

# Mineral Industry Surveys

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#### **COPPER IN MAY 2019**

In May 2019, mine production of recoverable copper in the United States was 103,000 metric tons (t). The average daily mine production was 3,320 t, a slight increase from that in April and 4% higher than that in May 2018 (fig. 1). Year-to-date recoverable mine output through May 2019 was 500,000 t, an increase of 3% relative to the same period in 2018 (table 2).

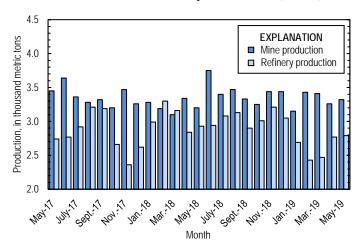


Figure 1. Average daily U.S. copper mine (recoverable) and refinery production from May 2017 through May 2019.

Smelter production in May 2019 was 54,100 t. The average daily smelter output was 1,740 t, 59% more than that in April and an increase of 39% compared with the daily average in May 2018. Year-to-date output through May 2019 was 176,000 t, 20% less than that through May 2018 (table 3).

Total domestic refinery production was 86,500 t in May 2019; data for electrolytic and electrowon output, as well as refined production from scrap, are in table 4. The average daily refinery production was 2,790 t, a slight increase from that in April and 5% lower than that in May 2018 (fig. 1). Year-to-date refinery production through May 2019 was 397,000 t, a decline of 13% relative to the same period in 2018 (table 4).

#### **Prices**

The average May 2019 COMEX spot copper price was \$2.74 per pound, a decrease of 6% from \$2.92 per pound in April and 10% lower than \$3.06 per pound in May 2018 (fig. 2, table 11). The average price of New York dealers' number 2 scrap in May 2019 was \$2.01 per pound, 3% less than \$2.07 per pound in April and a decline of 4% from \$2.09 per pound in May 2018 (fig. 2, table 12).

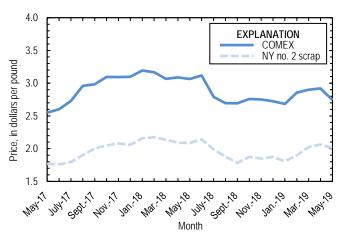


Figure 2. Monthly average COMEX copper price and New York no. 2 copper scrap price from May 2017 through May 2019. Sources: American Metal Market, Platts Metals Week.

#### Stocks

Refined copper stocks in the United States fell for the tenth consecutive month and totaled 117,000 t at the end of May 2019, a decrease of 9% from those in April, 64% lower than those in May 2018, and 67% less than the most recent peak in July 2018. Stocks at wire-rod mills fell by 18%, COMEX stocks declined by 8%, and London Metal Exchange Ltd. stocks in U.S. warehouses were slightly higher compared with those at the end of April (fig. 3, table 10).

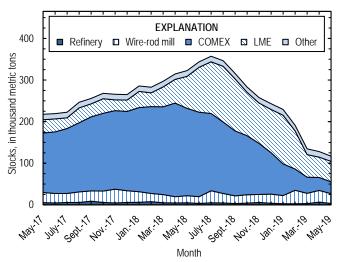


Figure 3. Monthly domestic refined copper stocks, by type, from May 2017 through May 2019. Sources: American Metal Market, London Metal Exchange Ltd., and U.S. Geological Survey.

#### **Industry News**

*Chile.*—Unionized workers accounting for more than 80% of the workforce at the Chuquicamata Mine voted on May 29 to go on strike (de la Paz, 2019). In 2018, Chuquicamata was one of the leading global copper mines and produced about 321,000 t of copper, or nearly 2% of global output (

).

*China.*—On May 10, the Government of the United States increased the duties collected on numerous products imported from China to 25%. Multiple copper materials were affected, including anodes, cathodes, semimanufactures (bars, pipes and tubes, sheets, wire-rod, etc.), and scrap. On May 13, the

Government of China announced that it would also increase tariffs on more than 5,000 types of U.S. imports to 25%, effective June 1. Affected copper products included anodes and cathodes. Imports of copper scrap from the United States had already been subjected to a 25% tariff since August 2018 (Luk, 2019; Office of the United States Trade Representative, 2019; Toto, 2018).

