

Mineral Industry Surveys

For information, contact:

Daniel M. Flanagan, Copper Commodity Specialist National Minerals Information Center U.S. Geological Survey 989 National Center Reston, VA 20192

Telephone: (703) 648-7726, Fax: (703) 648-7757

Email: dflanagan@usgs.gov

Sheema Merchant (Data) Telephone: (703) 659-9944 Fax: (703) 648-7975 Email: smerchant@usgs.gov

Internet: https://www.usgs.gov/centers/nmic

COPPER IN JULY 2019

In July 2019, mine production of recoverable copper in the United States was 117,000 metric tons (t). The average daily mine production was 3,780 t, an increase of 7% from that in June and 11% higher than that in July 2018 (fig. 1). Year-to-date recoverable mine output through July 2019 was 732,000 t, an increase of 4% relative to the same period in 2018 (table 2).

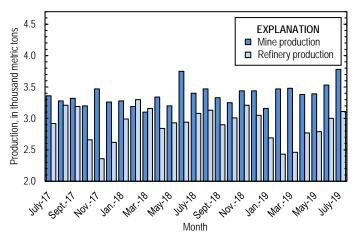


Figure 1. Average daily U.S. copper mine (recoverable) and refinery production from July 2017 through July 2019.

Smelter production in July 2019 was 34,500 t. The average daily smelter output was 1,110 t, 36% less than that in June and a decrease of 27% compared with the daily average in July 2018. Year-to-date output through July 2019 was 263,000 t, 17% lower than that through July 2018 (table 3). Smelter output in July was affected by a planned smelter shutdown and unplanned maintenance of the anode furnace at Rio Tinto plc's (United Kingdom) facility in Utah (Rio Tinto plc, 2019, p. 6).

Total domestic refinery production was 96,500 t in July 2019; data for electrolytic and electrowon output, as well as refined production from scrap, are in table 4. The average daily refinery production was 3,110 t, an increase of 4% from that in June and slightly higher than that in July 2018 (fig. 1). Year-to-date

refinery production through July 2019 was 584,000 t, a decline of 9% relative to the same period in 2018 (table 4).

Prices

The average July 2019 COMEX spot copper price was \$2.69 per pound, a slight increase from \$2.68 per pound in June and 4% lower than \$2.79 per pound in July 2018 (fig. 2, table 11). The average price of New York dealers' number 2 scrap in July 2019 was \$1.86 per pound, slightly less than \$1.88 per pound in June and a decline of 6% from \$1.99 per pound in July 2018 (fig. 2, table 12).

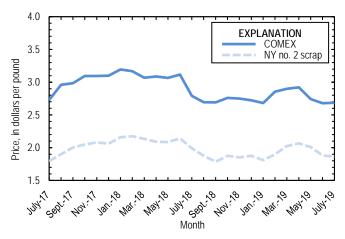


Figure 2. Monthly average COMEX copper price and New York no. 2 copper scrap price from July 2017 through July 2019. Sources: American Metal Market, Platts Metals Week.

Stocks

Refined copper stocks in the United States increased for the first time in the past 12 months and totaled 117,000 t at the end of July 2019, an increase of 9% from those in June and 67% less than those in July 2018. London Metal Exchange Ltd. stocks in U.S. warehouses rose by 3%, COMEX stocks increased by 17%, and stocks at wire-rod mills were 21% higher compared with those at the end of June (fig. 3, table 10).

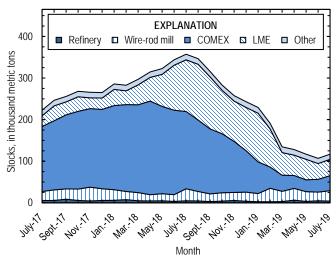


Figure 3. Monthly domestic refined copper stocks, by type, from July 2017 through July 2019. Sources: American Metal Market, London Metal Exchange Ltd., and U.S. Geological Survey.

