

# Mineral Industry Surveys

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## COPPER IN OCTOBER 2005

Average daily mine production of recoverable copper fell by about 7% in October and was at the lowest level since April 2004, according to data compiled by the U.S. Geological Survey. While October's production was 13% below that for October 2004, year-to-date production remained about 2% above that for the same period in 2004. Downstream, average daily production of refined copper in October fell by 8%, and year-to-date production was down by 5% compared with production for the same period in 2004. Consumption of refined copper, which had been weak during the first one-half of the year, continued to strengthen, rising for the fourth consecutive month to the highest level since the downturn began in the third quarter of 2004.

Despite lower consumption during the first 3 quarters of 2005, lower domestic production and a lower beginning inventory from which to draw stockpiled copper increased domestic reliance on imported copper. Imports of refined copper for the first 3 quarters rose to 697,000 metric tons (t) of copper from 611,000 for the same period in 2004. Domestic stocks fell by only 57,000 t in the first 3 quarters of 2005, compared with 495,000 t in the first 3 quarters of 2004.

### Update

Copper prices continued to move upward to successive record-high levels. The COMEX price averaged \$2.01 per pound of copper in November and \$2.17 per pound in December, closing the year at \$2.16 per pound. The price rise was in part fueled by speculation in mid-November that a trader acting on behalf of China's State Reserve Bureau (SRB) had built a substantial short position by selling forward copper contracts containing an estimated 100,000 t to 200,000 t of copper on the London Metals Exchange Ltd. (LME). The short position, reportedly built over the preceding several months, was believed to expire in mid-December. Uncertainty surrounded the ability of the SRB to deliver physical copper to fulfill their obligations. It was speculated that releases totaling about 60,000 t of copper from SRB stockpiles over the preceding months were intended to ease supply constraints and lower copper prices, but prices remained high. Lower prices would reduce potential losses to the SRB if it had to purchase copper to offset its short position

(Platts Metals Week, 2005). The reported expiration date in December, however, came and went without disruption. Speculation was that the initial SRB short position had been overestimated, and that the SRB settled some of its short positions with physical delivery of copper and rolled forward other short positions (Bresnick, 2005<sup>1</sup>). A rise in LME inventories held in Busan, Republic of Korea, to 69,900 t at the end of December from 6,400 t at the end of August may support the contention that the SRB had closed out some of its short positions with physical metal.

Striking workers at ASARCO Incorporated voted (November 12-13) to end their 16-week strike that had reduced production at its mines, smelter, and refinery. Key to reaching a deal on the new contract was the inclusion of a successorship clause that requires any buyer of Asarco to recognize and negotiate with the union. Asarco has been operating under Chapter 11 bankruptcy protection since August 10, and it reportedly was the creditors committee that put pressure on Asarco to settle. The new contract extends the terms of their existing contract through the end of 2006 (Barry, 2005<sup>§</sup>). Though workers returned to work almost immediately, production ramp-up to full capacity was not expected until February. In mid-December, full-year 2005 cathode production was projected at 150,000 t, down from a pre-strike projection of 220,000 t, and production in the Ray Pit (Arizona) reportedly was still running at only 20% of capacity (Barry, 2005b). In mid-December, Asarco received bankruptcy court approval to appoint a new interim chief executive, Douglas E. McAllister, following the resignation of the former chief executive in late October. The court also approved a \$75 million loan for Asarco that would provide "liquidity to the company on an as-need basis" (Barry, 2005a).

### References Cited

- Barry, Sean, 2005a, Asarco appoints interim chief executive: American Metal Market, v. 113, no. 50-2, December 20, p. 2.  
Barry, Sean, 2005b, Asarco ramp-up continues but full production still two months away: American Metal Market, v. 113, no. 49-2, December 13, p. 6.

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<sup>1</sup>A reference that includes a section mark (§) is found in the Internet References Cited section.

Platts Metals Week, 2005, Copper prices climb on uncertainty over SRB short positions: Platts Metals Week, v. 76, no. 47, p. 2, 8-9.

