

Mineral Industry Surveys

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COPPER IN DECEMBER 2017

In December 2017, domestic mine production of recoverable copper was 99,100 metric tons (t). The average daily mine production was 3,200 t, a decrease of 7% from that in November and a decline of 11% compared with that in December 2016. Total recoverable mine production in 2017 was 1.26 million metric tons (Mt), a decrease of 12% relative to the prior year (fig. 1, table 2). Copper output declined at most U.S. mines during 2017 as a result of lower ore grades, reduced mining rates early in the year when copper prices were lower, and (or) disruptions caused by poor weather conditions and technical complications.

Total U.S. refinery production was 81,200 t in December 2017; electrolytic and electrowon production data are in table 4. Average daily total refinery production was 2,620 t, an increase of 11% compared with that in November but 14% less than that in December 2016. Total refinery production in 2017 was 1.08 Mt, a decline of 12% relative to the prior year (fig. 1, table 4). Refinery and smelter output in 2017 were affected by several scheduled smelter maintenance shutdowns and a 6-week closure of the Rio Tinto Kennecott (South Jordan, UT) smelter following a fatal accident in November.

Smelter production in December 2017 was 37,800 t. The average daily output was 1,220 t, more than double that in November but a decrease of 31% from the daily average in December 2016. Total smelter production in 2017 was 470,000 t, a decline of 16% compared with that in 2016 (table 3).

Prices

The average December 2017 COMEX spot copper price was \$3.10 per pound, a slight increase from \$3.09 per pound in November and 21% greater than \$2.57 per pound in December 2016 (fig. 2, table 11). The average COMEX spot price for all of 2017 was \$2.80 per pound compared with \$2.20 per pound in 2016. This increase was in part attributed to lower global mine production resulting from supply disruptions, weakness of the United States dollar, and continued growth in copper consumption in China. The average price of New York dealers' number 2 scrap in December 2017 was \$2.06 per pound, down slightly from \$2.08 per pound in November and 13% higher than the average price in December 2016 (table 12).

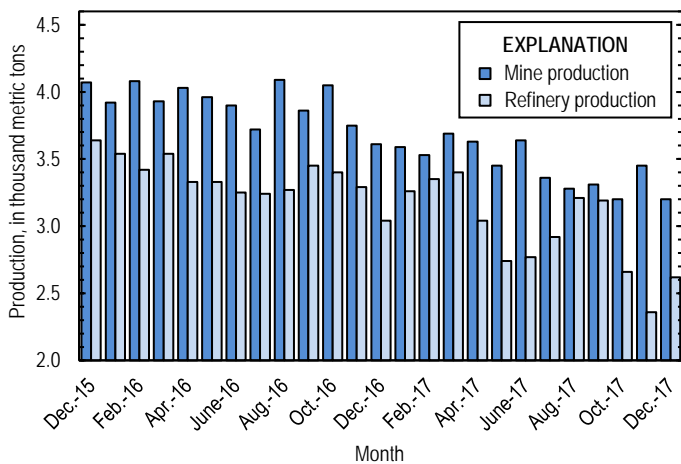


Figure 1. Average daily U.S. copper mine (recoverable) and refinery production from December 2015 through December 2017. Source: U.S. Geological Survey.