#### References Cited

Corporación Nacional del Cobre de Chile, 2019, 2018 results: Santiago, Chile, Corporación Nacional del Cobre de Chile presentation, March 29, 20 p. (Accessed September 25, 2019, at http://prontus.codelco.cl/prontus\_codelco/site/artic/20190329/asocfile/20190329111207/codelco\_results2018.pdf.)

de la Paz, F.D.M, 2019, Unions at Codelco's Chuquicamata mine vote to strike: S&P Global Market Intelligence, May 30. (Accessed May 31, 2019, via https://www.snl.com/.)

Luk, Julian, 2019, China to slap tariffs on US metals imports: American Metal Market, May 13. (Accessed May 17, 2019, via https://www.amm.com/.)

Office of the United States Trade Representative, 2019, Notice of modification of Section 301 action—China's acts, policies, and practices related to technology transfer, intellectual property, and innovation: Federal Register, v. 84, no. 90, May 9, p. 20459–20460. (Accessed May 16, 2019, at https://www.federalregister.gov/documents/2019/05/09/2019-09681/notice-of-modification-of-section-301-action-chinas-acts-policies-and-practices-related-to.)

Toto, DeAnne, 2018, China to impose tariffs on scrap imports from the US: Recycling Today, August 8. (Accessed June 3, 2019, at https://www.recyclingtoday.com/article/china-imposes-tariffs-on-us-scrap-imports/.)

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 $\label{table 1} \textbf{TABLE 1}$  SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES  $^1$ 

(Metric tons of copper content, unless otherwise specified)

				201	9	
	Source					January-
	table <sup>2</sup>	2018 <sup>p</sup>	March	April	May	May
Production:						
Primary:						
Mine, recoverable	(2)	1,220,000	106,000	97,800	103,000	500,000
Smelter	(3)	536,000	37,000	32,900	54,100	176,000
Refinery:						
Electrolytic, domestic and foreign	(4)	538,000	27,800	38,100	38,300	166,000
Electrowon	(4)	532,000	44,600	41,300	44,700	213,000
Total	(4)	1,070,000	72,500	79,400	83,000	379,000
Secondary recoverable copper: <sup>3</sup>						
Refineries	(5)	41,200	3,950	3,600	3,470	18,100
Ingot makers <sup>4</sup>	(5)	56,800	4,730	4,730	4,730	23,700
Brass and wire-rod mills	(5)	652,000	55,500	54,700	54,900	276,000
Foundries, etc. <sup>4</sup>	(5)	36,300	3,030	3,030	3,030	15,100
Consumption:						
Apparent	(8)	1,800,000	172,000	150,000	148,000	759,000
Refined (reported)	(7)	1,810,000	163,000	159,000	154,000	779,000
Purchased copper-base scrap (gross weight)	(9)	918,000	78,300	77,200	77,500	388,000
Stocks at end of period:						
Total refined	(10)	243,000	135,000	128,000	117,000	117,000
Blister, etc.	(10)	9,230	15,000	8,860	9,210	9,210
Price, U.S. producers cathode (cents per pound) <sup>5</sup>	(11)	298.737	297.974	299.820	282.232	289.749
Imports: <sup>6</sup>						
Ore and concentrates	(13)	32,200	824	3,110	3,850	9,470
Refined	(13)	778,000	40,500	65,400	52,400	253,000
Exports: <sup>6</sup>						
Ore and concentrates	(14)	253,000	33,800	23,200	35,000	142,000
Refined	(14)	190,000	10,200	13,500	11,000	60,500

<sup>&</sup>lt;sup>p</sup>Preliminary.

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

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

<sup>&</sup>lt;sup>3</sup>Copper recovered from copper-base scrap only.

<sup>&</sup>lt;sup>4</sup>Estimated based on the monthly average of 2017 annual data.