### **Internet References Cited**

Barry, Sean, 2005 (November 11), After 19 weeks, labor peace and a pivotal step toward restructuring, accessed November 14, 2005, via URL <http://www.amm.com>.

Bresnick, Julie, 2005 (December 21), SRB shorts fail to cause a stir; some see hoax, accessed January 3, 2006, via URL <http://www.amm.com>.

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

(Metric tons, unless otherwise specified)

	Source table <sup>2</sup>	2005			January - October
		2004 <sup>p</sup>	September	October	
<b>Production:</b>					
<b>Primary:</b>					
Mine, recoverable	(2)	1,160,000	93,400	89,900	962,000
<b>Refinery:</b>					
<b>Electrolytic:</b>					
Domestic and foreign	(4)	671,000	49,900	46,200	520,000
Electrowon	(4)	584,000	47,000	45,200	461,000
Total	(4)	1,260,000	96,900	91,500	981,000
<b>Secondary recoverable copper:</b>					
Refineries	(5)	50,800	3,630	3,780	39,400
Ingot makers <sup>3</sup>	(5)	91,800	7,650	7,650	76,500
Brass and wire-rod mills	(5)	705,000	59,600	60,300	582,000
Foundries, etc. <sup>3</sup>	(5)	65,200	5,430	5,430	54,300
Smelter, total	(3)	542,000	48,500	51,800	434,000
<b>Consumption:</b>					
Apparent	(8)	2,570,000	191,000	NA	NA
Refined (reported)	(7)	2,410,000	204,000 <sup>r</sup>	206,000	1,920,000
Purchased copper-base scrap	(9)	1,150,000	96,800 <sup>r</sup>	97,500	954,000
<b>Stocks at end of period:</b>					
Total refined	(11)	136,000	78,500 <sup>r</sup>	75,200	XX
Blister, etc.	(11)	51,400	51,700 <sup>r</sup>	47,300	XX
<b>Prices:</b>					
U.S. producer cathode (cents per pound) <sup>4</sup>	(12)	133.938	180.623	195.568	165.301
<b>Imports:<sup>5</sup></b>					
Ores and concentrates <sup>6</sup>	(14)	22,900	--	NA	NA
Refined	(14)	807,000	79,400	NA	NA
<b>Exports:<sup>5</sup></b>					
Ores and concentrates <sup>6</sup>	(15)	24,200	18,400	NA	NA
Refined	(15)	118,000	1,800	NA	NA

<sup>p</sup>Preliminary. <sup>r</sup>Revised. NA Not available. XX Not applicable. -- Zero.

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

<sup>2</sup>Numbers in parentheses refer to the significant tables where these data are located.

<sup>3</sup>Monthly data and 2004 cumulative data estimated based on 2003 monthly average.

<sup>4</sup>Source: Platts Metals Week.

<sup>5</sup>Source: U.S. Census Bureau.

<sup>6</sup>Copper content.

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

(Metric tons)

Period	Recoverable copper			Contained copper		
	Arizona	Others <sup>2</sup>	Total	Electrowon	Concentrates <sup>3</sup>	Total
2004: <sup>P</sup>						
January - October	598,000	343,000 <sup>r</sup>	941,000 <sup>r</sup>	487,000	467,000 <sup>r</sup>	954,000 <sup>r</sup>
October	64,200	39,400	104,000	48,900	56,300	105,000
November	61,400	46,500	108,000	47,600	62,100	110,000
December	63,300	45,200	109,000	50,000	60,300	110,000
Year	723,000	435,000	1,160,000	584,000	590,000	1,170,000
2005:						
January	58,500	39,800	98,300	42,400	57,600	99,900
February	54,200	37,500	91,700	40,800	52,400	93,100
March	62,100	43,200	105,000	47,400	59,600	107,000
April	62,000	39,000	101,000	47,700	55,000	103,000
May	65,300	38,100	103,000	48,800	56,400	105,000
June	61,700	36,000	97,700	48,100	51,100	99,200
July	54,400	36,000	90,400	46,600	45,000	91,600
August	55,200	35,800	91,000	47,300	44,900	92,200
September	53,500	39,900	93,400	47,000	48,000	95,000
October	53,200	36,700	89,900	45,200	45,900	91,100
January - October	580,000	382,000	962,000	461,000	516,000	977,000

<sup>P</sup>Preliminary. <sup>r</sup>Revised.

