

# Mineral Industry Surveys

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## COPPER IN MARCH 2002

Mine production for the first quarter of 2002 was down by about 16% from that in the first quarter of 2001. Production in March, however, rose to the highest level of the year. Phelps Dodge Corp., which had announced its intent to curtail production at its Chino Mine in New Mexico by mid-January (See Copper in August 2001), reported first quarter 2002 electrowon production of 16,600 metric tons (t), a 3% increase from the fourth quarter of 2001. Concentrate production at Bagdad and Sierrita declined by about 50% to 15,000 t and 12,500 t, respectively, in accordance with the previously announced reductions. Total production at Phelps Dodge operated mines in the United States fell to 160,000 t, down from 201,000 t in the first quarter of 2001 and 193,000 t in the fourth quarter of 2001 (Phelps Dodge Corp., 2002).

ASARCO Incorporated reported first quarter 2002 output for its Ray mine to be 36,200 t, an increase of 51% over production in the first quarter of 2001, owing to improved ore grades, a new mine plan, and the optimization of installed capacity. In accordance with its new mine plan, production at the Mission Mine in Arizona, declined by 27% from the same period in 2001 to 10,200 t (Grupo Mexico S.A. de C.V., 2002). Production at the Bingham Canyon Mine in Utah, where the North concentrator had been closed, fell to 62,500 t, down from 80,000 t and 67,200 t, respectively, from the first and fourth quarters of 2001 (Rio Tinto plc, 2002, p. 4).

The U.S. Customs Service issued a 90-day temporary rule, effective February 15, that extended duty-free entry status to eligible articles from beneficiary countries under the Andean Trade Preference Act (ATPA), which had expired on December 4, 2001. In issuing the rule, the Customs Service determined that there was a national security interest to be furthered by the

interim deferral of collection of applicable duties, and it anticipated that the duty-free status for applicable merchandise, including refined copper, would be restored retroactive to its expiration. The ATPA was enacted on December 4, 1991, and was to extend for no more than 10 years. It explicitly references that participating countries (Bolivia, Colombia, Ecuador, and Peru) satisfy narcotics cooperation certification criteria (U.S. Department of the Treasury, 2002). In 2001, Peru was the largest source of U.S. copper imports, accounting for 280,000 t (28%) of refined copper imports.

The House of Representatives passed a new ATPA bill on November 16, 2001, but it was delayed in the Senate Finance Committee where it was bundled with an omnibus trade bill that contained controversial "Fast-Track" negotiation provisions. According to Platts Metals Week, there was pressure in the Senate to sever the ATPA from the omnibus trade bill before expiration of the extension (Platts Metals Week, 2002).

## References Cited

- Grupo Mexico S.A. de C.V., 2002, Grupo Mexico first quarter 2002 CEO report: Mexico City, Grupo Mexico S.A. de C.V. press release, April 26, 11 p.
- Phelps Dodge Corp., 2002, Phelps Dodge reports 2002 first quarter loss of 56 cents per share before special items (loss of 35 cents per share after special items): Phoenix, AZ, Phelps Dodge Corp. news release, April 24, 10 p.
- Platts Metals Week, 2002, Deadline nears for US trade bill affecting Peru copper: Platts Metals Week, v. 73, no. 9, May 13, p. 8.
- Rio Tinto plc, 2002, Rio Tinto quarterly production report for period ending 31 March 2002: London, Rio Tinto plc press release, April 23, 21 p.
- U.S. Department of the Treasury, U.S. Customs Service, 2002, Andean Trade Preference Act: Federal Register, v. 67, no. 32, February 15, p. 7070-7072.