<sup>&</sup>lt;sup>5</sup>Source: Platts Metals Week.

<sup>&</sup>lt;sup>6</sup>Source: U.S. Census Bureau.

 $\mbox{TABLE 2} \\ \mbox{MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES}^1$ 

	Re	coverable cor	pper		Contained copper	
Period	Arizona	Others <sup>2</sup>	Total	Electrowon	Concentrates <sup>3</sup>	Total
2018: <sup>p</sup>						
January-May	333,000	153,000	486,000	221,000	275,000	496,000
May	69,300	29,800	99,200	46,000	55,200	101,000
June	70,600	41,900	113,000	44,900	70,100	115,000
July	66,800	38,500	105,000	46,000	61,400	107,000
August	69,100	38,600	108,000	45,500	64,600	110,000
September	63,000	36,800	99,800	43,000	59,100	102,000
October	64,000	36,900	101,000	43,100	59,800	103,000
November	65,200	38,000	103,000	43,000	62,400	105,000
December	69,300	37,300	107,000	45,800	63,000	109,000
January-December	801,000	421,000	1,220,000	532,000	716,000	1,250,000
2019:						
January	67,800	29,900	97,700	42,400	57,400	99,800
February	62,600	33,500	96,100	39,800	58,400	98,200
March	70,300	35,500	106,000	44,600	63,300	108,000
April	66,200	31,600	97,800	41,300	58,500	99,800
May	69,100	33,700	103,000	44,700	60,200	105,000
January–May	336,000	164,000	500,000	213,000	298,000	511,000

<sup>&</sup>lt;sup>p</sup>Preliminary.

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

<sup>&</sup>lt;sup>2</sup>Includes production from Michigan, Missouri, Montana, Nevada, New Mexico, and Utah.

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

## $\begin{tabular}{ll} TABLE~3\\ COPPER~PRODUCED~AT~SMELTERS~IN\\ THE~UNITED~STATES \end{tabular} .$

(Metric tons, copper content)

	Anode
Period	production
2018: <sup>p</sup>	
January–May	221,000
May	39,000
June	45,700
July	47,500
August	46,100
September	40,800
October	48,200
November	45,300
December	40,600
January-December	536,000
2019:	
January	34,700
February	17,700
March	37,000
April	32,900
May	54,100
January–May	176,000

<sup>&</sup>lt;sup>p</sup>Preliminary.

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

<sup>&</sup>lt;sup>2</sup>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<sup>1</sup>

	Prin	nary materials			
	Electrolytically				Total
Period	refined <sup>2</sup>	Electrowon	Total	Scrap	refined
2018: <sup>p</sup>					
January–May	222,000	221,000	443,000	16,300	459,000
May	41,600	46,000	87,600	3,330	90,900
June	39,800	44,900	84,700	3,400	88,000
July	45,900	46,000	91,900	3,390	95,300
August	48,400	45,500	93,900	3,220	97,100
September	40,200	43,000	83,200	3,810	87,000
October	46,100	43,100	89,200	4,180	93,400
November	50,000	43,000	93,000	3,370	96,400
December	45,300	45,800	91,200	3,520	94,700
January-December	538,000	532,000	1,070,000	41,200	1,110,000
2019:	<del>_</del>				
January	37,100	42,400	79,500	3,770	83,200
February	25,000	39,800	64,800	3,330	68,100
March	27,800	44,600	72,500	3,950	76,400
April	38,100	41,300	79,400	3,600	83,000
May	38,300	44,700	83,000	3,470	86,500
January–May	166,000	213,000	379,000	18,100	397,000

<sup>&</sup>lt;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.