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

<sup>2</sup>Includes production from, Idaho, Missouri, Montana, Nevada, New Mexico, and Utah.

<sup>3</sup>Includes copper content of precipitates and other metal concentrates.

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

(Metric tons, copper content)

Period	Anode production
2004: <sup>P</sup>	
January - October	450,000
October	49,200
November	42,300
December	49,900
January - December	542,000
2005:	
January	42,700
February	36,100
March	37,900
April	49,700
May	36,900
June	44,100
July	36,500
August	49,300
September	48,500
October	51,800
January - October	434,000

<sup>P</sup>Preliminary.

<sup>1</sup>Includes blister, anode and copper from primary or secondary sources.

<sup>2</sup>Data are rounded to no more than three significant digits; may not add to total shown.

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

(Metric tons)

Period	Primary materials			Scrap	Total refined
	Electrolytically refined <sup>2</sup>	Electrowon	Total		
2004: <sup>P</sup>					
January - October	545,000	487,000	1,030,000	42,600	1,070,000
October	57,400	48,900	106,000	4,540	111,000
November	56,700	47,600	104,000	4,190	109,000
December	69,300	50,000	119,000	4,010	123,000
Year	671,000	584,000	1,260,000	50,800	1,310,000
2005:					
January	54,900	42,400	97,200	4,380	102,000
February	57,400	40,800	98,100	4,380	102,000
March	52,600	47,400	100,000	4,210	104,000
April	53,100	47,700	101,000	4,160	105,000
May	56,100	48,800	105,000	3,750	109,000
June	49,100	48,100	97,200	3,620	101,000
July	49,500	46,600	96,200	3,940	100,000
August	51,200	47,300	98,500	3,590	102,000
September	49,900	47,000	96,900	3,630	100,000
October	46,200	45,200	91,500	3,780	95,200
January - October	520,000	461,000	981,000	39,400	1,020,000

<sup>P</sup>Preliminary.

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

<sup>2</sup>From domestic and foreign source materials.

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

(Metric tons, copper content)

Period	Refineries <sup>2</sup>		Ingot makers <sup>3</sup>		Brass and wire-rod mills		Foundries, etc. <sup>3</sup>		Total <sup>4</sup>
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2004: <sup>P</sup>									
January - October	13,400	29,200	13,900 <sup>r</sup>	62,600 <sup>r</sup>	570,000 <sup>r</sup>	30,300	20,600 <sup>r</sup>	33,700 <sup>r</sup>	774,000 <sup>r</sup>
October	1,340	3,210	1,390	6,260	56,800	2,670	2,060	3,370	77,100
November	1,340	2,850	1,390	6,260	50,500	2,670	2,060	3,370	70,500
December	1,340	2,680	1,390	6,260	48,000	3,300	2,060	3,370	68,400
Year	16,000	34,700	16,700	75,100	669,000	36,300	24,700	40,400	913,000
2005:									
January	1,340	3,050	1,390	6,260	57,700	2,780	2,060	3,370	77,900
February	1,340	3,040	1,390	6,260	54,900	3,110	2,060	3,370	75,500
March	1,340	2,870	1,390	6,260	56,300	2,980	2,060	3,370	76,500
April	1,340	2,820	1,390	6,260	54,200	3,220	2,060	3,370	74,700
May	1,340	2,410	1,390	6,260	54,100	2,550	2,060	3,370	73,500
June	1,340	2,280	1,390	6,260	54,500	2,380	2,060	3,370	73,600
July	1,340	2,610	1,390	6,260	51,000	2,840	2,060	3,370	70,900
August	1,340	2,260	1,390	6,260	56,400	2,840	2,060	3,370	75,900
September	1,340	2,300	1,390	6,260	56,800	2,810	2,060	3,370	76,400
October	1,340	2,450	1,390	6,260	58,900	1,410	2,060	3,370	77,200
January - October	13,400	26,100	13,900	62,600	555,000	26,900	20,600	33,700	752,000

<sup>P</sup>Preliminary. <sup>r</sup>Revised.