Industry News

China.—New restrictions on imports of copper scrap into China took effect on July 1. Companies that import high-grade copper scrap (known in China as category 6 scrap) must apply for a license and quota from the Ministry of Ecology and Environment and demonstrate that they have the capability to process the material into refined metal or semifabricates in compliance with environmental regulations (Daly, 2019; Daly and Singh, 2019). A ban on the importation of coppercontaining scrap materials that must be disassembled prior to processing (known in China as category 7 scrap), including automobile parts, electrical appliances, motors, and wire and cable, was previously enacted on January 1. Since March 2018, all nonferrous scrap imports into China could have a contaminant content (mud, paper, plastic, etc.) of no more than 1% (Wu, 2019).

Ecuador.—Copper production began at the Mirador Mine, primarily owned by Tongling Nonferrous Metals Group Co. Ltd. (China). At full capacity, the operation was expected to produce about 60,000 t of copper in concentrates per year over a mine life of 30 years (International Copper Study Group, 2019, p. 92; Ma, 2019).

United States.—On July 31, a court ruling overturned two previous U.S. Forest Service mine approvals for the Rosemont project in southern Arizona, owned by Hudbay Minerals Inc. (Canada), and prevented construction from proceeding at the

site. The company subsequently announced that it intended to appeal the decision (Davis, 2019; Hudbay Minerals Inc., 2019). Hudbay anticipated that the Rosemont project would produce an annual average of 112,000 t of copper in concentrates, equivalent to about 10% of U.S. mined copper output in 2018, over a 19-year mine life (Hudbay Minerals Inc., 2017, p. 1–30; table 2).

References Cited

- Daly, Tom, 2019, Factbox—China to tighten restrictions on scrap metal imports from Monday: Reuters, June 27. (Accessed January 15, 2020, at https:// www.reuters.com/article/us-china-metals-scrap-factbox/factbox-china-totighten-restrictions-on-scrap-metal-imports-from-monday-idUSKCN1TT 07R.)
- Daly, Tom, and Singh, Shivani, 2019, China's scrap metal imports to slump as new rules leave firms confused: Reuters, May 19. (Accessed May 30, 2019, at https://www.reuters.com/article/us-china-metals-scrap/chinas-scrap-metal-imports-to-slump-as-new-rules-leave-firms-confused-idUSKCN1SP0T2.)
- Davis, Tony, 2019, Federal judge bars Rosemont Mine construction: Arizona Daily Star [Tucson, AZ], August 1. (Accessed January 15, 2020, at https://tucson.com/news/local/federal-judge-bars-rosemont-mine-construction/article_53b3d5bc-b403-11e9-a413-e78b06cf0a82.html.)
- Hudbay Minerals Inc., 2017, Feasibility study—Updated mineral resource, mineral reserve, and financial estimates, Rosemont project, Pima County, Arizona, USA: Toronto, Ontario, Canada, Hudbay Minerals Inc. NI 43-101 technical report, March 30, 383 p. (Accessed April 30, 2019, at https://s23.q4cdn.com/405985100/files/doc_downloads/tech_reports/united_states/Rose montTechReport.pdf.)
- Hudbay Minerals Inc., 2019, Hudbay receives the mine plan of operations for Rosemont: Toronto, Ontario, Canada, Hudbay Minerals Inc. press release, March 21. (Accessed September 12, 2019, at https://hudbayminerals.com/ investors/press-releases/press-release-details/2019/Hudbay-Receives-the-Mine-Plan-of-Operations-for-Rosemont/default.aspx.)
- International Copper Study Group, 2019, ICSG directory of copper mines and plants up to 2023: Lisbon, Portugal, International Copper Study Group, July, 219 p. (Accessed August 10, 2019, via http://www.icsg.org/.)
- Ma, Raymond, 2019, Ecuador kicks off operations at US\$1B Mirador copper mine: S&P Global Market Intelligence, July 19. (Accessed July 26, 2019, via https://www.snl.com/.)
- Rio Tinto plc, 2019, Rio Tinto releases third quarter production results: London, United Kingdom, Rio Tinto plc media release, October 16, 25 p. (Accessed October 18, 2019, at https://mc-56397411-4872-452d-b48e-428890-cdn-endpoint.azureedge.net/-/media/Content/Documents/Invest/Financial-news-and-performance/Production/RT-Third-Quarter-Operations-Review-2019-pdf.pdf?rev=5e467c0dc3c54e38b53dfb36ba09609b.)
- Wu, Mengjie, 2019, Category 6 scrap imports to be reclassified: China Fortnightly [published by CRU International Ltd.], January 4, 8 p. (Accessed May 30, 2019, via https://www.crugroup.com/.)

