

Mineral Industry Surveys

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COPPER IN NOVEMBER 2001

Mine production of copper fell to its lowest level of the year owing to reduced output at the Bingham Canyon Mine in Utah. Smelter production in November fell sharply following closure of Chemetco Inc.'s secondary smelter. (see Copper in October 2001.) Downstream refinery production, which rose in November, was not yet impacted by the closure. Despite rising global inventories, copper prices rose in November following the announcement of several production cutbacks. The COMEX spot price rose to \$0.72 per pound at monthend, the highest level in 5 months. Inventories of refined copper held in global metal exchange warehouses rose to 1.07 million metric tons (Mt), an increase of 90,000 metric tons (t). U.S.-located warehouses accounted for 816,000 t, or 77% of the total. The price rise was short lived, however, as inventories continued to rise. Global warehouse inventories totaled 1.14 Mt at yearend and the corresponding COMEX price dropped to \$0.65 per pound.

In addition to cutbacks announced by U.S. producers (see Copper in August 2001; Copper in October 2001.), BHP Billiton Base Metals announced on November 8 that it would temporarily reduce copper production by 170,000 metric tons per year (t/yr). Effective immediately, production at the Escondida Mine in Chile was to be reduced by 10%, about 80,000 t/yr, and effective January 8, total sulfide production activities (90,000 t/yr) were to be curtailed at the Tintaya operations in Peru. At Escondida, production will be lowered by selectively mining lower-grade material while maintaining mill throughput (BHP Billiton Base Metals, 2001).

On November 30, Noranda Inc. announced that it would close its Gaspé custom copper smelter in Murdochville, Quebec, at the end of April for a period of at least 6 months. Noranda cited a combination of economic factors, including low metal prices and concentrate treatment charges that are "at their lowest levels in almost 14 years," as the reasons for the

suspension. The Gaspé smelter produced 115,000 t of anode in 2000 and processed both concentrate (310,000 t) and scrap (40,000 t). Concentrates come from Noranda's Brunswick mine, and from Portugal, Chile, Peru, and Argentina. Production in 2001 was estimated at 109,000 t of anode. As a result of the shutdown, Noranda expects to lose at least 45,000 t of downstream production at its CCR refinery in Montreal-East, Quebec (Noranda Inc., 2001). According to Platts Metals Week, a second smelting and refining company, Nippon Mining and Metals Inc. in Japan, planned to cut production by 40,000 t/yr beginning in January (Platts Metals Week, 2001a).

Olin Brass Corp. announced that it would idle its Indianapolis, IN, copper and copper-alloy sheet and strip mill by December 21 and lay off 200 employees because of poor market demand. Around 30 employees were to be retained for care and maintenance work so that the plant could be reopened when demand for the plant's products improved. The Indianapolis plant primarily serves customers in the automotive, telecommunications, and computer sectors (Platts Metals Week, 2001b).

Notice: This issue of the Mineral Industry Surveys contains numerous revisions owing to the inclusion of finalized annual data for 2000.

References Cited

- BHP Billiton Base Metals, 2001, BHP Billiton Base Metals reduces metal production: London, BHP Billiton Base Metals news release, November 8, 1 p.
- Noranda Inc., 2001, Noranda reduces copper anode production due to weak copper market: Toronto, Canada, Noranda Inc. news release, November 30, 3 p.
- Platts Metals Week, 2001a, Copper producer cuts spark rally on LME, COMEX: Platts Metals Week, v. 72, no. 49, December 3, p. 1, 8-9.
- 2001b, Olin idles mill in weak demand: Platts Metals Week, v. 72, no. 44, October 29, p. 6.

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

(Metric tons, unless otherwise specified)