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

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

<sup>3</sup>Monthly data and 2004 cumulative data estimated based on 2003 annual data.

<sup>4</sup>Does not include an estimate, based on reported 2003 data of 3,040 tons per month from new scrap and 1,830 tons per month of copper recovered from scrap other than copper-base.

TABLE 6  
PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD SEMIFABRICATES<sup>1</sup>

(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
2004: <sup>P</sup>						
January - October	1,180,000	1,520,000	1,180,000	1,520,000	XX	XX
October	120,000	135,000	120,000	148,000	54,400	23,000
November	107,000	148,000	108,000	144,000	52,900	26,600
December	100,000	134,000	97,600	130,000	55,300	31,200
Year	1,390,000	1,800,000	1,390,000	1,790,000	XX	XX
2005:						
January	113,000	141,000	114,000	137,000	55,100	35,100
February	109,000	135,000	110,000	134,000	53,300	35,100
March	117,000	135,000	117,000	149,000	53,600	20,600
April	109,000	143,000	112,000	141,000	50,200	22,000
May	111,000	145,000	110,000	143,000	51,400	23,500
June	115,000	145,000	116,000	145,000	50,300	23,100
July	109,000	148,000	113,000	140,000	46,300	31,000
August	123,000	147,000	123,000	152,000	46,200	25,600
September	121,000	150,000 <sup>r</sup>	122,000	148,000	45,300 <sup>r</sup>	22,000 <sup>r</sup>
October	125,000	152,000	124,000	150,000	45,900	24,100
January - October	1,150,000	1,440,000	1,160,000	1,440,000	XX	XX

<sup>P</sup>Preliminary. <sup>r</sup>Revised. XX Not applicable.

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

TABLE 7  
CONSUMPTION OF REFINED COPPER<sup>1</sup>

(Metric tons)

Period and item	Brass mills	Wire-rod mills	Other plants <sup>2</sup>	Total
2004: <sup>P</sup>				
January - October	489,000	1,510,000	51,600 <sup>r</sup>	2,050,000
October	48,200	136,000	5,160	190,000
November	44,700	145,000	5,160	195,000
December	39,200	129,000	5,160	173,000
Year	573,000	1,780,000	61,900	2,410,000
2005:				
January	44,900	145,000	5,160	195,000
February	42,500	129,000	5,160	177,000
March	46,100	134,000	5,160	185,000
April	41,500	143,000	5,160	190,000
May	43,000	132,000	5,160	180,000
June	46,200	141,000	5,160	192,000
July	42,100	146,000	5,160	193,000
August	45,900	151,000	5,160	202,000
September	45,300 <sup>r</sup>	153,000 <sup>r</sup>	5,160	204,000 <sup>r</sup>
October:				
Cathodes	31,300	154,000	954	187,000
Wire bars	--	--	(3)	(3)
Ingots and ingot bars	2,050	--	2,130	4,180
Cakes and slabs	3,070	--	(3)	3,120
Billets and other	10,100	109	2,070	12,200
Total	46,500	154,000	5,160	206,000
January - October	444,000	1,430,000	51,600	1,920,000

<sup>P</sup>Preliminary. <sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data included with "Cathodes." -- Zero.

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

<sup>2</sup>Consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers is estimated based on 2003 annual data.

<sup>3</sup>Withheld to avoid disclosing company proprietary data; included with "Billets and others."

