

Mineral Industry Surveys

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COPPER IN DECEMBER 2018

In December 2018, domestic mine production of recoverable copper was 107,000 metric tons (t). The average daily mine production was 3,440 t, unchanged from that in November and an increase of 6% compared with that in December 2017 (fig. 1). Total recoverable mine production in 2018 was 1.22 million metric tons (Mt), a decline of 3% from 1.26 Mt in 2017 (table 2). Mine output of copper decreased in the United States during 2018 primarily owing to reduced production from multiple operations in Arizona and New Mexico. Freeport-McMoRan Inc. (Phoenix, AZ) reported that total production at its seven U.S. mines declined by 8% in 2018 because of lower ore grades, and a landslide on March 21 at the Mission Mine, operated by ASARCO LLC (Tucson, AZ), significantly affected operations throughout the year (Freeport-McMoRan Inc., 2019, p. 9, 23; Grupo México, S.A.B. de C.V., 2018, p. 3). These production decreases were partially offset by higher output from Rio Tinto Kennecott's (South Jordan, UT) Bingham Canyon Mine in Utah, where mining activity progressed into higher-grade ores and ore processing rates increased (Rio Tinto plc, 2019, p. 7).

Total refinery production in the United States was 94,700 t in December 2018; data for electrolytic and electrowon output, as well as refined production from scrap, are in table 4. The average daily total refinery production was 3,050 t, a decrease of 5% compared with that in November and 17% more than that in December 2017. During the last 3 months of 2017, production was affected by a force majeure for sales of refined copper from one U.S. refinery. Total refinery output in 2018 was 1.11 Mt, an increase of 3% from 1.08 Mt in 2017 (table 4).

Smelter production in December 2018 was 40,600 t. The average daily smelter output was 1,310 t, 13% lower than that in November and an increase of 7% compared with the daily average in December 2017. Total smelter production in 2018 was 536,000 t, 14% greater than 470,000 t in 2017, when output was affected by planned maintenance shutdowns and a 6-week suspension of operations at one smelter following a fatal accident (table 3).

Prices

The average December 2018 COMEX spot copper price was \$2.72 per pound, a slight decrease from \$2.75 per pound in November and 12% lower than \$3.10 per pound in December 2017 (fig. 2, table 11). The average COMEX spot price for all of 2018 was \$2.93 per pound compared with \$2.80 per pound in 2017. This increase was primarily attributed by analysts to rising global copper demand and was partially offset by uncertainty in trade policies between the United States and China, among other factors. The average price of New York dealers' number 2 scrap in December 2018 was \$1.88 per pound, a slight increase from \$1.85 per pound in November and 9% less than \$2.06 per pound in December 2017 (fig. 2, table 12).

Stocks

Refined copper stocks in the United States fell for the fifth consecutive month and totaled 243,000 t at the end of December 2018, a decrease of 6% from those in November, 8% lower than those in December 2017, and 32% less than the recent peak in

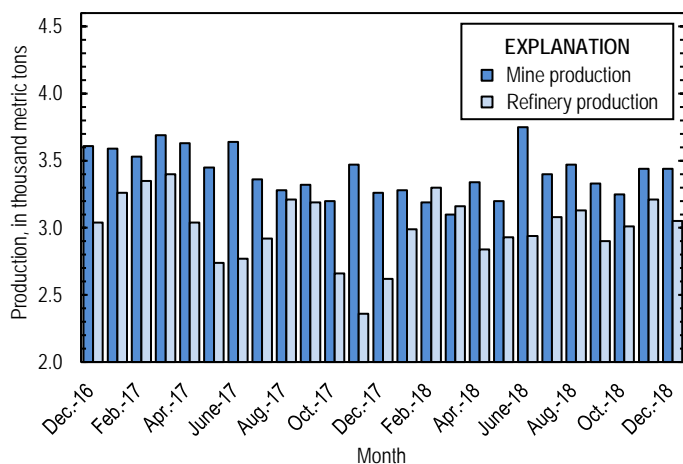


Figure 1. Average daily U.S. copper mine (recoverable) and refinery production from December 2016 through December 2018.