 ${\it TABLE~5}$  COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP  $^{\rm I}$ 

(Metric tons, copper content)

	Refine	eries <sup>2</sup>	Ingot m	akers <sup>3</sup>	Brass and wi	re-rod mills	Foundrie	es, etc.3	
Period	New scrap <sup>e</sup>	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	Total <sup>4</sup>
2018: <sup>p</sup>									
January-May	8,390	7,880	3,550	20,100	252,000	16,000	11,000	4,150	323,000
May	1,680	1,650	710	4,020	53,000	3,180	2,200	830	67,300
June	1,680	1,720	710	4,020	52,400	2,960	2,200	830	66,500
July	1,680	1,710	710	4,020	51,600	3,060	2,200	830	65,800
August	1,680	1,540	710	4,020	51,600	3,220	2,200	830	65,700
September	1,680	2,130	710	4,020	51,900	2,850	2,200	830	66,300
October	1,680	2,500	710	4,020	52,700	3,490	2,200	830	68,100
November	1,680	1,690	710	4,020	53,900	1,470	2,200	830	66,500
December	1,680	1,840	710	4,020	50,800	2,700	2,200	830	64,800
January-December	20,100	21,000	8,520	48,300	617,000	35,800	26,400	9,960	787,000
2019:									
January	1,680	2,100	710	4,020	52,100	3,520	2,200	830	67,200
February	1,680	1,660	710	4,020	51,900	3,170	2,200	830	66,200
March	1,680	2,270	710	4,020	52,200	3,310	2,200	830	67,200
April	1,680	1,930	710	4,020	51,400	3,340	2,200	830	66,100
May	1,680	1,790	710	4,020	51,600	3,330	2,200	830	66,100
January–May	8,390	9,740	3,550	20,100	259,000	16,700	11,000	4,150	333,000

<sup>&</sup>lt;sup>e</sup>Estimated <sup>p</sup>Preliminary.

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

<sup>&</sup>lt;sup>2</sup>Electrolytically refined and fire refined from scrap based on source of material at smelter or refinery level.

<sup>&</sup>lt;sup>3</sup>Monthly data estimated based on the monthly average of 2017 annual data.

<sup>&</sup>lt;sup>4</sup>Does not include an estimate, based on reported 2017 annual data, of 3,190 tons per month from new scrap and 2,560 tons per month from old scrap of copper recovered from scrap other than copper-base.

 ${\it TABLE~6}$  PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD SEMIFABRICATES  $^1$ 

	Pro	duction	Shi	pments	Stocks, e	end of period
Period	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills
2018: <sup>p</sup>						
January-May	368,000	555,000	368,000	563,000	28,800	18,400
May	73,600	115,000	74,000	113,000	28,800	18,400
June	73,900	118,000	73,800	114,000	28,900	22,200
July	73,400	99,300	73,700	102,000	28,700	19,600
August	73,800	124,000	74,200	120,000	28,300	23,900
September	73,500	110,000	73,300	111,000	28,400	23,000
October	74,300	114,000	73,900	120,000	28,800	16,900
November	73,500	113,000	73,400	108,000	28,900	21,300
December	73,800	97,700	73,000	92,100	29,700	27,000
January-December	884,000	1,330,000	884,000	1,330,000	29,700	27,000
2019:						
January	74,200	113,000	73,800	116,000	30,000	23,700
February	73,500	103,000	73,600	110,000	29,900	17,100
March	74,200	117,000	73,800	112,000	30,400	22,400
April	73,700	104,000	73,900	111,000	30,100	23,800
May	73,800	116,000	74,100	112,000	29,800	28,400
January-May	369,000	553,000	369,000	560,000	29,800	28,400

Preliminary.

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

## $\label{eq:table 7} \textbf{CONSUMPTION OF REFINED COPPER}^1$

	Brass	Wire-rod	Other	
Period	mills	mills	plants <sup>2</sup>	Total
2018: <sup>p</sup>				
January–May	175,000	555,000	25,900	755,000
May	34,900	115,000	5,170	155,000
June	34,900	106,000	5,170	146,000
July	34,800	104,000	5,170	144,000
August	35,100	121,000	5,170	161,000
September	35,100	122,000	5,170	163,000
October	34,900	112,000	5,170	152,000
November	34,700	113,000	5,170	153,000
December	34,600	98,000	5,170	138,000
January-December	419,000	1,330,000	62,100	1,810,000
2019:				
January	34,900	116,000	5,170	156,000
February	34,800	106,000	5,170	146,000
March	34,900	123,000	5,170	163,000
April	34,900	119,000	5,170	159,000
May	35,400	114,000	5,170	154,000
January-May	175,000	579,000	25,900	779,000

<sup>&</sup>lt;sup>p</sup>Preliminary.