TABLE 8  
U.S. APPARENT CONSUMPTION OF COPPER<sup>1</sup>

(Metric tons)

Period	Refined copper production	Copper in old scrap <sup>2</sup>	Refined general imports <sup>3</sup>	Refined exports <sup>3</sup>	Stock change during period	Apparent consumption
2004: <sup>P</sup>						
January - September	925,000	156,000 <sup>r</sup>	517,000	104,000	(500,000) <sup>r</sup>	2,000,000
September	108,000	17,400	73,800	570	(23,100)	221,000 <sup>r</sup>
October	106,000	17,300	60,200	3,890	(12,400)	192,000
November	104,000	16,900	75,300	2,460	(7,870)	202,000
December	119,000	17,400	51,100	8,390	(743)	180,000
Year	1,260,000	208,000	704,000	118,000	(521,000)	2,570,000
2005:						
January	97,200	17,200	77,900	4,460	6,350	182,000
February	98,100	17,600	66,500	3,230	(7,110)	186,000
March	100,000	17,300	72,000	2,830	(6,550)	193,000
April	101,000	17,500 <sup>r</sup>	63,300	1,900	(4,560)	184,000
May	105,000	16,400	101,000	7,240	(12,000)	227,000
June	97,200	16,100	64,100	4,270	(11,700)	185,000
July	96,200	16,900	75,500	3,010	(9,110)	195,000
August	98,500	16,500	79,400	2,650	(12,900)	205,000
September	96,900	16,500	79,400	1,800	443 <sup>r</sup>	191,000
October	91,500	15,300	NA	NA	(3,390)	NA
January - September	890,000	152,000	599,000	31,400	(57,100)	1,750,000

<sup>P</sup>Preliminary. <sup>r</sup>Revised. NA Not available.

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

<sup>2</sup>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 2003 data.

<sup>3</sup>Source: U.S. Census Bureau.

TABLE 9  
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP<sup>1</sup>

(Metric tons, gross weight)

Period	Smelters and refineries		Ingot makers <sup>2</sup>		Brass and wire-rod mills <sup>3</sup>		Foundries, etc. <sup>2</sup>		Total scrap used
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2004: <sup>P</sup>									
January - October	13,500	29,300	18,500 <sup>r</sup>	91,100 <sup>r</sup>	719,000 <sup>r</sup>	31,500	36,000 <sup>r</sup>	37,000 <sup>r</sup>	976,000 <sup>r</sup>
October	1,350	3,230	1,850	9,110	71,500	2,810	3,600	3,700	97,200
November	1,350	2,890	1,850	9,110	63,300	2,780	3,600	3,700	88,500
December	1,350	2,700	1,850	9,110	60,300	3,440	3,600	3,700	86,000
Year	16,200	34,900	22,200	109,000	843,000	37,700	43,200	44,400	1,150,000
2005:									
January	1,350	3,080	1,850	9,110	72,400	2,910	3,600	3,700	98,000
February	1,350	3,080	1,850	9,110	69,800	3,280	3,600	3,700	95,800
March	1,350	2,900	1,850	9,110	71,800	3,170	3,600	3,700	97,500
April	1,350	2,850	1,850	9,110	68,400	3,370	3,600	3,700	94,200
May	1,350	2,440	1,850	9,110	68,600	2,710	3,600	3,700	93,400
June	1,350	2,310	1,850	9,110	70,200	2,550	3,600	3,700	94,700
July	1,350	2,640	1,850	9,110	64,300	2,980	3,600	3,700	89,500
August	1,350	2,280	1,850	9,110	71,400	2,980	3,600	3,700	96,300
September	1,350	2,420 <sup>r</sup>	1,850	9,110	71,700	2,990	3,600	3,700	96,800 <sup>r</sup>
October	1,350	2,380	1,850	9,110	74,000	1,550	3,600	3,700	97,500
January - October	13,500	26,400	18,500	91,100	703,000	28,500	36,000	37,000	954,000

<sup>P</sup>Preliminary. <sup>r</sup>Revised.

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

<sup>2</sup>Monthly data and 2004 cumulative data estimated from 2003 annual data.