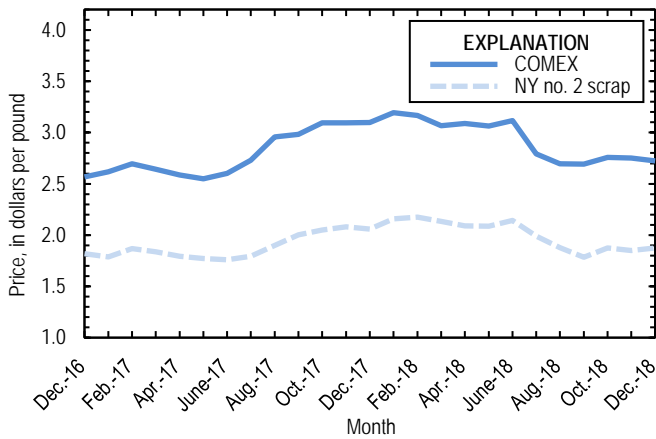


Figure 2. Monthly average COMEX copper price and New York no. 2 copper scrap price from December 2016 through December 2018. Sources: American Metal Market, Platts Metals Week.

July. COMEX stocks fell by 19%, stocks at wire-rod mills increased by 17%, and London Metal Exchange Ltd. stocks in U.S. warehouses were 7% higher compared with those at the end of November (fig. 3, table 10).

Industry News

Excelsior Mining Corp. (Canada) announced on December 4 that construction had begun at the Gunnison copper project in southeastern Arizona. The company expected to produce approximately 980,000 t of copper over a 25-year mine life, with first production anticipated in the fourth quarter of 2019. Gunnison was designed as in situ recovery operation, a process that involves injection of an acid solution into the ground to dissolve copper and recovery wells that bring the solution to the surface for processing at an electrowinning facility (Excelsior Mining Corp., 2019a, p. 18, 43; 2019b).

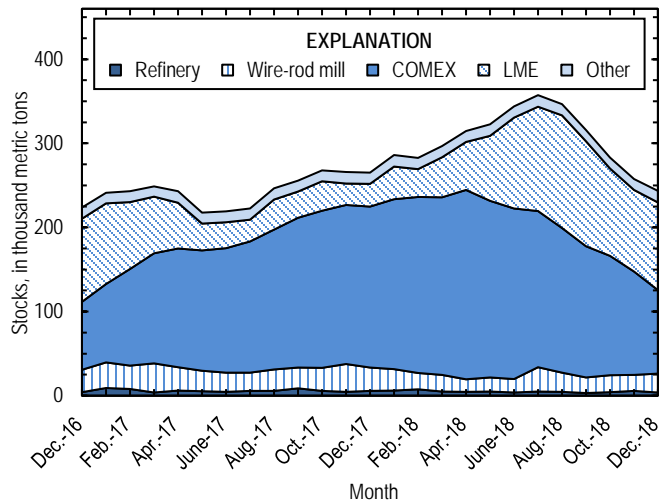


Figure 3. Monthly domestic refined copper stocks, by type, from December 2016 through December 2018. Sources: American Metal Market, London Metal Exchange Ltd., and U.S. Geological Survey.