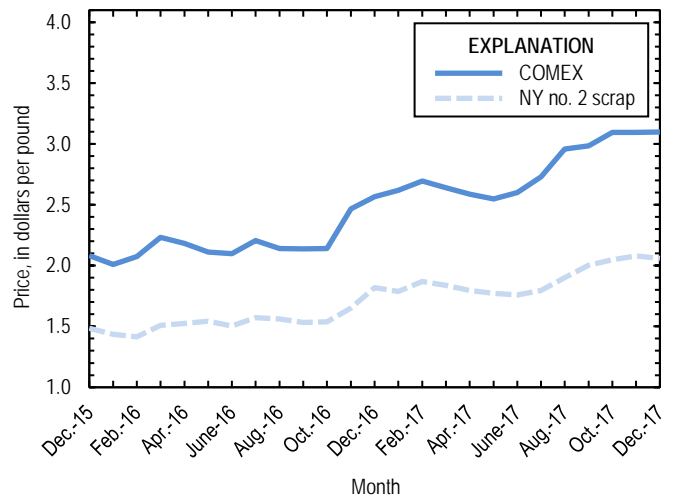


Figure 2. Monthly average COMEX copper price and New York no. 2 copper scrap price from December 2015 through December 2017. Sources: American Metal Market, Platts Metals Week.

Stocks

Refined copper stocks in the United States totaled 269,000 t at the end of December 2017, a slight decrease from those in November but 21% more than those in December 2016. COMEX stocks rose slightly, stocks at wire-rod mills declined by 13%, and London Metal Exchange Ltd. stocks in U.S. warehouses were 6% higher compared with those at the end of November (fig. 3, table 10). The overall increase in stocks during 2017 was consistent with a decrease in domestic copper consumption and lower average cathode premiums compared with those in 2016 (tables 7, 11; American Metal Market, 2018).

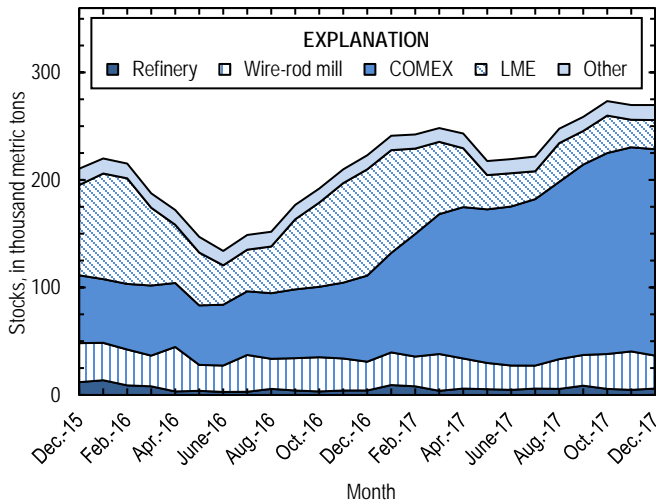


Figure 3. Monthly domestic refined copper stocks, by type, from December 2015 through December 2017. Sources: American Metal Market, London Metal Exchange Ltd., and U.S. Geological Survey.

Industry News

Owing to a worker strike, the Chilean mining agency Empresa Nacional de Minería (Enami) suspended operations at the Paipote smelter in the Atacama region on December 12. The smelter produced 84,500 t of copper anodes in 2016. Enami processes, smelts, and refines copper ore produced by small- to medium-scale mining companies in Chile and stated that it would continue to receive shipments until its storage capacity was reached (Assalve, 2017a; Platts Metals Daily, 2017). In Peru, a 3-week work stoppage at several Southern Copper Corp. (Phoenix, AZ) operations ended on December 12. A portion of

the workforce at the Cujajone and Toquepala Mines and the Ilo refinery had been on strike since November 21 in protest of pay and benefits (Assalve, 2017b). The Cujajone and Toquepala Mines produced a combined 306,000 t of copper in concentrates in 2017, and the Ilo refinery produced 291,000 t of copper cathodes. Southern Copper Corp. stated that the loss of output resulting from the disruption was not significant (Southern Copper Corporation, 2018, p. 9, 28).

Glencore plc (Switzerland) restarted production at its Kamoto Mine, which had been idle since 2015, in the Democratic Republic of the Congo. The company expected to produce 150,000 t of electrowon copper in 2018 and 300,000 t in 2019 (Zuberi, 2017). In India, the Government-owned company Hindustan Copper Ltd. also reopened its Kendadih Mine, which had been shut down since 2000. Annual output was expected to be 225,000 t of ore with an average copper grade of approximately 1.7% (Luk, 2017).