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

TABLE 10  
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP<sup>1,2</sup>

(Metric tons, gross weight)

Scrap type and processor	2004 <sup>P</sup>		2005			
	January - October <sup>F</sup>	Year	August	September	October	January - October
<b>No. 1 wire and heavy:</b>						
Smelters and refiners	58,600	68,500	5,710	4,880	4,880	55,400
Brass and wire-rod mills	394,000	394,000	32,100	32,700	33,200	317,000
<b>No. 2 mixed heavy and light:</b>						
Smelters and refiners	28,800	26,800	1,610	1,480	1,870	19,500
Brass and wire-rod mills	6,250	6,250	502	510	331	4,570
<b>Total unalloyed scrap:</b>						
Smelters and refiners	87,400	95,300	7,310	6,360	6,750	75,000
Brass and wire-rod mills	401,000	401,000	32,600	33,200	33,600	321,000
<b>Red brass:<sup>3</sup></b>						
All plants	40,500	39,300	3,410	3,570	3,870	32,800
<b>Leaded yellow brass:</b>						
All plants	323,000	322,000	16,200	16,900	16,300	160,000
<b>Yellow and low brass:</b>						
All plants	41,600	41,300	14,700	13,900	15,300	147,000
<b>Cartridge cases and brass:</b>						
All plants	86,700	86,600	8,310	8,250	7,970	80,000
<b>Auto radiators:</b>						
Smelters and refiners	25,000	26,700	2,230	2,080	2,080	22,000
<b>Bronzes:</b>						
Smelters and refiners	11,100	8,390	699	699	699	6,990
Brass mills	6,350	6,350	474	430	529	4,690
<b>Nickel-copper alloys:</b>						
All plants	19,900	20,000	1,420	1,680	1,190	15,600
<b>Low grade and residues:</b>						
Smelters and refiners	15,700	12,600	1,050	1,050	1,050	10,500
<b>Other alloy scrap:<sup>4</sup></b>						
Smelters and refiners	1,130	1,100	92	92	92	920
Brass mills	4,860	4,860	332	332	332	3,660
<b>Total alloyed scrap:</b>						
Smelters and refiners	95,500	89,100	7,420	7,420	7,420	74,200
Brass mills	480,000	480,000	41,500	41,500	42,000	410,000
<b>Total scrap:</b>						
Smelters and refiners	183,000	184,000	14,700	13,800	14,200	149,000
Brass and wire-rod mills	880,000	880,000	74,200	74,700	75,600	731,000

<sup>P</sup>Preliminary. <sup>F</sup>Revised.

<sup>1</sup>Does not include: consumption by foundries, chemical plants, and miscellaneous manufacturers, estimated to total about 7,300 tons of scrap per month based on 2003 annual data; monthly data include estimates of about 11,000 tons of scrap per month consumed by ingot makers.

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

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

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

TABLE 11  
COPPER STOCKS AT END OF PERIOD<sup>1</sup>

(Metric tons)

Period	Crude copper <sup>2</sup>	Refined copper					LME <sup>6</sup>	Total refined
		Refineries <sup>3</sup>	Wire-rod mills <sup>3</sup>	Brass mills <sup>3</sup>	Other <sup>4</sup>	Comex <sup>5</sup>		
2004: <sup>p</sup>								
October	72,200	9,210	25,200	20,300	4,870	41,300	43,400	144,000
November	70,600	13,100	24,300	18,200	4,870	38,500	37,500	136,000
December	51,400	10,400	20,300	21,500	4,870	43,700	35,000	136,000
2005:								
January	66,100	12,300	24,300	24,100	4,870	41,600	34,900	142,000
February	46,700	10,600	20,800	22,300	4,870	42,500	33,900	135,000
March	42,300	6,820	25,000	20,900	4,870	39,300	31,500	128,000
April	42,500	8,200	31,100	20,300	4,870	27,300	32,100	124,000
May	38,200	9,680	29,600	19,300	4,870	20,200	28,200	112,000
June	45,200	5,810	32,600	20,600	4,870	13,900	22,400	100,000
July	33,300	8,330	29,800	19,900	4,870	9,970	18,200	91,000
August	43,800	5,550	28,200	20,700	4,870	6,910	11,900	78,100
September	51,700 <sup>r</sup>	6,060 <sup>r</sup>	28,300	20,800 <sup>r</sup>	4,870	8,420	10,000	78,500 <sup>r</sup>
October	47,300	7,070	27,400	21,700	4,870	3,350	10,800	75,200

<sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

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

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

<sup>4</sup>Monthly estimates based on reported and 2003 annual data, comprising stocks at ingot makers, chemical plants, foundries, and miscellaneous manufacturers.