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

(Metric tons, unless otherwise specified)

	Source table 2/	2002			January - March
		2001 p/	February	March	
<b>Production:</b>					
<b>Primary:</b>					
Mine, recoverable	(2)	1,340,000	90,700 r/	99,900	284,000
<b>Refinery:</b>					
<b>Electrolytic:</b>					
Domestic	(4)	828,000	67,300	58,800	196,000
Foreign	(4)	185,000	8,050	10,100	27,800
Electrowon	(4)	641,000 r/	48,100	50,800	150,000
Total	(4)	1,650,000 r/	123,000	120,000	374,000
<b>Secondary recoverable copper:</b>					
Refineries	(5)	150,000	6,210	6,010	19,300
Ingot makers 3/	(5)	121,000	10,100	10,100	30,200
Brass and wire-rod mills	(5)	728,000 r/	64,500 r/	67,200	194,000
Foundries, etc. 3/	(5)	67,100	5,590	5,590	16,800
Smelter, total	(3)	945,000	60,400	70,100	201,000
<b>Consumption:</b>					
Apparent	(8)	2,520,000	228,000	NA	NA
Refined (reported)	(7)	2,620,000	191,000	205,000	588,000
Purchased copper-base scrap	(9)	1,380,000 r/	109,000 r/	113,000	329,000
<b>Stocks at end of period:</b>					
Total refined	(11)	949,000 r/	1,030,000 r/	1,050,000	XX
Blister, etc.	(11)	93,600	66,100	44,000	XX
<b>Prices:</b>					
U.S. producer cathode (cents per pound) 4/	(12)	76.854	76.384	78.683	76.337
<b>Imports: 5/</b>					
Ores and concentrates 6/	(14)	122,000	22,000	NA	NA
Refined	(14)	991,000	87,800	NA	NA
<b>Exports: 5/</b>					
Ores and concentrates 6/	(15)	45,300	1,590	NA	NA
Refined	(15)	22,500	699	NA	NA

p/ Preliminary. r/ 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 - March	212,000 r/	126,000	339,000 r/
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	29,000	101,000
December	75,700	35,800	111,000
Year	881,000	458,000	1,340,000
2002:			
January	64,900 r/	28,500	93,400 r/
February	59,800 r/	31,000	90,700 r/
March	64,800	35,000	99,900
January - March	189,000	94,500	284,000

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 - March	W	W	246,000
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
March	W	W	70,100
January - March	W	W	201,000

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 - March	224,000 r/	43,200	139,000 r/	406,000 r/	W	W	48,900 r/	455,000 r/
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	54,900 r/	134,000	W	W	10,200	144,000
November	71,200	16,100	54,100 r/	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	641,000 r/	1,650,000 r/	W	W	150,000	1,800,000 r/
2002:								
January	69,500	9,620	51,600 r/	131,000 r/	W	W	7,110	138,000 r/
February	67,300	8,050	48,100	123,000	W	W	6,210	130,000
March	58,800	10,100	50,800	120,000	W	W	6,010	126,000
January - March	196,000	27,800	150,000	374,000	W	W	19,300	393,000

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 - March r/	9,440	39,500	7,480	22,700	184,000	7,440	3,680	13,100	287,000
March	3,120	13,600	2,490	7,560	61,900 r/	2,260	1,230	4,360	96,500 r/
April	2,680	10,700	2,490	7,560	61,400 r/	1,770	1,230	4,360	92,200 r/
May	2,240	10,500	2,490	7,560	60,400 r/	297	1,230	4,360	89,100 r/
June	2,730	10,500	2,490	7,560	57,300 r/	1,060	1,230	4,360	87,200 r/
July	3,470	10,400	2,490	7,560	52,000 r/	969	1,230	4,360	82,500 r/
August	3,240	10,300	2,490	7,560	57,300 r/	1,790	1,230	4,360	88,300 r/
September	2,800	9,480	2,490	7,560	56,100 r/	1,140	1,230	4,360	85,200 r/
October	3,180	7,060	2,490	7,560	62,500 r/	1,790	1,230	4,360	90,200 r/
November	2,030	4,380	2,490	7,560	57,800 r/	1,640	1,230	4,360	81,500 r/
December	1,710	4,000	2,490	7,560	59,300 r/	1,880	1,230	4,360	82,500 r/
Year	33,500	117,000	29,900	90,700	708,000 r/	19,800	14,700	52,400	1,070,000 r/
2002:									
January	3,100	4,010	2,490	7,560	60,500 r/	1,790	1,230	4,360	85,000 r/
February	2,480	3,730	2,490	7,560	62,600 r/	1,820	1,230	4,360	86,300 r/
March	2,290	3,720	2,490	7,560	65,400	1,770	1,230	4,360	88,800
January - March	7,870	11,500	7,480	22,700	188,000	5,380	3,680	13,100	260,000