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

<sup>&</sup>lt;sup>2</sup>Monthly consumption data by ingot makers, chemical plants, foundries, and miscellaneous manufacturers are estimated based on the monthly average of 2017 annual data.

 $\label{eq:table 8} \textbf{U.S. APPARENT CONSUMPTION OF COPPER}^1$ 

	Refined copper	Copper in	Refined general	Refined	Stock change	Apparent
Period	production <sup>2</sup>	old scrap <sup>3</sup>	imports <sup>4</sup>	exports <sup>4</sup>	during period	consumption
2018: <sup>p</sup>						
January-May	443,000	61,000	361,000	56,500	57,300	751,000
May	87,600	12,200	64,600	13,800	8,150	142,000
June	84,700	12,100	66,200	11,300	21,000	131,000
July	91,900	12,200	59,500	11,200	13,500	139,000
August	93,900	12,200	48,300	15,700	-10,200	149,000
September	83,200	12,400	62,300	15,600	-30,900	173,000
October	89,200	13,400	54,400	31,000	-32,900	159,000
November	93,000	10,600	51,000	36,200	-25,400	144,000
December	91,200	12,000	44,800	12,400	-14,900	150,000
January-December	1,070,000	146,000	747,000	190,000	-22,500	1,800,000
2019:						
January	79,500	13,000	57,600	12,600	-13,800	151,000
February	64,800	12,200	37,000	13,100	-37,900	139,000
March	72,500	13,000	39,900	10,200	-56,500	172,000
April	79,400	12,700	65,000	13,500	-6,390	150,000
May	83,000	12,500	52,000	11,000	-11,300	148,000
January–May	379,000	63,500	251,000	60,500	-126,000	759,000

<sup>&</sup>lt;sup>p</sup>Preliminary.

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

<sup>&</sup>lt;sup>2</sup>Includes electrowon production and electrolytically-refined copper from primary materials. All refined copper consumed in scrap form is included in "Copper in old scrap."

<sup>&</sup>lt;sup>3</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 2017 annual data.

<sup>&</sup>lt;sup>4</sup>Source: U.S. Census Bureau.

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

-	Smelt	ters			Brass	and			
	and refin	neries	Ingot m	akers <sup>2</sup>	wire-rod	l mills <sup>3</sup>	Foundrie	es, etc. <sup>2</sup>	Total scrap
Period	New scrap <sup>e</sup>	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	used
2018: <sup>p</sup>									
January-May	8,650	8,130	10,200	25,200	292,000	16,500	13,100	4,680	378,000
May	1,730	1,700	2,030	5,040	61,000	3,270	2,620	935	78,300
June	1,730	1,770	2,030	5,040	60,400	3,030	2,620	935	77,500
July	1,730	1,770	2,030	5,040	59,600	3,110	2,620	935	76,900
August	1,730	1,590	2,030	5,040	59,600	3,320	2,620	935	76,800
September	1,730	2,200	2,030	5,040	59,900	2,970	2,620	935	77,500
October	1,730	1,590	2,030	5,040	60,700	3,580	2,620	935	78,200
November	1,730	1,750	2,030	5,040	61,900	1,510	2,620	935	77,500
December	1,730	1,900	2,030	5,040	58,700	2,770	2,620	935	75,800
January-December	20,800	20,700	24,400	60,500	712,000	36,800	31,500	11,200	918,000
2019:									
January	1,730	2,160	2,030	5,040	60,100	3,610	2,620	935	78,300
February	1,730	1,710	2,030	5,040	59,900	3,260	2,620	935	77,200
March	1,730	2,340	2,030	5,040	60,200	3,410	2,620	935	78,300
April	1,730	1,990	2,030	5,040	59,400	3,450	2,620	935	77,200
May	1,730	1,850	2,030	5,040	59,700	3,540	2,620	935	77,500
January-May	8,650	10,000	10,200	25,200	299,000	17,300	13,100	4,680	388,000

<sup>&</sup>lt;sup>e</sup>Estimated. <sup>p</sup>Preliminary.