	Source table 2/	2001			January - November
		2000	October	November	
Production:					
Primary:					
Mine, recoverable	(2)	1,440,000	113,000	106,000	1,230,000
Refinery:					
Electrolytic:					
Domestic	(4)	865,000	61,300 r/	67,700	749,000
Foreign	(4)	163,000	17,400	14,000	170,000
Electrowon	(4)	557,000 r/	55,000 r/	57,400	581,000
Total	(4)	1,590,000 r/	134,000 r/	139,000	1,500,000
Secondary recoverable copper:					
Refineries	(5)	208,000	10,200	11,300	150,000
Ingot makers 3/	(5)	121,000 r/	10,100 r/	10,100	111,000
Brass and wire-rod mills	(5)	844,000	69,700	65,700	728,000
Foundries, etc. 3/	(5)	67,100 r/	5,590	5,590	61,500
Smelter, total	(3)	1,000,000	86,300	79,700	859,000
Consumption:					
Apparent	(8)	3,110,000	198,000	NA	NA
Refined (reported)	(7)	3,030,000 r/	216,000 r/	206,000	2,420,000
Purchased copper-base scrap	(9)	1,600,000	128,000	122,000	1,370,000
Stocks at end of period:					
Total refined	(11)	334,000	828,000	893,000	XX
Blister, etc.	(11)	122,000	104,000	63,700	XX
Prices:					
U.S. producer cathode (cents per pound) 4/	(12)	88.163	67.422	70.560	77.036
Imports: 5/					
Ores and concentrates 6/	(14)	53	21,200	NA	NA
Refined	(14)	1,060,000	71,000	NA	NA
Exports: 5/					
Ores and concentrates 6/	(15)	107,000 r/	2,970	NA	NA
Refined	(15)	93,600	4,630	NA	NA

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
2000:			
January - November r/	853,000	469,000	1,320,000
November	74,200	40,800	115,000
December	75,600	47,000	123,000
Year	<u>928,000</u>	<u>516,000</u>	<u>1,440,000</u>
2001:			
January	75,700	41,200	117,000
February	68,900	41,400	110,000
March	68,300	42,700	111,000
April	69,800	40,600	110,000
May	78,700	43,600	122,000
June	76,100 r/	39,500	116,000 r/
July	72,800	37,000	110,000
August	73,000	35,900	109,000
September	73,000	33,600 r/	107,000 r/
October	76,800	36,600	113,000
November	77,200	28,800	106,000
January - November	<u>810,000</u>	<u>421,000</u>	<u>1,230,000</u>

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
2000:			
January - November	W	W	913,000 r/
November	W	W	83,800
December	W	W	88,500
Year	<u>W</u>	<u>W</u>	<u>1,000,000</u>
2001:			
January	W	W	88,400
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
January - November	<u>W</u>	<u>W</u>	<u>859,000</u>

r/ Revised. 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						
2000:								
January - November	795,000 r/	142,000 r/	510,000 r/	1,450,000	W	W	193,000 r/	1,640,000 r/
November	71,100	13,600	42,400	127,000	W	W	19,700	147,000
December	70,500	21,000	46,800	138,000	W	W	15,600	154,000
Year	865,000	163,000	557,000 r/	1,590,000 r/	W	W	208,000 r/	1,790,000
2001:								
January	78,000 r/	16,700	45,200	140,000 r/	W	W	15,400	155,000 r/
February	69,100 r/	14,700	43,100	127,000 r/	W	W	16,800	144,000 r/
March	77,400 r/	11,800	50,400	140,000 r/	W	W	16,700	156,000 r/
April	66,500 r/	12,900	54,300	134,000 r/	W	W	13,400	147,000 r/
May	72,500 r/	15,100	55,000	143,000 r/	W	W	12,800	155,000 r/
June	71,100 r/	15,500	55,100	142,000 r/	W	W	13,200	155,000 r/
July	64,700 r/	14,300	55,100	134,000 r/	W	W	13,900	148,000 r/
August	56,300 r/	19,900	56,300	132,000 r/	W	W	13,500	146,000 r/
September	64,300 r/	17,900	54,000 r/	136,000 r/	W	W	12,300	149,000 r/
October	61,300 r/	17,400	55,000 r/	134,000 r/	W	W	10,200	144,000 r/
November	67,700	14,000	57,400	139,000	W	W	11,300	150,000
January - November	749,000	170,000	581,000	1,500,000	W	W	150,000	1,650,000