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 - March r/	385,000	490,000	381,000	492,000	XX	XX
March	131,000 r/	163,000	130,000 r/	169,000	56,000 r/	31,900
April	125,000 r/	152,000	126,000 r/	148,000	55,700 r/	31,600
May	124,000 r/	152,000	125,000 r/	154,000	54,200 r/	30,000
June	123,000 r/	150,000	127,000 r/	150,000	50,200 r/	30,300
July	107,000 r/	158,000	107,000 r/	156,000	50,100 r/	30,100
August	126,000 r/	163,000	127,000 r/	163,000	49,700 r/	30,000
September	121,000 r/	158,000	120,000 r/	159,000	50,800 r/	28,800
October	123,000 r/	164,000	122,000 r/	165,000	52,000 r/	25,700
November	116,000 r/	157,000	116,000 r/	155,000	52,300 r/	27,700 r/
December	115,000 r/	139,000	114,000 r/	140,000	53,600 r/	25,800 r/
Year	1,470,000 r/	1,880,000	1,460,000 r/	1,880,000	XX	XX
2002:						
January	123,000 r/	143,000	126,000	143,000	49,500 r/	25,600
February	121,000	139,000 r/	122,000 r/	135,000	48,500 r/	28,900 r/
March	129,000	148,000	129,000	147,000	48,900	29,200
January - March	373,000	429,000	376,000	425,000	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 - March r/	529,000	179,000	15,700	724,000
March	175,000	63,200 r/	5,220 r/	243,000
April	160,000	53,700 r/	5,220 r/	219,000
May	156,000	55,800 r/	5,220 r/	217,000
June	157,000	54,900 r/	5,220 r/	217,000
July	161,000	44,900 r/	5,220 r/	211,000
August	160,000	52,300 r/	5,220 r/	217,000
September	155,000	47,600 r/	5,220 r/	208,000
October	164,000	47,300 r/	5,220 r/	217,000
November	151,000	46,500 r/	5,220 r/	202,000
December	135,000	45,000 r/	5,220 r/	185,000
Year	1,930,000	627,000 r/	62,600 r/	2,620,000
2002:				
January	140,000	48,000 r/	5,220 r/	193,000
February	138,000 r/	47,600 r/	5,220 r/	191,000
March:				
Cathodes	147,000	39,100	1,210	187,000
Wire bars	--	--	W	W
Ingots and ingot bars	--	1,540	1,760	3,290
Cakes and slabs	695	W	W	695
Billets and other	--	11,400	2,250	13,700
Total	147,000	52,000	5,220	205,000
January - March	425,000	148,000	15,700	588,000

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	59,900 r/	211,000	3,250	29,600	506,000
March	140,000	30,400 r/	101,000	2,880	68,700 r/	199,000 r/
April	134,000	27,000 r/	107,000	1,890	70,600	195,000
May	143,000	25,400 r/	72,400	1,020	13,800 r/	226,000 r/
June	142,000	26,100 r/	89,000	815	46,200	210,000
July	134,000	25,900 r/	95,800	1,650	109,000	145,000
August	132,000	26,600 r/	80,900	2,590	31,000	206,000
September	136,000	25,200 r/	114,000	1,190	88,800 r/	185,000
October	134,000	23,400 r/	78,600	4,630	35,500 r/	196,000 r/
November	141,000	20,600 r/	148,000	5,290	67,700 r/	237,000 r/
December	142,000	20,400 r/	101,000	571	53,100 r/	209,000 r/
Year	1,640,000	309,000 r/	1,200,000	25,800	614,000 r/	2,520,000
2002:						
January	131,000 r/	20,300 r/	134,000	393	54,100 r/	230,000 r/
February	123,000	20,100 r/	113,000	699	27,800 r/	228,000
March	120,000	19,900	NA	NA	22,900	NA
January - February	254,000	40,400	247,000	1,090	81,900	459,000