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TABLE 1
SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES¹

(Metric tons of copper content, unless otherwise specified)

	Source table ²	2017 ^p	2018			January– December
			October	November	December	
Production:						
Primary:						
Mine, recoverable	(2)	1,260,000	101,000	103,000 ^r	107,000	1,220,000
Smelter	(3)	470,000	48,200	45,300	40,600	536,000
Refinery:						
Electrolytic, domestic and foreign	(4)	482,000	46,100	50,000	45,300	538,000
Electrowon	(4)	557,000	43,100	43,000	45,800	532,000
Total	(4)	1,040,000	89,200	93,000	91,200	1,070,000
Secondary recoverable copper:³						
Refineries	(5)	40,100	4,180	3,370	3,520	41,200
Ingot makers ⁴	(5)	57,600	4,800	4,800	4,800	57,600
Brass and wire-rod mills	(5)	645,000	56,100	55,300	53,500	652,000
Foundries, etc. ⁴	(5)	46,800	3,900	3,900	3,900	46,800
Consumption:						
Apparent	(8)	1,870,000	159,000	144,000	150,000	1,790,000
Refined (reported)	(7)	1,800,000	152,000	153,000	140,000	1,810,000
Purchased copper-base scrap (gross weight)	(9)	924,000	79,400	78,700	77,000	932,000
Stocks at end of period:						
Total refined	(10)	265,000	283,000	258,000	243,000	243,000
Blister, etc.	(10)	12,600	8,940	7,380	24,100	24,100
Price, U.S. producers cathode (cents per pound) ⁵	(11)	285.393	282.498	281.598	279.026	298.737
Imports:⁶						
Ore and concentrates	(13)	14,000	2,380	3,120	2,340	32,200
Refined	(13)	813,000	64,700	51,000	44,500	778,000
Exports:⁶						
Ore and concentrates	(14)	237,000	10,800	37,200	27,500	253,000
Refined	(14)	94,200	31,000	36,200	12,400	190,000

^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 2016 annual data.

⁵Source: Platts Metals Week.

⁶Source: U.S. Census Bureau.

TABLE 2
MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES¹

(Metric tons)

Period	Recoverable copper			Contained copper		
	Arizona	Others ²	Total	Electrowon	Concentrates ³	Total
2017: ^p						
December	76,100	24,900	101,000	47,600	55,700	103,000
January–December	868,000	391,000	1,260,000	557,000	730,000	1,290,000
2018:						
January	68,800	32,900	102,000	46,800	56,900	104,000
February	61,500	27,700	89,200	40,600 ^r	50,700	91,300
March	68,200	27,900 ^r	96,000	44,400 ^r	53,700	98,000
April	65,400	34,700 ^r	100,000	43,200	58,800	102,000
May	69,300	29,800	99,200 ^r	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 ^r	64,600	110,000
September	63,000	36,800	99,800	43,000	59,100	102,000
October	64,000 ^r	36,900 ^r	101,000	43,100	59,800 ^r	103,000
November	65,200 ^r	38,000	103,000 ^r	43,000	62,400 ^r	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

^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.

TABLE 3
COPPER PRODUCED AT SMELTERS IN
THE UNITED STATES^{1,2}

(Metric tons, copper content)

Period	Anode production
2017: ^P	
December	37,800
January–December	470,000
2018:	
January	53,900
February	42,200
March	41,500
April	44,800
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

^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 RECOVERY¹

(Metric tons)

Period	Primary materials			Scrap	Total refined
	Electrolytically refined ²	Electrowon	Total		
2017: ^p					
December	30,400	47,600	77,900	3,250	81,200
January–December	482,000	557,000	1,040,000	40,100	1,080,000
2018:					
January	42,800	46,800	89,600	3,220	92,800
February	48,500	40,600 ^r	89,000	3,260	92,300
March	50,400	44,400 ^r	94,800	3,220	98,000
April	38,700	43,200	82,000 ^r	3,260	85,200
May	41,600	46,000	87,600 ^r	3,330	90,900
June	39,800	44,900	84,700 ^r	3,400	88,000
July	45,900	46,000	91,900	3,390	95,300
August	48,400	45,500 ^r	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

^pPreliminary. ^rRevised.

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

²From domestic and foreign source materials.