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	
	2000:								
January - November	35,200	157,000 r/	27,400 r/	83,200 r/	762,000 r/	20,400	13,500 r/	48,000 r/	1,150,000
November	3,810	15,900	2,490 r/	7,560 r/	66,700	2,120	1,230 r/	4,360 r/	104,000 r/
December	3,790	11,800	2,490 r/	7,560 r/	59,600	1,730	1,230 r/	4,360 r/	92,600 r/
Year	39,000	169,000	29,900 r/	90,700 r/	822,000	22,200	14,700 r/	52,400 r/	1,240,000
2001:									
January	2,850	12,500	2,490 r/	7,560 r/	67,000	2,580	1,230 r/	4,360 r/	101,000
February	3,470	13,400	2,490 r/	7,560 r/	65,700	2,630	1,230 r/	4,360 r/	101,000
March	3,120	13,600	2,490 r/	7,560 r/	67,200	2,260	1,230 r/	4,360 r/	102,000
April	2,680	10,700	2,490 r/	7,560 r/	66,700	1,770	1,230 r/	4,360 r/	97,500 r/
May	2,240	10,500	2,490 r/	7,560 r/	65,700	297	1,230 r/	4,360 r/	94,400 r/
June	2,730	10,500	2,490 r/	7,560 r/	63,300	1,060	1,230 r/	4,360 r/	93,200 r/
July	3,470	10,400	2,490 r/	7,560 r/	58,100	969	1,230 r/	4,360 r/	88,600 r/
August	3,240	10,300	2,490 r/	7,560 r/	63,000	1,790	1,230 r/	4,360 r/	93,900 r/
September	2,800	9,480	2,490 r/	7,560 r/	61,500	1,140	1,230 r/	4,360 r/	90,500 r/
October	3,270	6,960	2,490 r/	7,560 r/	67,900	1,790	1,230 r/	4,360 r/	95,600 r/
November	2,040	9,300	2,490	7,560	64,000	1,640	1,230	4,360	92,700
January - November	31,900	118,000	27,400	83,200	710,000	17,900	13,500	48,000	1,050,000

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
2000:						
January - November	1,560,000 r/	1,910,000 r/	1,550,000	1,940,000 r/	XX	XX
November	139,000	153,000	135,000	176,000	55,100	25,800
December	118,000	164,000	118,000	155,000	54,800	34,700
Year	1,670,000	2,080,000	1,670,000	2,100,000	XX	XX
2001:						
January	127,000	176,000	126,000	173,000	56,100	37,500
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	109,000	158,000	109,000	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	163,000	123,000	165,000	55,100	25,500
November	119,000	159,000	119,000	157,000	55,300	26,900
January - November	1,370,000	1,750,000	1,370,000	1,740,000	XX	XX

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
2000:				
January - November r/	2,070,000	673,000	59,000	2,800,000
November	166,000	60,700	5,360 r/	232,000 r/
December	174,000	49,900	5,360 r/	229,000
Year	2,240,000	723,000	64,300 r/	3,030,000 r/
2001:				
January	192,000	55,800	5,360 r/	253,000 r/
February	163,000	55,500	5,360 r/	224,000 r/
March	175,000	60,100	5,360 r/	240,000
April	160,000	52,200	5,360 r/	218,000 r/
May	156,000	55,400	5,360 r/	217,000 r/
June	157,000	53,200	5,360 r/	216,000 r/
July	161,000	44,700	5,360 r/	211,000 r/
August	160,000	52,000	5,360 r/	217,000
September	155,000	47,300	5,360 r/	208,000 r/
October	163,000	47,000	5,360 r/	216,000 r/
November:				
Cathodes	154,000	36,700	1,210	192,000
Wire bars	--	--	W	W
Ingots and ingot bars	--	1,520	1,760	3,280
Cakes and slabs	417	W	W	417
Billets and other	--	8,120	2,400	10,500
Total	154,000	46,300	5,360	206,000
January - November	1,800,000	570,000	59,000	2,420,000

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
2000:						
January - October	1,320,000	303,000 r/	846,000	90,400	(258,000)r/	2,640,000 r/
November	127,000	32,300	105,000	1,180	16,500	247,000
December	138,000	27,900	73,700	2,070	8,760	229,000
Year	1,590,000 r/	363,000 r/	1,020,000	93,600	(232,000)	3,110,000
2001:						
January	140,000 r/	29,300 r/	123,000	1,180	23,600	268,000 r/
February	127,000 r/	30,200 r/	88,200	2,070	5,420	238,000 r/
March	140,000 r/	30,000 r/	101,000	2,880	70,800	196,000 r/
April	134,000 r/	26,700 r/	107,000	1,890	70,500	195,000 r/
May	143,000 r/	25,000 r/	72,400	1,020	13,900	225,000 r/
June	142,000 r/	25,700 r/	89,000	815	46,300 r/	209,000 r/
July	134,000 r/	25,600 r/	95,800	1,650	109,000	145,000 r/
August	132,000 r/	26,200 r/	80,900	2,590	31,000 r/	206,000 r/
September	136,000 r/	24,800 r/	114,000	1,190	91,000 r/	183,000 r/
October	134,000 r/	22,900 r/	78,600	4,630	32,100 r/	198,000
November	139,000	25,100	NA	NA	65,200	NA
January - October	1,360,000	266,000	950,000	19,900	494,000	2,060,000