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 - March	18,500 r/	44,500 r/	11,000 r/	31,300 r/	233,000 r/	7,670	6,550 r/	14,200	367,000 r/
March	6,430	14,000	3,670	10,400	78,600 r/	2,330	2,180	4,740	122,000 r/
April	6,460	14,800	3,670	10,400	78,100 r/	1,820	2,180	4,740	122,000 r/
May	3,400	17,400	3,670	10,400	77,500 r/	338	2,180	4,740	120,000 r/
June	3,400	16,200	3,670	10,400	73,300 r/	1,120	2,180	4,740	115,000 r/
July	3,590	16,500	3,670	10,400	65,700 r/	1,010	2,180	4,740	108,000 r/
August	3,530	16,900	3,670	10,400	73,000 r/	1,840	2,180	4,740	116,000 r/
September	3,530	15,900	3,670	10,400	71,200 r/	1,190	2,180	4,740	113,000 r/
October	3,620	5,670 r/	3,670	10,400	79,200 r/	1,840	2,180	4,740	111,000 r/
November	3,530	4,690 r/	3,670	10,400	73,100 r/	1,660	2,180	4,740	104,000 r/
December	3,520	3,520 r/	3,670	10,400	75,000 r/	1,930	2,180	4,740	105,000 r/
Year	53,100	156,000 r/	44,000	125,000	899,000 r/	20,400	26,200	56,800	1,380,000 r/
2002:									
January	4,090	3,530 r/	3,670	10,400	76,600 r/	1,840	2,180	4,740	107,000 r/
February	3,950	3,530 r/	3,670	10,400	79,100 r/	1,880	2,180	4,740	109,000 r/
March	3,830	3,530	3,670	10,400	82,700	1,830	2,180	4,740	113,000
January - March	11,900	10,600	11,000	31,300	238,000	5,540	6,540	14,200	329,000

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 - March	Year	January	February	March	January - March
No. 1 wire and heavy:						
Smelters and refiners	18,700 t/	69,400	4,310	4,330	4,310	13,000
Brass and wire-rod mills	106,000 t/	395,000 t/	33,800 t/	35,400 t/	36,500	106,000
No. 2 mixed heavy and light:						
Smelters and refiners	34,700 t/	120,000	6,420	6,270	6,160	18,900
Brass and wire-rod mills	1,560	5,340	291	211	264	766
Total unalloyed scrap:						
Smelters and refiners	53,400 t/	190,000	10,700	10,600	10,500	31,800
Brass and wire-rod mills	108,000 t/	400,000 t/	34,100 t/	35,600 t/	36,800	106,000
Red brass: 3/						
All plants	14,800	58,800 t/	4,370 t/	4,410 t/	4,630	13,400
Leaded yellow brass:						
All plants	92,300 t/	353,000	29,100	29,500 t/	31,900	90,500
Yellow and low brass:						
All plants	26,900 t/	109,000 t/	9,220 t/	9,220 t/	9,230	27,700
Cartridge cases and brass:						
Smelters and refiners	W	W	W	W	W	W
Brass mills	7,460 t/	36,300 t/	3,650 t/	4,200 t/	4,160	12,000
Auto radiators:						
Smelters and refiners	12,100 t/	47,200	3,620	3,620	3,620	10,900
Bronzes:						
Smelters and refiners	2,770 t/	11,100	922	922	922	2,770
Brass mills	2,470	8,320 t/	954	958	931	2,840
Nickel-copper alloys:						
All plants	6,430 t/	18,700 t/	1,640 t/	1,690 t/	1,550	4,890
Low grade and residues:						
Smelters and refiners	15,600 t/	50,100	1,120	1,120	1,120	3,350
Other alloy scrap: 4/						
Smelters and refiners 5/	2,830 t/	8,890	138	138	138	414
Brass mills	1,520 t/	5,570 t/	550 t/	550 t/	550	1,650
Total alloyed scrap:						
Smelters and refiners	51,800 t/	188,000	11,000	11,000	11,000	32,900
Brass mills	133,000 t/	519,000 t/	44,300 t/	45,400 t/	47,700	137,000
Total scrap:						
Smelters and refiners	105,000	378,000	21,700	21,600	21,400	64,700
Brass and wire-rod mills	241,000 t/	920,000 t/	78,400 t/	81,000 t/	84,500	244,000