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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	2016 ^p	2017			
			October	November	December	January– December
Production:						
Primary:						
Mine, recoverable	(2)	1,430,000	99,100	104,000 ^r	99,100	1,260,000
Smelter, total	(3)	563,000	29,300	14,500 ^r	37,800	470,000
Refinery:						
Electrolytic, domestic and foreign	(4)	561,000	32,500	21,100	30,400	482,000
Electrowon	(4)	615,000	46,600	46,600 ^r	47,600	557,000
Total	(4)	1,180,000	79,100	67,700 ^r	77,900	1,040,000
Secondary recoverable copper:³						
Refineries	(5)	46,300	3,280	3,240	3,250	40,100
Ingot makers ⁴	(5)	73,100	6,090	6,090	6,090	73,100
Brass and wire-rod mills	(5)	621,000	55,600	53,100	50,800	646,000
Foundries, etc. ⁴	(5)	47,200	3,940	3,940	3,940	47,200
Consumption:						
Apparent	(8)	1,890,000	142,000	146,000 ^r	145,000	1,870,000
Refined (reported)	(7)	1,810,000	149,000	140,000	134,000	1,780,000
Purchased copper-base scrap (gross weight)	(9)	917,000	83,200	80,500	78,200	976,000
Stocks at end of period:						
Total refined	(10)	223,000	273,000	270,000	269,000	269,000
Blister, etc.	(10)	14,400	13,600	16,700	12,600	12,600
Price, U.S. producers cathode (cents per pound) ⁵	(11)	224.873	314.747	314.717	314.825	285.393
Imports:⁶						
Ore and concentrate	(13)	67	--	3,380	4	14,100
Refined	(13)	708,000	76,500	65,200	58,400	813,000
Exports:⁶						
Ore and concentrate	(14)	331,000	20,000	26,000	15,800	237,000
Refined	(14)	134,000	5,210	4,400	4,810	94,200

^pPreliminary. ^rRevised. -- Zero.

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 2015 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
2016: ^P						
January–November	892,000	426,000	1,320,000	567,000	782,000	1,350,000
December	76,600	35,300	112,000	47,900	66,600	115,000
January–December	969,000	461,000	1,430,000	615,000	848,000	1,460,000
2017:						
January	71,000	40,200	111,000	46,800	66,900	114,000
February	64,200	34,500	98,700	41,600	59,400	101,000
March	77,500	36,800	114,000	49,000	67,900	117,000
April	72,500	36,500	109,000	45,600	66,000	112,000
May	75,100	31,900	107,000	48,600	60,900	109,000
June	71,900	37,100	109,000	46,600	64,700	111,000
July	73,500	30,600	104,000	44,900	61,600	107,000
August	71,200	30,500	102,000	46,900	57,000	104,000
September	75,000	24,200	99,200	46,700	55,000	102,000
October	66,900	32,200	99,100	46,600	54,800	101,000
November	72,800	30,900 ^r	104,000 ^r	46,600 ^r	59,500 ^r	106,000 ^r
December	75,000	24,000	99,100	47,600	54,000	102,000
January–December	867,000	390,000	1,260,000	557,000	728,000	1,290,000

^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
2016: ^P	
January–November	508,000
December	55,000
January–December	563,000
2017:	
January	48,900
February	47,800
March	52,200
April	40,700
May	20,100
June	37,100
July	45,800
August	47,200
September	49,000
October	29,300
November	14,500 ^r
December	37,800
January–December	470,000

^PPreliminary. ^rRevised.