List services and web feed subscribers are the first to receive notification of USGS minerals information publications and data releases. For information on how to subscribe, go to https://www.usgs.gov/centers/nmic/minerals-information-publication-list-services.

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

(Metric tons of copper content, unless otherwise specified)

				2019)	
	Source	-				January-
	table ²	2018 ^p	May	June	July	July
Production:						
Primary:						
Mine, recoverable	(2)	1,220,000	105,000 r	106,000 ^r	117,000	732,000
Smelter	(3)	536,000	54,100	51,800	34,500	263,000
Refinery:						
Electrolytic, domestic and foreign	(4)	538,000	38,300	40,600	45,100	252,000
Electrowon	(4)	532,000	44,700	45,900	47,600	306,000
Total	(4)	1,070,000	83,000	86,500	92,600	558,000
Secondary recoverable copper: ³						
Refineries	(5)	41,200	3,470	3,480	3,860	25,500
Ingot makers ⁴	(5)	56,800	4,730	4,730	4,730	33,100
Brass and wire-rod mills	(5)	652,000	54,900	54,900	52,700	383,000
Foundries, etc. ⁴	(5)	36,300	3,030	3,030	3,030	21,200
Consumption:						
Apparent	(8)	1,800,000	148,000	150,000 ^r	154,000	1,060,000
Refined (reported)	(7)	1,810,000	154,000	150,000	147,000	1,080,000
Purchased copper-base scrap (gross weight)	(9)	918,000	77,500	77,500	75,600	542,000
Stocks at end of period:						
Total refined	(10)	243,000	117,000	107,000 ^r	117,000	117,000
Blister, etc.	(10)	9,230	9,210	13,600	15,500	15,500
Price, U.S. producers cathode (cents per pound) ⁵	(11)	298.737	282.232	274.968	275.657	285.624
Imports: ⁶						
Ore and concentrates	(13)	32,200	3,850	7,360	3,240	20,100
Refined	(13)	778,000	52,400	55,200	68,200	377,000
Exports: ⁶						
Ore and concentrates	(14)	253,000	35,000	27,900	25,800	195,000
Refined	(14)	190,000	11,000	13,800	9,820	84,100

^pPreliminary. ^rRevised.

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

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

³Copper recovered from copper-base scrap only.

⁴Estimated based on the monthly average of 2017 annual data.

⁵Source: Platts Metals Week.

⁶Source: U.S. Census Bureau.

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

	Rec	overable cop	pper		Contained copper	
Period	Arizona	Others ²	Total	Electrowon	Concentrates ³	Total
2018: ^p						
January–July	471,000	233,000	704,000	312,000	407,000	719,000
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	67,900 ^r	29,900	97,800 ^r	42,400	57,600 ^r	99,900 ^r
February	63,600 ^r	33,500	97,100 ^r	39,800	59,500 ^r	99,200 ^r
March	72,300 ^r	35,500	108,000 ^r	44,600	65,700 ^r	110,000 ^r
April	69,700 ^r	31,600	101,000 ^r	41,300	62,300 ^r	104,000 ^r
May	71,500 ^r	33,700	105,000 ^r	44,700	62,800 ^r	108,000 ^r
June	73,400 ^r	32,400	106,000 ^r	45,900	62,100 ^r	108,000 ^r
July	79,200	38,000	117,000	47,600	72,300	120,000
January–July	498,000	235,000	732,000	306,000	442,000	748,000

^pPreliminary. ^rRevised.

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

²Includes production from Michigan, Missouri, Montana, Nevada, New Mexico, and Utah.

³Includes copper content of precipitates and other metal concentrates.