TABLE 5
COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP¹

(Metric tons, copper content)

Period	Refineries ²		Ingot makers ³		Brass and wire-rod mills		Foundries, etc. ³		Total ⁴
	New scrap ^e	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2017: ^p									
December	1,680	1,570	800	4,000	48,000	2,500	3,060	845	62,400
January–December	20,100	20,000	9,600	48,000	608,000	36,900	36,700	10,100	790,000
2018:									
January	1,680	1,540	800	4,000	51,100	3,300	3,060	845	66,300
February	1,680	1,580	800	4,000	50,000	2,940	3,060	845	64,900
March	1,680	1,540	800	4,000	46,800	3,350	3,060	845	62,100
April	1,680	1,580	800	4,000	50,800	3,270	3,060	845	66,100
May	1,680	1,650	800	4,000	53,000	3,180	3,060	845	68,200
June	1,680	1,720	800	4,000	52,400	2,960	3,060	845	67,500
July	1,680	1,710	800	4,000	51,600	3,060	3,060	845	66,800
August	1,680	1,540	800	4,000	51,600	3,220	3,060	845	66,700
September	1,680	2,130	800	4,000	51,900	2,850	3,060	845	67,300
October	1,680	2,500	800	4,000	52,700	3,490	3,060	845	69,000
November	1,680	1,690	800	4,000	53,900	1,470	3,060	845	67,400
December	1,680	1,840	800	4,000	50,800	2,700	3,060	845	65,700
January–December	20,100	21,000	9,600	48,000	617,000	35,800	36,700	10,100	798,000

^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 2016 annual data.

⁴Does not include an estimate, based on reported 2016 annual data, of 3,121 tons per month from new scrap and 2,490 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 SEMIFABRICATES¹

(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
2017: ^p						
December	72,100	92,500	72,000	89,800	29,500	26,800
January–December	882,000	1,320,000	881,000	1,320,000	29,500	26,800
2018:						
January	73,600	114,000	73,500	114,000	29,500	26,700
February	72,700	107,000	73,400	107,000	28,800	26,400
March	74,300	115,000	74,000	117,000	29,200	24,200
April	73,600	103,000	73,600	111,000	29,200	16,400
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	109,000	28,900	20,400
December	74,900	99,100	73,000	93,900	30,800	25,600
January–December	885,000	1,330,000	884,000	1,330,000	30,800	25,600

^pPreliminary.

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

TABLE 7
CONSUMPTION OF REFINED COPPER¹

(Metric tons)

Period	Brass mills	Wire-rod mills	Other plants ²	Total
2017: ^P				
December	34,900	91,800	5,070	132,000
January–December	420,000	1,320,000	60,800	1,800,000
2018:				
January	34,600	114,000	5,070	154,000
February	35,100	107,000	5,070	147,000
March	34,900	115,000	5,070	155,000
April	35,100	105,000	5,070	145,000
May	34,900	115,000	5,070	155,000
June	34,900	106,000	5,070	146,000
July	34,800	104,000	5,070	144,000
August	35,100	121,000	5,070	161,000
September	35,100	122,000	5,070	162,000
October	34,900	112,000	5,070	152,000
November	34,700	114,000	5,070	153,000
December	34,600	100,000	5,070	140,000
January–December	419,000	1,330,000	60,800	1,810,000

^PPreliminary. ^RRevised.

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 2016 annual data.

TABLE 8
U.S. APPARENT CONSUMPTION OF COPPER¹

(Metric tons)