<sup>5</sup>Commodity Exchange Inc., New York.

<sup>6</sup>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 <sup>1</sup>	Comex first position <sup>2</sup>	LME cash price Grade A
2004:			
October	140.273	135.007	136.575
November	146.599	141.333	141.620
December	150.897	145.631	142.633
Year	133.938	128.972	129.958
2005:			
January	150.261	144.995	143.751
February	151.905	146.639	147.544
March	153.946	148.680	153.268
April	154.606	149.340	153.938
May	153.256	147.990	147.331
June	167.452	162.186	159.807
July	168.484	163.218	163.909
August	176.905	171.639	172.230
September	180.623	175.350	174.959
October	195.568	190.302	184.119
January - October	165.301	160.034	160.086

<sup>1</sup>Listed as "U.S. producer cathode."

<sup>2</sup>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
<b>2004:</b>				
October	130.43	113.38	89.00	55.00
November	135.40	118.15	89.00	55.00
December	139.14	121.00	89.00	55.00
Year	126.41	107.62	86.86	55.14
<b>2005:</b>				
January	139.40	119.50	89.00	55.00
February	139.89	121.67	89.00	55.00
March	142.52	123.43	89.00	55.00
April	143.52	126.00	89.00	55.00
May	138.24	124.76	89.00	55.00
June	137.23	124.82	93.09	59.09
July	153.40	141.60	99.00	65.00
August	142.26	126.52	99.00	65.00
September	142.86	128.38	99.00	65.00
October	176.90	162.95	99.00	65.00
January - October	145.62	129.96	93.41	59.41

Source: American Metal Market.

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

(Metric tons, copper content)

Country or territory	Ore and concentrate			Matte, ash and precipitates			Blister and anodes			Refined		
	2005			2005			2005			2005		
	2004	September	January - September	2004	September	January - September	2004	September	January - September	2004	September	January - September
Brazil	--	--	--	--	--	--	--	--	10	15,600	--	18,000
Canada	516	--	2	99	24	107	75,500	6,910	63,100	278,000	25,500	239,000
Chile	--	--	--	--	--	--	48,900	2,920	29,000	311,000	36,300	269,000
Germany	--	--	--	--	--	--	--	--	12	21,000	116	19,600
Mexico	22,400	--	221	206	--	37	8,630	--	3,870	19,300	--	27,000
Namibia	--	--	--	--	--	--	7,710	--	--	--	--	--
Peru	--	--	--	--	--	--	10,200	--	--	152,000	14,800	115,000
Taiwan	--	--	--	1,330	70	890	--	--	--	(2)	--	--
Other	--	--	--	46	48	202	34	16	16	10,500	2,740	10,300
Total	22,900	--	223	1,680	142	1,240	151,000	9,840	96,000	807,000	79,400	697,000

-- Zero.

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

<sup>2</sup>Less than 1/2 unit.

Source: U.S. Census Bureau.

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

(Metric tons, copper content)