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	
2000:									
January - November	52,800 r/	196,000 r/	40,300 r/	115,000 r/	973,000 r/	21,200	24,000 r/	52,100 r/	1,470,000
November	6,140	21,300	3,670 r/	10,400 r/	84,300	2,180	2,180 r/	4,740 r/	135,000 r/
December	5,900	16,300	3,670 r/	10,400 r/	76,200	1,790	2,180 r/	4,740 r/	121,000 r/
Year	58,700 r/	212,000	44,000 r/	125,000 r/	1,050,000	23,000	26,200 r/	56,800 r/	1,600,000
2001:									
January	5,460	14,900	3,670 r/	10,400 r/	85,300	2,650	2,180 r/	4,740 r/	129,000 r/
February	6,610	15,600	3,670 r/	10,400 r/	82,500	2,700	2,180 r/	4,740 r/	128,000 r/
March	6,430	14,000	3,670 r/	10,400 r/	85,100	2,330	2,180 r/	4,740 r/	129,000
April	6,460	14,800	3,670 r/	10,400 r/	84,600	1,820	2,180 r/	4,740 r/	129,000
May	3,400	17,400	3,670 r/	10,400 r/	84,100	338	2,180 r/	4,740 r/	126,000 r/
June	3,400	16,200	3,670 r/	10,400 r/	80,600	1,120	2,180 r/	4,740 r/	122,000 r/
July	3,590	16,500	3,670 r/	10,400 r/	73,100	1,010	2,180 r/	4,740 r/	115,000 r/
August	3,520	16,900	3,670 r/	10,400 r/	79,900	1,840	2,180 r/	4,740 r/	123,000 r/
September	3,520	15,900	3,670 r/	10,400 r/	77,800	1,190	2,180 r/	4,740 r/	119,000 r/
October	3,520	15,800	3,670 r/	10,400 r/	85,900	1,840	2,180 r/	4,740 r/	128,000
November	3,520	14,700	3,670	10,400	80,700	1,690	2,180	4,740	122,000
January - November	49,400	173,000	40,300	115,000	900,000	18,500	24,000	52,100	1,370,000

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	2000		2001			
	January - November	Year	September	October	November	January - November
No. 1 wire and heavy:						
Smelters and refiners	78,000 r/	86,000	6,230	4,950 r/	4,340	65,100
Brass and wire-rod mills	405,000 r/	438,000	34,200	37,700	35,900	395,000
No. 2 mixed heavy and light:						
Smelters and refiners	122,000 r/	133,000 r/	10,000 r/	7,460 r/	7,000	114,000
Brass and wire-rod mills	13,400 r/	13,800	338	517	292	5,000
Total unalloyed scrap:						
Smelters and refiners	200,000 r/	219,000 r/	16,300 r/	12,400 r/	11,300	180,000
Brass and wire-rod mills	419,000 r/	452,000	34,500	38,200	36,200	400,000
Red brass: 3/						
All plants	57,300 r/	62,000 r/	5,120 r/	4,530 r/	4,650	55,100
Leaded yellow brass:						
All plants	383,000 r/	413,000 r/	28,100 r/	31,400 r/	27,400	325,000
Yellow and low brass:						
All plants	92,500 r/	103,000 r/	10,600 r/	10,600 r/	10,500	116,000
Cartridge cases and brass:						
Smelters and refiners	W	W	W	W	W	W
Brass mills	68,200 r/	72,000	5,140	5,560	6,260	60,500
Auto radiators:						
Smelters and refiners	44,200 r/	48,300 r/	4,040 r/	3,620 r/	3,620	43,600
Bronzes:						
Smelters and refiners	10,100 r/	11,100 r/	922 r/	922 r/	922	10,100
Brass mills	10,600 r/	11,300	368	1,010	955	9,060
Nickel-copper alloys:						
All plants	26,300 r/	27,600 r/	895 r/	1,010 r/	1,070	12,500
Low grade and residues:						
Smelters and refiners	70,100 r/	75,300 r/	5,200 r/	1,120 r/	1,120	49,000
Other alloy scrap: 4/						
Smelters and refiners 5/	11,000 r/	11,900 r/	942 r/	138 r/	138	8,750
Brass mills	5,790 r/	6,200	406	565	565	5,630
Total alloyed scrap:						
Smelters and refiners	204,000 r/	221,000 r/	17,300 r/	11,000 r/	11,000	177,000
Brass mills	575,000 r/	620,000	44,500	49,500	46,200	518,000
Total scrap:						
Smelters and refiners	404,000 r/	440,000 r/	33,500 r/	23,400 r/	22,300	357,000
Brass and wire-rod mills	994,000 r/	1,070,000	79,000	87,700	82,400	918,000