Period	Refined copper production ²	Copper in old scrap ³	Refined general imports ⁴	Refined exports ⁴	Stock change during period	Apparent consumption
2017: ^P						
December	77,900	11,400	58,900	4,810	-728	144,000
January–December	1,040,000	145,000	820,000	94,200	42,100	1,870,000
2018:						
January	89,600	12,200	81,100	9,550	20,300	153,000
February	89,000	11,900	77,500	7,270	-2,750	174,000
March	94,800	12,200	75,200	12,100	14,000	156,000
April	82,000	12,200	62,400	13,700	17,700	125,000
May	87,600	12,200	64,600	13,800	8,150	142,000
June	84,700	12,000	66,200	11,200	21,000	131,000
July	91,900	12,100	59,500	11,300	13,500	139,000
August	93,900	12,100	48,300	15,700	-10,200	149,000
September	83,200	12,300	62,300	15,600	-30,900	173,000
October	89,200	13,300	54,400	31,000	-32,900	159,000
November	93,000	10,500	51,000	36,200	-25,700	144,000
December	91,200	11,900	44,800	12,400	-14,300	150,000
January–December	1,070,000	145,000	747,000	190,000	-22,200	1,790,000

^PPreliminary.

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 2016 annual data.

⁴Source: U.S. Census Bureau.

TABLE 9
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP¹

(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 ^c	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2017: ^p									
December	1,730	1,620	2,060	5,130	55,900	2,560	3,660	956	73,600
January–December	20,800	19,300	24,700	61,600	704,000	38,000	43,900	11,500	924,000
2018:									
January	1,730	1,590	2,060	5,130	59,000	3,380	3,660	956	77,500
February	1,730	1,630	2,060	5,130	57,900	3,010	3,660	956	76,100
March	1,730	1,590	2,060	5,130	54,700	3,450	3,660	956	73,300
April	1,730	1,630	2,060	5,130	58,800	3,380	3,660	956	77,400
May	1,730	1,700	2,060	5,130	61,000	3,270	3,660	956	79,500
June	1,730	1,770	2,060	5,130	60,400	3,030	3,660	956	78,700
July	1,730	1,770	2,060	5,130	59,600	3,110	3,660	956	78,100
August	1,730	1,590	2,060	5,130	59,600	3,320	3,660	956	78,000
September	1,730	2,200	2,060	5,130	59,900	2,970	3,660	956	78,600
October	1,730	1,590	2,060	5,130	60,700	3,580	3,660	956	79,400
November	1,730	1,750	2,060	5,130	61,900	1,510	3,660	956	78,700
December	1,730	1,900	2,060	5,130	58,700	2,770	3,660	956	77,000
January–December	20,700	20,700	24,700	61,600	712,000	36,800	43,900	11,500	932,000

^cEstimated. ^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 2016 annual data.

³Consumption at brass and wire-rod mills assumed equal to receipts.

TABLE 10
COPPER STOCKS AT END OF PERIOD¹

(Metric tons)

Period	Crude copper ²	Refined copper					Total refined	
		Refineries ³	Wire-rod mills ³	Brass mills ³	Other ⁴	Comex		LME ⁵
2017: ^P								
December	12,600	5,840	27,800	7,870	5,470	191,000	27,100	265,000
2018:								
January	15,000	6,190	25,500	8,040	5,470	202,000	38,800	286,000
February	14,600	7,690	19,400	7,880	5,470	209,000	33,200	283,000
March	9,010	4,790	19,900	8,000	5,470	211,000	47,600	297,000
April	9,880	4,500	15,000	7,870	5,470	225,000	57,000	315,000
May	8,130	4,960	16,800	8,190	5,470	210,000	77,200	323,000
June	14,300	3,590	16,100	7,980	5,470	203,000	108,000	344,000
July	9,670	4,980	28,700	8,180	5,470	186,000	124,000	357,000
August	9,010	4,600	22,600	7,890	5,470	172,000	134,000	347,000
September	9,110	3,120	18,500	7,710	5,470	156,000	125,000	316,000
October	8,940	4,290	19,900	7,460	5,470	142,000	104,000	283,000
November	7,380	5,580	19,000	7,660	5,470	123,000	96,900	258,000
December	24,100	3,850	22,200	8,210	5,470	99,600	104,000	243,000

^PPreliminary.