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		
2016: ^P					
January–November	519,000	567,000	1,090,000	43,000	1,130,000
December	42,900	47,900	90,800	3,330	94,100
January–December	561,000	615,000	1,180,000	46,300	1,220,000
2017:					
January	51,100	46,800	97,900	3,240	101,000
February	48,200	41,600	89,800	4,090	93,900
March	53,200	49,000	102,000	3,240	105,000
April	42,300	45,600	87,800	3,230	91,000
May	32,800	48,600	81,400	3,390	84,800
June	33,100	46,600	79,800	3,280	83,000
July	42,400	44,900	87,300	3,220	90,600
August	49,200	46,900	96,100	3,340	99,400
September	45,700	46,700	92,400	3,310	95,700
October	32,500	46,600	79,100	3,280	82,400
November	21,100	46,600 ^r	67,700 ^r	3,240	70,900 ^r
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

^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	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2016: ^P									
January–November	18,200	24,700	14,200	52,800	537,000	32,400	33,400	9,880	723,000
December	1,680	1,650	1,290	4,800	49,100	2,860	3,040	898	65,300
January–December	19,900	26,400	15,400	57,600	586,000	35,200	36,500	10,800	788,000
2017:									
January	1,680	1,560	1,290	4,800	49,500	3,360	3,040	898	66,100
February	1,680	2,420	1,290	4,800	50,100	2,940	3,040	898	67,100
March	1,680	1,560	1,290	4,800	52,000	3,110	3,040	898	68,400
April	1,680	1,550	1,290	4,800	51,300	3,110	3,040	898	67,600
May	1,680	1,710	1,290	4,800	52,000	3,140	3,040	898	68,600
June	1,680	1,600	1,290	4,800	51,300	3,070	3,040	898	67,700
July	1,680	1,540	1,290	4,800	50,700	3,010	3,040	898	67,000
August	1,680	1,660	1,290	4,800	52,100	3,360	3,040	898	68,800
September	1,680	1,630	1,290	4,800	49,200	2,870	3,040	898	65,400
October	1,680	1,600	1,290	4,800	52,200	3,350	3,040	898	68,900
November	1,680	1,560	1,290	4,800	49,900	3,110	3,040	898	66,300
December	1,680	1,570	1,290	4,800	48,300	2,500	3,040	898	64,000
January–December	20,100	20,000	15,400	57,600	609,000	36,900	36,500	10,800	806,000

^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 2015 annual data.

⁴Does not include an estimate, based on reported 2015 annual data, of 3,050 tons per month from new scrap and 2,510 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
2016: ^P						
January–November	807,000	1,230,000	808,000	1,220,000	28,300	28,200
December	72,300	94,300	72,100	97,700	28,500	24,800
January–December	880,000	1,320,000	880,000	1,320,000	28,500	24,800
2017:						
January	73,500	114,000	72,900	117,000	29,100	22,200
February	72,800	105,000	73,100	98,000	28,900	29,000
March	74,200	117,000	74,400	120,000	28,600	25,300
April	72,200	112,000	72,800	104,000	28,000	33,000
May	74,700	112,000	74,500	117,000	28,300	28,500
June	73,300	115,000	73,000	117,000	28,600	26,400
July	73,000	97,200	73,200	97,400	28,400	26,700
August	75,000	111,000	74,200	112,000	29,300	25,800
September	74,000	108,000	73,600	103,000	29,700	30,300
October	74,100	107,000	74,100	109,000	29,700	28,500
November	72,500	100,000	72,800	100,000	29,300	28,300
December	72,300	94,100	71,800	92,800	29,800	29,700
January–December	882,000	1,290,000	880,000	1,290,000	29,800	29,700

^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
2016: ^P				
January–November	387,000	1,230,000	64,000	1,680,000
December	33,800	93,200	5,820	133,000
January–December	421,000	1,320,000	69,800	1,810,000
2017:				
January	34,600	113,000	5,820	154,000
February	34,800	114,000	5,820	154,000
March	35,300	116,000	5,820	157,000
April	34,200	112,000	5,820	152,000
May	35,300	113,000	5,820	154,000
June	34,700	114,000	5,820	155,000
July	35,000	96,300	5,820	137,000
August	35,300	98,600	5,820	140,000
September	35,200	108,000	5,820	149,000
October	35,400	107,000	5,820	149,000
November	34,700	99,900	5,820	140,000
December	34,900	93,400	5,820	134,000
January–December	420,000	1,290,000	69,800	1,780,000

^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 2015 annual data.

