1,160	45,800	3,250	38,700	1,990	33,100	2,220
China	41	--	15	11	156,000	8,420	136,000	7,100
Colombia	--	--	899	54	--	--	18	2
Costa Rica	868	94	635	49	--	--	3	--
Dominican Republic	1,550	117	1,570	78	--	--	--	--
Germany	27	--	62	--	6,500	1,340	9,480	1,110
Guatemala	499	61	1,990	107	--	--	--	--
Honduras	484	16	656	8	--	--	--	--
Hong Kong	--	--	--	--	4,300	616	5,440	532
India	--	--	--	--	2,770	407	33,400	3,810
Italy	309	19	--	--	117	--	143	--
Japan	169	9	--	--	13,800	788	13,200	486
Korea, Republic of	--	--	20	--	24,400	1,490	17,800	1,870
Mexico	13,500	595	24,000	1,510	2,760	183	4,370	15
Peru	347	--	112	--	--	--	--	--
Spain	--	--	47	--	549	--	2,710	356
Switzerland	--	--	45	--	596	--	3,720	172
Taiwan	--	--	554	41	9,120	1,220	5,870	341
United Kingdom	64	9	919	119	36	--	570	21
Venezuela	42	--	874	72	--	--	--	--
Other	1,710	152	5,790 r/	313	988 r/	71	4,520 r/	202
Total	30,300	2,230	84,400	5,610	262,000	16,700	272,000	18,500

r/ Revised. -- Zero.

1/ Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.