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

<sup>&</sup>lt;sup>2</sup>Monthly data estimated based on the monthly average of 2017 annual data. <sup>3</sup>Consumption at brass and wire-rod mills assumed equal to receipts.

### $\label{eq:table 10} \text{COPPER STOCKS AT END OF PERIOD}^1$

-	Refined copper							
	Crude		Wire-rod					Total
Period	copper <sup>2</sup>	Refineries <sup>3</sup>	$mills^3$	Brass mills <sup>3</sup>	Other <sup>4</sup>	Comex	LME <sup>5</sup>	refined
2018: <sup>p</sup>								
May	8,130	4,960	16,800	8,190	5,350	210,000	77,200	323,000
June	14,300	3,590	16,100	7,980	5,350	203,000	108,000	344,000
July	9,670	4,980	28,700	8,180	5,350	186,000	124,000	357,000
August	9,010	4,600	22,600	7,890	5,350	172,000	134,000	347,000
September	9,110	3,120	18,500	7,710	5,350	156,000	125,000	316,000
October	8,940	4,290	19,900	7,460	5,350	142,000	104,000	283,000
November	7,380	5,580	19,200	7,660	5,350	123,000	96,900	258,000
December	9,230	3,850	21,800	8,210	5,350	99,600	104,000	243,000
2019:								
January	9,550	2,700	19,700	8,370	5,350	76,100	117,000	229,000
February	10,200	2,750	32,300	8,270	5,350	51,200	91,300	191,000
March	15,000	2,970	24,800	8,400	5,350	38,700	54,400	135,000
April	8,860	6,630	28,100	8,370	5,350	31,100	48,600	128,000
May	9,210	3,550	23,200	7,250	5,330	28,700	49,000	117,000

Preliminary.

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

<sup>&</sup>lt;sup>2</sup>Copper content of blister and anode.

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

<sup>&</sup>lt;sup>4</sup>Monthly estimates based on 2017 annual data, comprising stocks at ingot makers, chemical plants, foundries, and miscellaneous manufacturers.

<sup>&</sup>lt;sup>5</sup>London Metal Exchange Ltd., U.S. warehouses.

#### TABLE 11 AVERAGE PRICE OF COPPER IN THE UNITED STATES AND ON THE LONDON METAL EXCHANGE

#### (Cents per pound)

	-	* > c=
		LME
U.S. producers		cash price
cathode1	position <sup>2</sup>	Grade A
312.402	306.402	309.409
318.152	311.714	315.436
285.626	279.126	283.387
276.087	269.387	273.936
276.107	269.232	273.044
282.498	275.935	281.918
281.598	275.098	280.882
279.026	272.338	276.397
298.737	292.567	295.960
275.588	268.238	269.052
293.129	285.566	284.754
297.974	289.974	292.581
299.820	292.007	292.317
282.232	274.282	273.412
289.749	282.013	282.423
	312.402 318.152 285.626 276.087 276.107 282.498 281.598 279.026 298.737 275.588 293.129 297.974 299.820 282.232	cathode¹         position²           312.402         306.402           318.152         311.714           285.626         279.126           276.087         269.387           276.107         269.232           282.498         275.935           281.598         275.098           279.026         272.338           298.737         292.567           275.588         268.238           293.129         285.566           297.974         289.974           299.820         292.007           282.232         274.282

<sup>&</sup>lt;sup>1</sup>Sum of "Comex high grade first position" and "NY dealer premium cathode."

<sup>2</sup>Listed as "Comex high grade first position."

Source: Platts Metals Week.