$\begin{tabular}{ll} TABLE~3\\ COPPER PRODUCED~AT~SMELTERS~IN\\ THE~UNITED~STATES 1,2 \end{tabular}$

(Metric tons, copper content)

	Anode
Period	production
2018: ^p	
January–July	315,000
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
June	51,800
July	34,500
January–July	263,000

^pPreliminary.

¹Includes blister and copper anode from primary or secondary sources.

²Data 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 $^{\rm l}$

	Pri	mary materials			
	Electrolytically				Total
Period	refined ²	Electrowon	Total	Scrap	refined
2018: ^p					
January–July	308,000	312,000	620,000	23,100	643,000
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:	_				
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	72,400 ^r	3,950	76,300 ^r
April	38,100	41,300	79,400	3,600	83,000
May	38,300	44,700	83,000	3,470	86,500
June	40,600	45,900	86,500	3,480	90,000
July	45,100	47,600	92,600	3,860	96,500
January–July	252,000	306,000	558,000	25,500	584,000

^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown. ²From domestic and foreign source materials.

 ${\it TABLE~5}$ COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP 1

(Metric tons, copper content)

	Refine	eries ²	Ingot m	akers ³	Brass and wi	re-rod mills	Foundrie	es, etc. ³	
Period	New scrap ^e	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	Total ⁴
2018: ^p									
January–July	11,700	11,300	4,970	28,200	356,000	22,100	15,400	5,810	455,000
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
June	1,680	1,800	710	4,020	51,400	3,550	2,200	830	66,100
July	1,680	2,190	710	4,020	49,100	3,590	2,200	830	64,300
January–July	11,700	13,700	4,970	28,200	360,000	23,800	15,400	5,810	463,000

^eEstimated ^pPreliminary.

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

²Electrolytically refined and fire refined from scrap based on source of material at smelter or refinery level.

³Monthly data estimated based on the monthly average of 2017 annual data.

⁴Does 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: ^p						
January–July	515,000	772,000	516,000	779,000	28,700	19,600
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:	<u> </u>					
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	30,200	23,800
May	73,800	116,000	74,100	112,000	29,800	28,400
June	73,600	109,000	73,500	116,000	30,000	22,100
July	70,300	110,000	70,900	113,000	29,400	25,200
January–July	513,000	773,000	514,000	789,000	29,400	25,200

Preliminary.

¹Data 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 ²	Total
2018: ^p				
January–July	244,000	765,000	36,200	1,050,000
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
June	34,200	110,000	5,170	150,000
July	34,100	107,000	5,170	147,000
January–July	243,000	796,000	36,200	1,080,000

^pPreliminary.

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

²Monthly consumption data by ingot makers, chemical plants, foundries, and miscellaneous manufacturers are estimated based on the monthly average of 2017 annual data.

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

Period	Refined copper production ²	Copper in old scrap ³	Refined general imports ⁴	Refined exports ⁴	Stock change during period	Apparent consumption
2018: ^p	•	-	•	-		
January–July	620,000	85,300	486,000	79,000	91,800	1,020,000
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	72,400 ^r	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
June	86,500	12,800	54,800	13,800	-10,100 ^r	150,000 r
July	92,600	13,200	68,200	9,810	10,000	154,000
January–July	558,000	89,400	374,000	84,100	-126,000	1,060,000

^pPreliminary. ^rRevised.

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

²Includes electrowon production and electrolytically-refined copper from primary materials. All refined copper consumed in scrap form is included in "Copper in old scrap."

³Includes 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.

⁴Source: U.S. Census Bureau.

TABLE 9 CONSUMPTION OF PURCHASED COPPER-BASE SCRAP¹

	Smelt	ters			Brass	and			
	and refi	neries	Ingot m	akers ²	wire-roo	l mills ³	Foundrie	es, etc. ²	Total scrap
Period	New scrap ^e	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	used
2018: ^p									
January–July	12,100	11,700	14,200	35,300	412,000	22,600	18,400	6,550	532,000
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
June	1,730	1,850	2,030	5,040	59,400	3,910	2,620	935	77,500
July	1,730	2,260	2,030	5,040	57,100	3,880	2,620	935	75,600
January–July	12,100	14,200	14,200	35,300	416,000	25,100	18,400	6,550	542,000

^eEstimated. ^pPreliminary.