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 2016 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)

Period	U.S. producers cathode ¹	Comex first position ²	LME cash price Grade A
2017:			
December	314.825	309.825	308.471
Year	285.393	280.425	279.518
2018:			
January	324.640	319.390	321.137
February	322.495	316.745	317.574
March	312.083	306.683	308.227
April	314.129	308.754	310.169
May	312.402	306.402	309.409
June	318.152	311.714	315.436
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
January–December	298.737	292.567	295.960

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)

Period	Brass mills No. 1 scrap	Refiners No. 2 scrap	Dealers (New York)	
			No. 2 scrap	Red brass turnings and borings
2017:				
December	298.58	271.05	206.00	157.00
Year	271.69	245.68	189.25	149.55
2018:				
January	308.14	279.00	215.79	160.81
February	304.63	275.68	217.50	161.00
March	295.18	268.32	213.50	160.00
April	299.33	274.36	209.02	158.00
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
January–December	283.19	254.90	200.31	150.76

Source: American Metal Market.

TABLE 13
U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY CLASS¹

(Metric tons, copper content)

Country or locality	Ore and concentrates ²			Matte, ash, and precipitates ³			Blister and anodes			Refined		
	2018			2018			2018			2018		
	2017	December	January–December	2017	December	January–December	2017	December	January–December	2017	December	January–December
Belgium	--	--	--	69	--	283	--	--	--	(4)	--	10,100
Bolivia	--	--	--	--	--	--	--	--	--	1,560	--	1,460
Brazil	--	--	--	--	--	--	--	--	--	3,580	--	297
Canada	6	--	40	284	2	570	--	(4)	(4)	209,000	11,600	172,000
Chile	--	--	--	--	--	--	--	--	--	486,000	22,000	483,000
China	--	--	8	33	--	2	--	--	--	50	6	111
Congo (Kinshasa)	--	--	--	--	--	--	--	--	--	9,190	--	3,380
Finland	--	--	--	--	--	--	359	--	292	4	--	--
Germany	--	--	--	7	--	--	(4)	--	(4)	2,310	117	1,260
India	--	--	--	--	--	--	--	--	--	224	--	(4)
Japan	--	--	--	76	--	10	2	(4)	2	4,630	430	3,990
Malaysia	--	--	--	--	--	--	126	--	54	--	--	--
Mexico	14,000	2,340	32,200	588	64	539	--	--	--	75,200	5,920	63,000
Netherlands	--	--	--	166	6	115	3	--	2	3	--	(4)
Peru	--	--	--	--	--	--	--	--	--	18,000	4,010	19,100
South Africa	--	--	--	--	--	--	--	--	--	1,510	--	963
Other	9	--	--	397	48	157	14	(4)	5	1,230	407	19,200
Total	14,000	2,340	32,200	1,620	120	1,680	504	1	355	813,000	44,500	778,000

¹Revised. -- 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.

Source: U.S. Census Bureau.

TABLE 14
U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS¹

(Metric tons, copper content)

Country or locality	Ore and concentrates ²			Matte, ash, and precipitates ³			Blister and anodes			Refined		
	2018			2018			2018			2018		
	2017	December	January–December	2017	December	January–December	2017	December	January–December	2017	December	January–December
Belgium	--	20	20	4,860	139	2,170	447	15	226	-- ^r	--	--
Canada	23,500	963	17,200	17,300	1,360	19,500	3,290	232	4,320	18,300	4,690	37,400
China	70,800	--	47,500	392	51	1,650	249	21	210	10,100	2,050	47,600
Germany	--	--	4,810	576	109	1,130	215	21	282	14	--	2
Hong Kong	--	--	--	--	--	--	1,110	--	462	1	--	(4)
India	1	--	--	(4)	--	44	730	34	585	15	--	9
Italy	--	--	1	73	--	10	325	40	281	14	1	24
Japan	1,540	7,720	13,500	189	58	230	80	--	36	16	(4)	14
Korea, Republic of	99	--	4,690	397	54	817	1,780	158	1,680	2,460	150	2,200
Mexico	141,000	17,600	147,000	99	--	1,430	102	--	80	62,600	5,470	102,000
Singapore	--	--	--	--	2	8	40	1	41	5	--	3
Spain	--	--	10,500	124	--	210	121	--	101	1	--	1
Switzerland	--	--	--	--	--	--	31	1	18	5	1	5
Taiwan	--	--	--	146	118	152	122	--	40	19	--	12
Vietnam	--	--	--	--	--	--	--	--	--	503	--	1
Other	137	1,200	7,860	1,090	316	2,590	1,040	14	687	142	4	342
Total	237,000	27,500	253,000	25,200	2,210	29,900	9,690	536	9,060	94,200	12,400	190,000