TABLE 12 AVERAGE BUYING PRICES FOR COPPER SCRAP

#### (Cents per pound)

			Dealers	(New York)
				Red brass
	Brass mills	Refiners	No. 2	turnings and
Period	No. 1 scrap	No. 2 scrap	scrap	borings
2018:				
May	297.50	271.68	208.59	158.55
June	301.67	274.14	214.17	160.57
July	269.95	239.48	198.93	151.29
August	261.00	229.07	187.80	145.43
September	261.16	228.50	178.45	141.47
October	267.65	239.80	187.50	141.00
November	267.50	240.10	185.00	130.00
December	264.52	238.72	187.50	141.00
Year	283.19	254.90	200.31	150.76
2019:				
January	260.33	235.19	180.79	139.00
February	278.66	252.39	189.82	140.42
March	282.69	253.31	202.50	145.00
April	284.26	252.17	206.50	147.00
May	265.41	231.95	201.05	143.18
January–May	274.27	245.00	196.13	142.92

Source: American Metal Market.

 ${\it TABLE~13}$  U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY  ${\it CLASS}^1$ 

(Metric tons, copper content)

	Ore	and concentra	tes <sup>2</sup>	Matte, ash, and precipitates <sup>3</sup>				Blister and and	odes	Refined		
		2019			2019 January–			2019 January–			2019	
Country or	=	January–										January-
locality	2018	May	May	2018	May	May	2018	May	May	2018	May	May
Belgium				283	111	228				10,100	804	2,300
Bolivia										1,460		1,390
Canada	40	(4)	(4)	613	56	147	(4)			172,000	12,800	47,800
Chile										483,000	30,500	163,000
China	8			2				(4)	(4)	111	24	160
Congo (Brazzaville)										1,040		
Congo (Kinshasa)										3,380		
Finland							292	33	97			38
Germany							(4)			1,260	225	847
Japan				10			2		(4)	3,990	286	1,250
Malaysia							54					
Mexico	32,100	3,850	9,460	539	(4)	59		(4)	(4)	63,100	7,770	32,900
Netherlands				115			2		3	(4)		
Peru										19,100		3,000
Saudi Arabia				85		98						
Zambia										18,900		616
Other			2	175	(4)	536	5	(4)	3	562	11	54
Total	32,200	3,850	9,470	1,820	167	1,070	355	33	104	778,000	52,400	253,000

<sup>--</sup> Zero.

 $<sup>^{1}\</sup>mathrm{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Copper ore and concentrates only; excludes copper contained in ore and concentrates of other metals.

<sup>&</sup>lt;sup>3</sup>Copper matte, ash, and precipitates only; excludes the copper content of mattes and ashes of other metals.

<sup>&</sup>lt;sup>4</sup>Less than ½ unit.

 ${\it TABLE~14} \\ {\it U.S.~EXPORTS~OF~COPPER~(UNMANUFACTURED),~BY~CLASS}^1$ 

(Metric tons, copper content)

	Ore	and concentrate:	$s^2$	Matte, a	]	Blister and ano	des	Refined				
	2019 January–			2019			2019				2019	
Country or				<del>=</del>	January–		-	January-		<del>-</del>		January-
locality	2018	May	May	2018	May	May	2018	May	May	2018	May	May
Belgium	20		82	2,150	158	923	226	14	156			29
Brazil	3,040						62	3	18	23		1
Bulgaria	2,990	2,940	11,200									
Canada	17,200	1,160	5,580	19,500	1,080	7,600	4,320	1,040	2,650	37,300	2,530	13,200
China	47,500			1,650		89	210	20	84	47,600	2	3
Germany	4,810			1,130	37	285	282	20	145	2		1
Hong Kong					19	19	462	20	199	(4)		(4)
India				44			585	6	106	9		
Italy	1			10			281	21	66	24		24
Japan	13,500	2,950	10,100	230		8	36		3	14	(4)	2
Korea, Republic of	4,690	2,340	6,910	817		74	1,680	173	749	2,200		62
Malaysia	545		5	413			178		79	62		4
Mexico	147,000	23,700	100,000	1,430	215	1,210	80	8	19	102,000	8,480	47,100
Philippines	1,180		2,310				42	8	33	(4)		
Slovakia				526	77	351						
Spain	10,500	1,920	4,700	210			101		20	1		
Other	120	14	466	1,850	82	368	503	222	408	278	2	48
Total	253,000	35,000	142,000	30,000	1,670	10,900	9,060	1,550	4,740	190,000	11,000	60,500

<sup>--</sup> Zero.