Country or territory	Ore and concentrate			Matte, ash and precipitates			Blister and anodes			Refined		
	2004	2005		2004	2005		2004	2005		2004	2005	
		September	January - September		September	January - September		September	January - September		September	January - September
Belgium	6	--	41	45	--	37	1,320	--	675	998	--	49
Canada	18,200	2,120	12,900	18,800	4,380	18,900	22,400	1,390	14,800	2,230	77	1,670
China	2,340	10,500	58,900	52	1,080	6,780	307	20	266	23,900	998	15,700
Costa Rica	--	--	3	--	(2)	(2)	--	--	--	1,300	--	1
Germany	32	--	--	23	--	18	1,880	85	677	70	8	158
Hong Kong	229	--	2	12	--	1	3,410	267	2,440	11	--	(2)
India	56	--	149	21	--	1	164	5	47	2,940	220	5,590
Italy	--	--	--	--	(2)	18	1,570	279	3,240	21,100	--	14
Japan	2,510	5,750	21,800	122	--	68	705	176	1,690	66	--	5
Korea, Republic of	23	--	1	8	--	2	8,910	47	333	5,060	15	104
Mexico	115	1	6,380	2,650	85	681	221	4	2,640	20,500	470	7,040
Saudi Arabia	--	--	--	--	--	--	--	--	11	7,840	--	11
Singapore	--	--	19	19	1	20	654	22	351	39	--	13
Spain	308	48	1,680	--	--	--	347	--	162	--	--	--
Sweden	--	--	--	--	--	--	399	188	1,270	3	--	--
Taiwan	109	--	15	5	--	10	1,320	120	1,060	29,000	--	55
Other	311	2	216	333	45	188	2,830	62	846	3,190	9	1,000
Total	24,200	18,400	102,000	22,100	5,600	26,800	46,400	2,670	30,600	118,000	1,800	31,400

-- Zero.

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

<sup>2</sup>Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 16  
U.S. COPPER SCRAP IMPORTS<sup>1</sup>

(Metric tons, gross weight)

Country or territory	Unalloyed			Alloyed		
	2004	2005		2004	2005	
		September	January- September		September	January- September
Canada	6,370	752	4,920	44,500	4,300	34,300
China	1	--	--	448	--	63
Costa Rica	1,400	255	1,570	516	72	316
Germany	48	15	84	1,130	21	21
Guatemala	271	6	43	1,050	118	997
Honduras	1,430	75	1,180	625	20	406
Jamaica	429	15	190	182	8	95
Japan	65	--	39	145	51	133
Mexico	10,300	1,510	9,710	22,100	2,080	18,000
Taiwan	--	--	2	1,480	71	231
United Kingdom	554	--	198	1,030	57	737
Other	2,570	123	1,550	5,030 <sup>r</sup>	282	5,250
Total	23,400	2,750	19,500	78,300	7,070	60,500

<sup>r</sup>Revised. -- Zero.

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

Source: U.S. Census Bureau.

TABLE 17  
U.S. COPPER SCRAP EXPORTS<sup>1</sup>

(Metric tons, gross weight)

Country or territory	Unalloyed							Alloyed					
	2004	2005						2004	2005				
		No. 1		No. 2		Other			Segregated		Unsegregated		
		September	January-September	September	January-September	September	January-September		September	January-September	September	January-September	
Belgium	3,850	--	--	--	1	40	445	8,200	93	1,030	336	3,890	
Canada	33,300	--	--	--	--	2,050	20,700	15,000	493	3,070	657	6,890	
China	222,000	7,540	66,800	10,800	87,800	4,280	44,600	239,000	7,880	75,100	6,810	54,500	
Germany	8,830	--	618	--	320	731	6,450	13,800	177	2,510	212	5,140	
Hong Kong	3,910	545	4,020	150	1,760	40	567	11,000	434	3,420	619	6,240	
India	4,160	40	366	--	240	160	3,270	45,100	873	11,600	19	900	
Japan	7,930	76	97	--	626	387	4,790	9,660	505	4,190	249	1,710	
Korea, Republic of	22,400	530	4,900	727	8,130	1,010	8,220	16,300	398	7,290	--	1,500	
Mexico	4,560	--	459	19	219	19	214	1,570	56	498	156	431	
Spain	37	--	2	--	140	--	2	2,740	--	249	864	2,990	
Taiwan	11,300	206	1,120	697	5,380	190	2,710	13,700	417	7,020	6	859	
Thailand	--	--	--	--	19	81	681	1,250	44	394	--	26	
United Kingdom	34	--	--	--	--	--	234	4,560	12	228	346	2,550	
Other	2,990	107	237	--	138	15	463	7,210	93	4,950	354	1,810	
Total	325,000	9,040	78,600	12,400	105,000	9,010	93,300	389,000	11,500	122,000	10,600	89,400	

-- Zero.

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

Source: U.S. Census Bureau.