^rRevised. -- 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.

Source: U.S. Census Bureau.

TABLE 15
U.S. IMPORTS FOR CONSUMPTION OF COPPER SCRAP¹

(Metric tons, gross weight)

Country or locality	Unalloyed			Alloyed		
	2018			2018		
	2017	December	January– December	2017	December	January– December
Canada	18,900	1,420	16,800	81,900	5,410	72,000
Chile	57	--	177	301	--	321
Colombia	598	--	367	1,360	59	926
Costa Rica	636	89	459	1,060	65	750
Guatemala	36	3	92	446	34	501
Honduras	61	2	5	352	112	589
Mexico	10,400	730	10,800	35,300	3,100	38,600
Nicaragua	38	--	19	321	--	225
Pakistan	694	--	567	--	--	--
Panama	1,440	14	1,020	790	43	640
Venezuela	958	--	2,540	1,870	26	646
Other	1,720	152	1,660	6,190	605	7,530
Total	35,500	2,410	34,600	130,000	9,450	123,000

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 16
U.S. EXPORTS OF COPPER SCRAP¹

(Metric tons, gross weight)

Country or locality	Unalloyed							Alloyed				
	2018							2018				
	2017	No. 1		No. 2		Other		2017	Segregated		Unsegregated	
		December	January– December	December	January– December	December	January– December		December	January– December	December	January– December
Belgium	7,870	706	6,810	1,150	9,290	267	3,420	8,560	127	991	1,490	10,800
Canada	43,800	--	--	--	--	2,880	51,900	49,700	--	--	2,720	38,700
China	352,000	1,570	64,400	1070	64,700	2,070	65,600	336,000	809	36,500	951	43,500
Germany	19,700	1,390	16,800	791	5,500	89	1,530	10,900	--	2,330	788	11,000
Hong Kong	5,580	425	5,330	625	2,950	966	11,900	30,800	399	6,880	643	16,200
India	4,810	319	7,310	271	3,820	550	2,870	20,100	2,410	23,000	2,110	11,400
Japan	11,800	582	4,870	2440	19,200	837	5,030	9,300	888	5,280	2,330	21,400
Korea, Republic of	17,200	2,250	25,800	1190	8,290	1,370	11,200	14,100	1,080	10,900	3,130	15,000
Mexico	3,500	57	3,700	15	20	--	80	507	--	51	26	884
Netherlands	7,260	35	3,540	134	467	256	4,020	1,120	--	119	460	2,160
Pakistan	3,790	92	1,210	79	535	--	8	5,780	17	270	1,670	16,200
Spain	1,220	4	364	161	313	20	119	6,280	454	2,590	567	7,480
Taiwan	5,750	1,220	7,970	268	4,090	364	4,960	2,900	671	4,880	1,700	13,300
Thailand	204	49	1,210	2	441	38	1,550	472	--	561	179	10,800
Other	9,690	3,930	26,700	1,450	15,900	4,670	34,000	13,600	2,910	27,000	11,900	63,000
Total	494,000	12,600	176,000	9,640	135,000	14,400	198,000	510,000	9,770	121,000	30,700	282,000

-- Zero.

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

²Less than ½ unit.

Source: U.S. Census Bureau.