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

²Monthly data estimated based on the monthly average of 2017 annual data. ³Consumption 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 ²	Refineries ³	$mills^3$	Brass mills ³	Other ⁴	Comex	LME ⁵	refined
2018: ^p								
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	5,350	28,700	49,000	117,000
June	13,600	5,000	20,700 ^r	7,120	5,350	30,700	38,000	107,000 ^r
July	15,500	4,350	25,000	7,070	5,350	36,000	39,200	117,000

^pPreliminary. ^rRevised.

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

²Copper content of blister and anode.

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

⁴Monthly estimates based on 2017 annual data, comprising stocks at ingot makers, chemical plants, foundries, and miscellaneous manufacturers.

⁵London 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)

		Comex	LME
	II C d		
	U.S. producers	first	cash price
Period	cathode	position ²	Grade A
2018:	<u></u>		
July	285.626	279.126	283.387
August	276.087	269.387	273.936
September	276.107	269.232	273.044
October	282.498	275.935	281.918
November	281.598	275.098	280.882
December	279.026	272.338	276.397
Year	298.737	292.567	295.960
2019:	<u></u>		
January	275.588	268.238	269.052
February	293.129	285.566	284.754
March	297.974	289.974	292.581
April	299.820	292.007	292.317
May	282.232	274.282	273.412
June	274.968	267.843	266.166
July	275.657	268.657	269.397
January–July	285.624	278.081	278.240

¹Sum of "Comex high grade first position" and "NY dealer premium cathode."

²Listed 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:				
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
June	257.40	225.70	188.00	138.00
July	258.48	227.95	186.32	138.00
January–July	269.60	239.81	193.57	141.51

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 concentrates ²			Matte, ash, and precipitates ³				Blister and and	odes	Refined		
		2019			2019 January–			2019 January–			2019	
Country or	-	January-										January-
locality	2018	July	July	2018	July	July	2018	July	July	2018	July	July
Belgium				283		228				10,100		2,300
Bolivia										1,460		1,390
Canada	40		(4)	613	17	204	(4)			172,000	12,800	74,000
Chile										483,000	48,600	247,000
China	8			2					(4)	111	5	189
Congo (Brazzaville)										1,040		
Congo (Kinshasa)										3,380		
Finland							292	26	158			38
Germany							(4)			1,260	196	1,140
Japan				10		50	2		(4)	3,990	199	1,670
Malaysia							54					
Mexico	32,100	3,240	20,100	539	(4)	59			(4)	63,100	6,390	44,900
Netherlands				115			2		3	(4)		
Peru										19,100		3,000
Saudi Arabia				85		98						
Zambia										18,900	67	683
Other			2	175	(4)	536	5	(4)	4	562	(4)	54
Total	32,200	3,240	20,100	1,820	17	1,180	355	26	165	778,000	68,200	377,000

⁻⁻ Zero.

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

²Copper ore and concentrates only; excludes copper contained in ore and concentrates of other metals.

³Copper matte, ash, and precipitates only; excludes the copper content of mattes and ashes of other metals.

⁴Less than ½ unit.

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

(Metric tons, copper content)

-	Ore and concentrates ²			Matte, a	ash, and precipita]	Blister and anoc	les	Refined			
	2019 January–				2019 January–			2019 January–		-	2019	
Country or				=			-			=		January-
locality	2018	July	July	2018	July	July	2018	July	July	2018	July	July
Belgium	20	7	92	2,150	233	1,470	226	130	305			29
Brazil	3,040	2,180	2,180				62		39	23		1
Bulgaria	2,990		11,200									
Canada	17,200	1,010	7,500	19,500	1,290	10,400	4,320	113	3,010	37,300	3,280	21,200
China	47,500		7	1,650	2	90	210	32	141	47,600	3	6
Germany	4,810			1,130		324	282	40	226	2		1
Hong Kong						19	462	20	239	(4)		(4)
India				44			585	31	176	9		36
Italy	1			10			281		88	24	(4)	26
Japan	13,500		10,100	230		8	36		3	14	(4)	3
Korea, Republic of	4,690		6,910	817		74	1,680	80	1,000	2,200	103	180
Malaysia	545	30	35	413			178	20	119	62		4
Mexico	147,000	20,100	142,000	1,430		1,210	80	3	25	102,000	6,420	62,600
Philippines	1,180	2,410	4,720				42		33	(4)		2
Slovakia				526	117	546						
Spain	10,500		10,100	210			101	20	40	1		
Other	120	8	486	1,850	105	479	503	181	662	278	3	110
Total	253,000	25,800	195,000	30,000	1,750	14,600	9,060	671	6,100	190,000	9,820	84,100