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/		
2000:								
November	115,000	16,200	28,800	17,700	4,680	58,700	199,000	325,000
December	122,000	14,800	28,600	23,600	4,680	58,700	204,000	334,000
2001:								
January	102,000	15,100	25,200	25,900	4,680	71,900	215,000	358,000
February	105,000	18,700	23,000	27,600	4,680	81,600	208,000	363,000
March	102,000	22,600	27,600	31,600	4,680	95,400	252,000	434,000
April	95,600	27,500	26,500	34,400	4,680	115,000	297,000	505,000
May	98,100	28,100	27,300	23,000	4,680	137,000	298,000	518,000
June	92,500	26,600 r/	30,200	20,900	4,680	150,000	333,000	565,000 r/
July	89,500	20,000 r/	30,800	23,400	4,680	160,000	435,000	674,000 r/
August	93,400	18,400 r/	28,900	24,300	4,680	170,000	459,000	705,000 r/
September	88,700	17,700 r/	29,400	23,200	4,680	181,000	540,000	796,000 r/
October	104,000	19,300	25,000	21,300	4,680	191,000	566,000	828,000
November	63,700	22,300	24,500	25,900	4,680	215,000	601,000	893,000

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
2000:			
November	87.568	83.250	81.405
December	91.271	86.923	83.922
Year	88.163	83.971	82.239
2001:			
January	88.018	83.700	81.059
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
January - November	77.036	72.996	72.013

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	Dealers (New York)			
	Brass mills No. 1 scrap	Refiners No. 2 scrap	No. 2 scrap	Red brass turnings and borings
2000:				
November	79.08	64.00	57.00	42.00
December	82.28	66.85	55.00	42.00
Year	80.67	64.99	51.43	39.95
2001:				
January	82.45	68.05	56.45	44.10
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
January - November	69.96	59.36	49.42	40.96

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		
	2001			2001			2001			2001		
	2000	October	January - October	2000	October	January - October	2000	October	January - October	2000	October	January - October
Bulgaria	--	--	--	--	--	--	4,040	--	497	56	--	--
Canada	--	--	7,210	20	--	5	53,500	8,030	65,800	268,000	21,600	212,000
Chile	--	--	6,510	1	--	--	76,200	3,560	80,500	258,000	9,580	154,000
Finland	--	--	--	--	--	--	2,180	--	--	178	503	688
Indonesia	--	--	20,000	--	--	--	--	--	--	--	--	--
Italy	--	--	--	--	--	--	2,180	--	12,200	(2/)	--	--
Kazakhstan	--	--	--	--	--	--	--	--	--	54,900	4,080	41,400
Mexico	--	1,260	2,550	757	--	317	19,500	2,860	46,600	80,400	12,100	115,000
Namibia	--	--	--	--	--	--	2,750	--	5,830	--	--	--
Netherlands	--	--	--	173	--	--	1	(2/)	(2/)	--	2	9
Peru	--	20,000	40,200	--	--	--	5,960	4,920	18,700	311,000	17,900	239,000
Philippines	5	--	--	--	--	--	--	--	4,990	--	--	999
Russia	--	--	--	--	--	--	117	--	115	58,900	--	22,800
Spain	--	--	--	--	--	--	5,670	--	4,420	--	--	--
Taiwan	--	--	--	644	5	472	--	--	--	101	--	34
Turkey	--	--	--	--	--	--	11,000	--	--	1,100	--	--
Other	48	--	--	88 r/	--	13	1,690	--	3,010	23,800	5,200	19,900
Total	53	21,200	76,500	1,680	5	807	185,000	19,400	243,000	1,060,000	71,000	806,000