TABLE 8
U.S. APPARENT CONSUMPTION OF COPPER¹

(Metric tons)

Period	Refined copper production	Copper in old scrap ²	Refined general imports ³	Refined exports ³	Stock change during period	Apparent consumption
2016: ^P						
January–November	1,090,000	147,000	642,000	126,000	-663	1,750,000
December	90,800	12,700	59,400	8,040	13,200	142,000
January–December	1,180,000	160,000	701,000	134,000	12,600	1,890,000
2017:						
January	97,900	13,100	72,400	12,300	18,000	153,000
February	89,800	13,600	53,500	9,100	1,420	146,000
March	102,000	12,900	73,800	9,760	5,800	173,000
April	87,800	12,900	51,400	12,200	-5,100	145,000
May	81,400	13,100	63,200	9,230	-25,200	174,000
June	79,800	12,900	79,500	6,140	1,300	165,000
July	87,300	12,800	91,800	7,140	2,900	182,000
August	96,100	13,200	54,300	6,680	25,600	131,000
September	92,400	12,700	85,400	7,190	11,400	172,000
October	79,100	13,200	69,600	5,210	14,200	142,000
November	67,700 ^r	12,900	66,500	4,400	-3,740	146,000 ^r
December	77,900	12,300	58,900	4,810	-371	145,000
January–December	1,040,000	155,000	820,000	94,200	46,200	1,870,000

^PPreliminary. ^rRevised.

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

²Includes 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 2015 annual data.

³Source: 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	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2016: ^P									
January–November	18,800	20,900	31,800	60,000	624,000	33,400	40,200	10,900	840,000
December	1,730	1,590	2,890	5,460	57,100	2,990	3,660	992	76,400
January–December	20,500	22,400	34,700	65,500	681,000	36,400	43,900	11,900	917,000
2017:									
January	1,820	4,630	2,890	5,460	57,500	3,490	3,660	992	80,400
February	1,820	4,630	2,890	5,460	58,000	3,040	3,660	992	80,500
March	1,820	4,630	2,890	5,460	60,100	3,240	3,660	992	82,700
April	1,820	4,630	2,890	5,460	59,300	3,190	3,660	992	81,900
May	1,820	4,630	2,890	5,460	60,100	3,250	3,660	992	82,800
June	1,820	4,690	2,890	5,460	59,300	3,180	3,660	992	82,000
July	1,820	4,630	2,890	5,460	58,700	3,070	3,660	992	81,200
August	1,820	4,630	2,890	5,460	60,100	3,450	3,660	992	83,000
September	1,820	4,730	2,890	5,460	57,100	2,920	3,660	992	79,600
October	1,820	4,700	2,890	5,460	60,200	3,460	3,660	992	83,200
November	1,820	4,650	2,890	5,460	57,900	3,180	3,660	992	80,500
December	1,820	4,660	2,890	5,460	56,200	2,560	3,660	992	78,200
January–December	21,900	55,800	34,700	65,500	704,000	38,000	43,900	11,900	976,000