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

<sup>&</sup>lt;sup>2</sup>Copper ore and concentrates only; excludes copper contained in ore and concentrates of other metals.

<sup>&</sup>lt;sup>3</sup>Copper matte, ash, and precipitates only; excludes the copper content of mattes and ashes of other metals.

<sup>&</sup>lt;sup>4</sup>Less than ½ unit.

 $\label{eq:table 15} \text{U.S. IMPORTS FOR CONSUMPTION OF COPPER SCRAP}^1$ 

		Unalloyed	Alloyed				
		201		2019			
Country or	•		January-	·		January-	
locality	2018	May	May	2018	May	May	
Bahamas	23			569	42	393	
Canada	16,800	1,650	7,600	72,000	5,570	27,400	
Chile	177			321	80	1,220	
Colombia	367	21	100	926	106	549	
Costa Rica	459	21	208	750	55	381	
Dominican Republic	80	78	221	901	206	998	
Guatemala	92		8	501	45	318	
Honduras	5	5	18	589	52	199	
Hong Kong	7			1,450		229	
Japan	278	178	814	52			
Mexico	10,800	1,210	5,560	38,600	3,500	17,200	
Pakistan	567						
Panama	1,020	107	255	640	34	186	
Spain				637			
Venezuela	2,540	28	28	646	9	140	
Other	1,270	52	368	4,150	501	2,270	
Total	34,500	3,340	15,200	123,000	10,200	51,500	

<sup>--</sup> Zero.

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

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

				Unalloyed		Alloyed						
		2019							2019			
	•	No. 1 January–		No. 2 January–		Other January–		<del>-</del>	Segregated January-		Unsegregated	
Country or	·											January-
locality	2018	May	May	May	May	May	May	2018	May	May	May	May
Belgium	19,500	638	2,900	1,160	4,740	348	987	11,800	184	518	1,100	5,380
Canada	51,900					3,910	20,600	40,200			5,290	22,700
China	193,000	3,530	13,300	2,460	14,900	2,270	11,800	78,600	631	4,650	2,150	3,840
Germany	24,000	1,910	8,010	432	3,220	253	922	13,300	178	809	1,110	5,150
Greece	7,630	454	3,570		388	119	632	1,150	57	155	60	160
Hong Kong	20,700	507	3,050	407	3,240	660	3,960	23,600	1,100	5,430	1,800	8,380
India	14,000	115	1,200	400	1,410	889	3,460	34,300	2,100	12,000	1,100	4,810
Japan	29,300	358	2,630	702	6,410	153	1,600	26,700	277	3,270	1,290	7,360
Korea, Republic of	45,800	1,540	7,920	320	2,070	898	5,550	25,900	798	5,350	973	5,390
Malaysia	47,800	1,060	6,570	1,860	7,230	3,330	17,500	71,800	2,920	16,500	9,330	49,800
Netherlands	8,030	174	422	100	197	279	1,630	2,280		181	17	543
Pakistan	1,450	65	273	93	401		39	16,500	42	339	2,970	6,620
Spain	760	86	115	24	71		18	10,100	465	1,670	905	3,340
Taiwan	17,100	728	4,430	5	647	543	2,370	18,300	909	2,660	1,600	6,310
Thailand	3,000	47	316	85	545	144	395	11,100	11	52	605	6,140
Other	25,700	1,440	6,700	761	2,930	383	1,650	17,900	268	2,020	1,320	8,330
Total	509,000	12,700	61,400	8,820	48,400	14,200	73,100	403,000	9,940	55,600	31,600	144,000

-- Zero.

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