p/ Preliminary. t/ 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, zinc 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/								
March	102,000	22,600	27,600	31,000 r/	4,680	95,400	252,000	433,000 r/
April	95,600	27,500	26,500	33,900 r/	4,680	115,000	297,000	504,000 r/
May	98,100	28,100	27,300	22,300 r/	4,680	137,000	298,000	518,000 r/
June	92,500	26,600	30,200	20,200 r/	4,680	150,000	333,000	564,000 r/
July	89,500	20,000	30,800	22,700 r/	4,680	160,000	435,000	673,000 r/
August	93,400	18,400	28,900	23,500 r/	4,680	170,000	459,000	704,000 r/
September	88,700	17,700	28,200	21,600 r/	4,680	181,000	540,000	793,000 r/
October	104,000	19,700	25,700	20,600 r/	4,680	191,000	566,000	829,000 r/
November	85,400	23,900	26,600 r/	25,100 r/	4,680	215,000	601,000	896,000 r/
December	93,600	25,200	32,900 r/	25,900 r/	4,680	244,000	617,000	949,000 r/
2002:								
January	71,100	27,900 r/	33,100 r/	25,500 r/	4,680	258,000	654,000	1,000,000
February	66,100	28,700	14,100 r/	25,500 r/	4,680	275,000	683,000	1,030,000 r/
March	44,000	22,100	15,100	24,200	4,680	284,000	704,000	1,050,000

p/ Preliminary. r/ Revised.

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:			
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
March	78.683	74.525	72.779
January - March	76.337	72.179	70.604

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:				
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
March	72.24	59.76	43.00	39.00
January - March	69.67	57.56	42.40	38.03

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	February	January - February	2001	February	January - February	2001	February	January - February	2001	February	January - February
Brazil	--	--	--	--	--	--	--	--	--	12,000	8,010	13,000
Canada	7,210	4,070	4,070	43	28	46	79,700	6,400	13,400	270,000	29,200	59,600
Chile	51,800	17,900	17,900	--	--	--	87,700	--	922	174,000	26,700	33,800
China	--	--	--	--	--	--	3	--	--	22	--	--
Indonesia	20,000	--	--	--	--	--	--	--	--	--	--	--
Italy	--	--	--	--	--	--	12,200	--	--	--	--	--
Kazakhstan	--	--	--	--	--	--	--	--	--	82,400	--	2,060
Mexico	2,550	--	--	317	--	--	48,900	821	1,830	131,000	2,060	12,800
Namibia	--	--	--	--	--	--	6,840	1,030	1,030	--	--	--
Peru	40,200	--	--	--	--	--	22,600	--	--	280,000	17,400	43,400
Philippines	--	--	--	--	--	--	4,990	--	--	999	--	--
Russia	--	--	--	--	--	--	115	--	--	22,800	2,020	2,020
South Africa	--	--	--	--	--	--	1,050	--	--	981	1,010	1,010
Spain	--	--	--	--	--	--	4,420	--	--	--	--	--
Taiwan	--	--	--	560	27	104	--	--	--	34	--	--
Turkey	--	--	10,000	--	--	--	--	--	--	--	--	--
Other	--	--	--	25	--	--	2,460	r/	--	--	16,400	r/
Total	122,000	22,000	32,000	945	55	150	271,000	8,250	17,200	991,000	87,800	170,000