^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 2015 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					LME ⁵	Total refined
		Refineries ³	Wire-rod mills ³	Brass mills ³	Other ⁴	Comex		
2016: ^P								
December	14,400	4,190	26,700	7,380	5,730	80,100	98,900	223,000
2017:								
January	11,700	9,250	30,300	7,430	5,730	92,600	95,700	241,000
February	13,200	8,010	27,700	7,330	5,730	114,000	79,600	242,000
March	13,500	3,860	34,400	7,050	5,730	130,000	67,200	248,000
April	26,100	5,980	27,900	8,030	5,730	141,000	54,700	243,000
May	11,000	5,280	24,400	7,410	5,730	143,000	31,900	218,000
June	11,000	4,670	22,700	7,430	5,730	148,000	31,000	219,000
July	11,000	5,810	21,500	7,920	5,730	155,000	25,800	222,000
August	7,350	5,610	27,800	7,740	5,730	165,000	35,900	248,000
September	12,100	8,740	28,600	7,440	5,730	177,000	31,300	259,000
October	13,600	5,620	32,600	7,650	5,730	187,000	34,800	273,000
November	16,700	4,700	35,700	8,190	5,730	190,000	25,600	270,000
December	12,600	5,840	30,900	8,100	5,730	192,000	27,100	269,000

^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 2015 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
2016:			
December	261.183	256.683	256.997
January–December	224.873	219.727	220.571
2017:			
January	266.363	261.863	260.225
February	274.051	269.426	269.484
March	269.122	264.122	264.040
April	263.626	258.626	258.428
May	259.902	254.902	253.608
June	265.143	260.193	258.506
July	277.821	272.883	271.162
August	300.928	295.878	293.822
September	303.468	298.405	298.585
October	314.747	309.559	308.299
November	314.717	309.417	309.581
December	314.825	309.825	308.471
January–December	285.393	280.425	279.518

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
2016:				
December	248.38	224.48	181.98	146.00
January–December	218.01	197.52	155.05	132.17
2017:				
January	254.78	228.38	178.80	144.65
February	261.50	234.00	186.97	148.00
March	256.70	228.57	183.67	146.30
April	251.10	225.95	179.50	145.00
May	249.41	225.32	177.23	144.36
June	255.59	232.27	175.95	144.00
July	267.82	243.18	179.50	146.00
August	285.74	260.67	190.07	151.17
September	286.25	261.35	200.30	154.45
October	297.34	270.18	204.95	156.18
November	295.42	267.25	208.00	157.50
December	298.58	271.05	206.00	157.00
January–December	271.69	245.68	189.25	149.55

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 concentrate			Matte, ash, and precipitates			Blister and anodes			Refined		
	2016	2017		2016	2017		2016	2017		2016	2017	
		December	January– December		December	January– December		December	January– December		December	January– December
Belgium	--	--	--	27	--	69	--	--	--	--	--	(2)
Canada	33	4	25	355	--	284	2	--	--	193,000	17,900	209,000
Chile	--	--	--	--	--	--	--	--	--	354,000	31,500	486,000
China	--	--	--	--	--	7	(2)	--	--	76	4	48
Congo (Kinshasa)	--	--	--	--	--	--	--	--	--	21,100	229	9,190
Finland	--	--	--	--	--	--	175	32	359	110	--	4
Germany	--	--	--	--	--	7	(2)	(2)	(2)	1,830	243	2,310
India	3	--	--	--	--	--	--	--	--	1,210	--	224
Japan	--	--	--	109	--	76	3	(2)	2	4,090	403	4,630
Mexico	3	--	14,000	41	--	25	--	--	--	102,000	4,940	75,200
Netherlands	--	--	--	69	--	166	(2)	--	3	(2)	--	3
Peru	--	--	--	--	--	--	--	--	--	24,800	2,010	18,000
Other	27	--	9	205	303	697	93	18	140	4,100	1,190	7,890
Total	67	4	14,100	806	303	1,330	274	51	504	708,000	58,400	813,000

-- 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.