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 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		
	2001			2001			2001			2001		
	2000	October	January - October	2000	October	January - October	2000	October	January - October	2000	October	January - October
Belgium	--	--	18	48	--	--	397	56	1,480	--	--	30
Brazil	3,090 r/	12	23	3	--	5	33	--	--	15	--	3
Canada	45,000	1,480	27,400	13,100	342	6,240	10,400	1,330	11,100	5,990	611	5,600
China	8,500 r/	234	1,060	10	--	3	61	--	87	52,700	3,430	3,920
Egypt	--	--	--	--	--	--	--	--	2	1	--	2,160
Finland	4,680 r/	--	--	--	--	--	--	--	--	19	--	(2/)
Germany	6,100 r/	9	365	--	7	50	383	--	903	123	--	127
Hong Kong	111	--	87	3	--	2	2,330	158	1,980	1,750	407	2,320
Israel	47	--	836	--	--	18	83	--	54	11	--	6
Italy	7	--	20	5	--	--	510	19	332	97	--	27
Japan	483	11	13	56	--	8	1,990	6	189	74	--	443
Korea, Republic of	1,180	78	665	10	892	1,020	589	78	1,050	538	7	48
Mexico	31,500	1,060	8,920	17,900	3,500	13,000	1,680	7	22	2,980	8	796
Philippines	4,300 r/	--	--	--	--	--	89	--	83	4	--	--
Singapore	115	38	119	--	(2/)	(2/)	953	49	347	7,220	--	14
Taiwan	65	1	333	93	9	32	2,230	322	959	20,400	3	122
Thailand	--	--	20	--	--	--	297	--	177	300	--	--
United Kingdom	600	11	269	40	15	42	439	20	372	33	134	321
Venezuela	10	--	501	--	--	--	7	5	5	12	7	140
Other	1,140 r/	28	78	90 r/	7	289	866 r/	199	2,380	1,310 r/	27	590
Total	107,000 r/	2,970	40,700	31,300	4,780	20,700	23,300	2,250	21,500	93,600	4,630	16,700

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			2001			2001			2001		
	2000	October	January - October									
Canada	9,130	1,490	8,160	54,400	4,050	39,600	45,300	1,680	35,300	41,400	2,910	27,900
China	--	--	41	760	--	2	124,000	16,700	136,000	86,100	11,800	116,000
Colombia	146	--	--	2,670	65	847	--	--	--	40	--	--
Costa Rica	947	107	743	876	52	542	20	--	--	5	--	3
Dominican Republic	1,480	116	1,270	1,530	142	1,370	20	--	--	--	--	--
Germany	283	--	27	129	20	62	2,070	173	5,330	5,610	912	7,720
Guatemala	536	55	390	1,730	211	1,640	--	--	--	--	--	--
Honduras	402	41	439	776	21	610	--	--	--	1	--	--
Hong Kong	10	--	--	17	--	--	6,900	359	2,900	6,240	214	4,180
India	--	--	--	--	--	--	933	178	2,520	24,000	3,930	27,600
Japan	124	7	154	37	--	--	15,900	1,650	11,400	16,200	1,560	11,200
Korea, Republic of	--	--	--	590	--	3	20,600	2,210	21,500	39,700	1,400	14,600
Mexico	15,100	1,340	12,200	29,400	1,940	21,100	2,760	109	2,490	14,700	277	4,010
Peru	277	--	347	99	--	92	--	--	--	2	--	--
Spain	--	--	--	4,100	--	47	589	--	511	5,460	52	2,290
Switzerland	--	--	--	24	--	24	126	--	578	966	173	3,020
Taiwan	17	--	--	1,150	56	472	5,080	1,080	7,070	6,190	198	4,560
United Kingdom	11	9	39	2,550	144	707	113	--	36	713	22	354
Venezuela	418	22	42	1,760	30	755	156	--	--	--	--	--
Other	1,940	133	1,730	10,200 r/	463	5,440	2,970 r/	316	1,940	10,500 r/	250	4,860
Total	30,900	3,320	25,600	113,000	7,190	73,300	228,000	24,500	228,000	258,000	23,700	229,000

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.