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 -	
		February	February		February	February		February	February			
Belgium	18	--	--	--	--	--	1,550	179	179	30	--	--
Canada	30,300	1,320	2,920	6,860	273	584	13,800	1,510	3,330	6,520	130	293
China	2,310	250	269	3	--	--	87	--	26	8,520	--	--
France	1	--	--	64	--	--	2,130	20	40	62	--	--
Germany	443	7	7	50	35	35	982	--	20	169	7	7
Hong Kong	87	--	5	2	--	--	2,470	226	533	2,330	4	4
India	8	--	--	261	113	113	125	3	3	--	17	38
Israel	836	--	--	18	--	--	65	2	6	6	--	2
Italy	20	--	--	--	--	--	376	39	39	27	--	--
Japan	19	--	--	8	--	1,160	216	20	20	460	2	2
Korea, Republic of	699	17	170	1,090	--	--	1,320	78	151	78	141	247
Mexico	9,130	--	--	15,300	104	3,770	22	--	9	821	6	16
Singapore	159	--	60	(2/)	(2/)	(2/)	407	20	68	14	--	--
Taiwan	347	--	4	50	20	26	1,130	60	160	146	16	16
Thailand	22	--	--	--	--	--	264	38	38	--	--	--
United Arab Emirates	--	--	--	--	--	--	--	--	--	24	18	18
United Kingdom	280	--	--	49	--	--	451	60	60	457	132	214
Venezuela	501	--	--	--	--	--	5	6	6	140	205	205
Other	143 r/	--	25	144 r/	--	10	646 r/	68	77	2,720 r/	21	32
Total	45,300	1,590	3,460	23,900	546	5,700	26,000	2,330	4,770	22,500	699	1,090

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		
	2002		January - February	2002		January - February	2002		January - February	2002		January - February
	2001	February		2001	February		2001	February		2001	February	
Belgium	--	--	--	388	--	--	1,260	136	305	1,470	736	1,010
Canada	10,600	1,170	2,330	45,800	2,650	5,900	38,700	1,460	3,440	33,100	2,190	4,410
China	41	--	--	15	32	44	156,000	9,600	18,000	136,000	10,900	18,000
Colombia	--	--	--	899	30	85	--	--	--	18	--	2
Costa Rica	868	105	199	635	7	55	--	--	--	3	2	2
Dominican Republic	1,550	169	286	1,570	55	132	--	--	--	--	--	--
France	--	--	--	188	--	40	11	273	273	59	(2/)	(2/)
Germany	27	--	--	62	--	--	6,500	1,490	2,820	9,480	1,390	2,500
Guatemala	499	40	101	1,990	98	205	--	--	--	--	--	--
Honduras	484	3	19	656	17	25	--	--	--	--	--	--
Hong Kong	--	--	--	--	--	--	4,300	615	1,230	5,440	652	1,180
India	--	--	--	--	--	--	2,770	185	592	33,400	3,790	7,600
Italy	309	39	58	--	--	--	117	12	12	143	--	--
Jamaica	283	39	56	470	68	115	--	--	--	--	--	--
Japan	169	8	16	--	--	--	13,800	1,010	1,800	13,200	497	983
Korea, Republic of	--	19	19	20	--	--	24,400	1,500	3,000	17,800	2,100	3,970
Mexico	13,500	581	1,180	24,000	1,320	2,820	2,760	179	362	4,370	15	30
Panama	161	13	49	804	84	160	--	--	--	--	79	79
Peru	347	--	--	112	--	--	--	--	--	--	--	--
Spain	--	--	--	47	(2/)	(2/)	549	--	--	2,710	644	1,000
Switzerland	--	--	--	45	--	--	596	--	--	3,720	235	407
Taiwan	--	--	--	554	17	59	9,120	565	1,790	5,870	501	843
United Kingdom	64	--	9	919	110	229	36	--	--	570	62	82
Venezuela	42	--	--	874	38	110	--	--	--	--	--	--
Other	1,270 r/	127	225	4,320 r/	211	363	977 r/	115	186	4,460 r/	168	369
Total	30,300	2,310	4,540	84,400	4,730	10,300	262,000	17,100	33,800	272,000	23,900	42,400

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.