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

(Metric tons, copper content)

Country or locality	Ore and concentrate			Matte, ash, and precipitates			Blister and anodes			Refined		
	2017			2017			2017			2017		
	2016	December	January–December	2016	December	January–December	2016	December	January–December	2016	December	January–December
Belgium	(2)	--	--	5,700	111	4,860	679	22	447	--	--	(2)
Canada	25,800	1,170	23,500	12,300	1,980	17,200	2,050	503	3,290	32,400	226	18,300
China	57,100	5,630	70,800	52	74	366	485	30	249	32,600	84	10,100
Germany	--	--	--	204	--	564	517	20	215	21	--	14
Hong Kong	--	--	--	36	--	--	1,070	59	1,110	--	--	1
Italy	--	--	--	--	--	35	377	80	325	240	1	14
Japan	20,400	45	1,540	180	--	182	453	--	80	157	(2)	16
Korea, Republic of	138	--	99	352	55	383	1,420	190	1,780	85	--	2,460
Mexico	226,000	8,960	141,000	--	--	--	99	3	102	67,700	4,500	62,600
Singapore	--	--	--	--	--	--	42	--	40	13	--	5
Spain	--	--	--	40	--	124	266	--	121	4	--	1
Switzerland	--	--	--	--	--	--	24	1	31	5	--	5
Taiwan	--	--	--	359	54	144	60	--	122	62	--	19
Other	853	4	138	883	57	600	1,970	137	1,770	518	8	661
Total	331,000	15,800	237,000	20,100	2,340	24,400	9,510	1,050	9,690	134,000	4,810	94,200

-- 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.

TABLE 15
U.S. COPPER SCRAP IMPORTS¹

(Metric tons, gross weight)

Country or locality	Unalloyed			Alloyed		
	2016	2017		2016	2017	
		December	January– December		December	January– December
Canada	13,300	1,090	18,900	52,200	5,610	81,900
Chile	41	--	57	211	14	301
Colombia	259	78	598	1,180	55	1,360
Costa Rica	344	98	636	1,030	99	1,060
Guatemala	--	3	36	326	38	446
Honduras	102	9	61	357	16	352
Mexico	12,900	841	10,400	34,400	2,720	35,300
Nicaragua	--	18	38	264	55	321
Other	2,170	581	4,630	6,180	887	8,780
Total	29,100	2,710	35,300	96,100	9,490	130,000

-- 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. COPPER SCRAP EXPORTS¹

(Metric tons, gross weight)

Country or locality	Unalloyed							Alloyed				
	2016	2017						2016	2017			
		No. 1		No. 2		Other			Segregated		Unsegregated	
		December	January– December	December	January– December	December	January– December		December	January– December	December	January– December
Belgium	9,030	263	3,890	78	2,000	122	1,980	8,390	--	1,410	857	7,150
Canada	23,400	--	--	--	--	2,550	43,700	51,200	--	--	1,580	49,200
China	284,000	10,200	125,000	10,500	103,000	10,700	122,000	376,000	6,230	101,000	13,800	234,000
Germany	24,900	1,370	15,000	242	3,630	14	1,080	8,130	486	2,010	1,000	8,910
Hong Kong	6,550	93	2,150	140	1,290	44	3,510	17,100	1,150	10,700	1,180	21,100
India	1,670	73	2,230	24	618	130	1,870	23,000	825	16,000	374	4,090
Japan	6,460	123	1,760	833	6,330	44	3,760	8,730	58	685	815	8,620
Korea, Republic of	17,000	1,270	10,900	124	921	553	5,250	10,300	817	7,310	966	7,110
Mexico	1,660	332	3,380	--	--	4	124	950	4	52	41	455
Netherlands	12,100	52	2,240	199	1,000	381	4,020	1,170	--	57	63	1,060
Spain	182	81	516	6	667	20	40	7,770	468	1,420	418	4,860
Taiwan	8,290	261	3,870	120	1,180	78	550	1,740	40	807	764	2,090
Thailand	121	44	200	--	--	(2)	4	1,050	99	313	82	159
Other	16,100	689	7,970	170	1,870	299	2,080	16,900	387	2,850	2,230	16,500
Total	411,000	14,900	179,000	12,400	122,000	15,000	190,000	532,000	10,600	145,000	24,100	365,000

-- 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.