⁻⁻ Zero.

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

²Copper ore and concentrates only; excludes copper contained in ore and concentrates of other metals.

³Copper matte, ash, and precipitates only; excludes the copper content of mattes and ashes of other metals.

⁴Less than ½ unit.

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

		Unalloyed		Alloyed				
	·	201		20	19			
Country or	- -		January-	-		January-		
locality	2018	July	July	2018	July	July		
Bahamas	23			569	31	472		
Canada	16,800	1,300	9,910	72,000	3,960	34,200		
Chile	177			321		1,240		
Colombia	367	21	121	926	68	706		
Costa Rica	459	8	271	750	103	584		
Dominican Republic	80	65	388	901	133	1,280		
Guatemala	92		8	501	56	447		
Honduras	5	2	33	589	45	288		
Hong Kong	7	16	16	1,450		229		
Japan	278	13	958	52				
Mexico	10,800	908	7,510	38,600	3,560	24,600		
Pakistan	567	94	94					
Panama	1,020	52	387	640	30	251		
Spain				637				
Venezuela	2,540		28	646	71	272		
Other	1,270	74	525	4,150	294	3,010		
Total	34,500	2,560	20,300	123,000	8,350	67,500		

⁻⁻ Zero.

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

TABLE 16
U.S. EXPORTS OF COPPER SCRAP¹

				Unalloyed	Alloyed							
		2019							2019			
	-	No. 1 January–		No. 2 January–		Other January–		=	Segregated January		Unsegregated January–	
Country or	·							-				
locality	2018	July	July	July	July	July	July	2018	July	July	July	July
Belgium	19,500	442	4,010	832	6,720	150	1,480	11,800	19	597	1,190	7,500
Canada	51,900					3,960	28,800	40,200			4,390	29,800
China	193,000	2,720	18,300	3,020	19,700	1,460	17,000	78,600	397	5,130	843	5,290
Germany	24,000	971	10,600	940	4,800	173	1,360	13,300	39	1,020	1,110	7,410
Greece	7,630	354	4,420	40	428	220	930	1,150	43	198		239
Hong Kong	20,700	884	4,790	417	4,150	684	5,520	23,600	682	6,740	2,410	13,700
India	14,000	194	1,540	420	2,120	856	4,910	34,300	3,220	17,600	1,300	7,600
Japan	29,300	562	3,730	1,210	8,590	225	2,110	26,700	330	3,820	1,320	9,770
Korea, Republic of	45,800	2,310	11,600	301	2,650	984	7,130	25,900	831	7,270	1,070	7,260
Malaysia	47,800	558	7,750	1,400	9,950	1,300	20,500	71,800	1,820	20,200	10,900	69,400
Netherlands	8,030	57	540	59	395	298	2,200	2,280		181	39	582
Pakistan	1,450	67	359	8	514		57	16,500		359	1,360	8,930
Spain	760	68	264		161		334	10,100	123	1,970	346	4,090
Taiwan	17,100	278	5,220	251	1,080	632	3,430	18,300	425	3,810	649	7,640
Thailand	3,000	97	445	80	665	137	813	11,100	183	276	1,720	9,080
Other	25,700	1,200	8,810	840	4,690	897	3,440	17,900	115	2,360	1,220	11,000
Total	509,000	10,800	82,300	9,810	66,600	12,000	100,000	403,000	8,230	71,500	29,900	199,000

⁻⁻ Zero.

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