

Mineral Industry Surveys

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COPPER IN SEPTEMBER 2018

In September 2018, domestic mine production of recoverable copper was 100,000 metric tons (t). The average daily mine production was 3,340 t, a decrease of 4% from that in August and a slight increase from that in September 2017 (fig. 1). Year-to-date recoverable mine production through September 2018 was 912,000 t, a decline of 5% relative to the same period in 2017 (table 2).

Total refinery production in the United States was 87,000 t in September 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 2,900 t, a decrease of 7% compared with that in August and 9% less than that in September 2017 (fig. 1). Year-to-date refinery production through September 2018 was 826,000 t, a slight decline relative to the same period in 2017 (table 4).

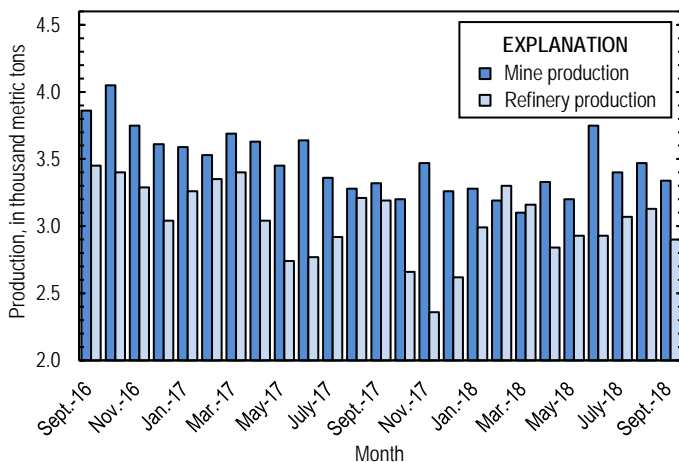


Figure 1. Average daily U.S. copper mine (recoverable) and refinery production from September 2016 through September 2018.

Smelter production in September 2018 was 40,800 t. The average daily smelter output was 1,360 t, 9% lower than that in August and a decline of 17% compared with the daily average in September 2017. Year-to-date smelter production through

September 2018 was 401,000 t, 3% greater than that through September 2017 (table 3).

Prices

The average September 2018 COMEX spot copper price was \$2.69 per pound, unchanged from that in August and 10% lower than \$2.98 per pound in September 2017 (fig. 2, table 11). The average price of New York dealers' number 2 scrap in September 2018 was \$1.78 per pound, a decline of 5% from \$1.88 per pound in August and 11% less than \$2.00 per pound in September 2017 (fig. 2, table 12).

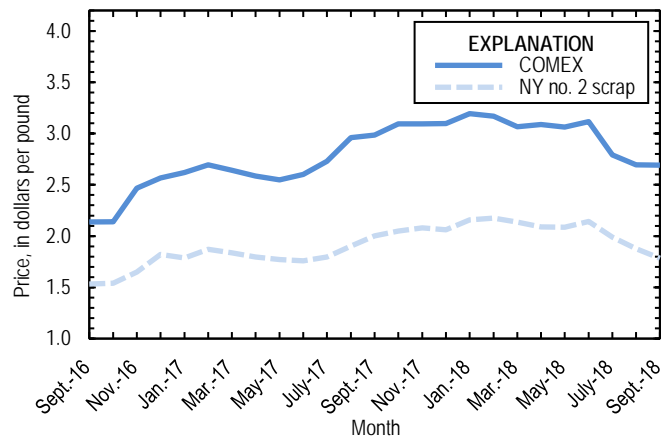


Figure 2. Monthly average COMEX copper price and New York no. 2 copper scrap price from September 2016 through September 2018. Sources: American Metal Market, Platts Metals Week.

Stocks

Refined copper stocks in the United States totaled 316,000 t at the end of September 2018, a decrease of 9% from those in August and 24% more than those in September 2017. COMEX stocks fell by 9%, stocks at wire-rod mills declined by 18%, and London Metal Exchange Ltd. stocks in U.S. warehouses were 7% lower compared with those at the end of August (fig. 3, table 10).

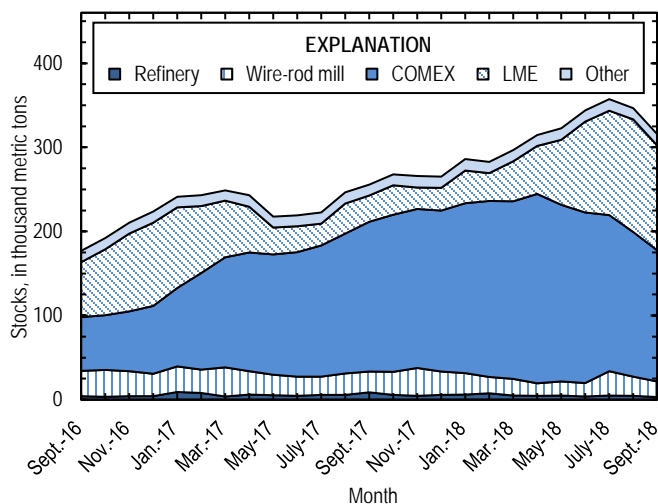


Figure 3. Monthly domestic refined copper stocks, by type, from September 2016 through September 2018. Sources: American Metal Market, London Metal Exchange Ltd., and U.S. Geological Survey.

Industry News

The U.S. Department of Agriculture canceled an environmental review of the potential effects of mining in the Superior National Forest of Minnesota, which had been blocking mineral exploration in the area (Decena, 2018). The decision would allow Twin Metals LLC (St. Paul, MN) to resume exploration and development activities for a polymetallic mine near Ely in Northeast Minnesota.

MMG Ltd. (Australia) announced that production at the Las Bambas Mine in Peru would be affected by instabilities in the walls of the open pit. The company anticipated yearend 2018 production to be in the range of 375,000 to 395,000 t of copper in concentrates, down from a previously announced forecast of 410,000 to 430,000 t (MMG Ltd., 2018a). Las Bambas was one of the leading global copper mines in 2017 and produced 454,000 t, accounting for about 2% of global production (MMG Ltd., 2018b, p. 23).

References Cited

Decena, Karl. 2018. Minn. forests reopened to mining: S&P Global Market Intelligence, September 9. (Accessed September 14, 2018, via <http://www.snl.com/>.)

MMG Ltd., 2018a, Las Bambas update: Melbourne, Victoria, Australia, MMG Ltd. media release, September 18. (Accessed February 14, 2019, at http://www.mmg.com/en/Investors-and-Media/News/2018/09/18/180918_Change-to-Las-Bambas-Production-guidance.aspx.)

MMG Ltd., 2018b, MMG annual report 2017: Melbourne, Victoria, Australia, MMG Ltd., 156 p. (Accessed February 14, 2019, at http://www.mmg.com/en/Investors-and-Media/Reports-and-Presentations/~/_media/Files/Investors%20and%20Media/2018/MMG_Annual%20Report%202017.pdf.)

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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			
			July	August	September	January– September
Production:						
Primary:						
Mine, recoverable	(2)	1,260,000	105,000	108,000 ^r	100,000	912,000
Smelter, total	(3)	470,000	47,500	46,100	40,800	401,000
Refinery:						
Electrolytic, domestic and foreign	(4)	482,000	45,900	48,400	40,200	396,000
Electrowon	(4)	557,000	46,000	45,400	43,000	400,000
Total	(4)	1,040,000	91,900	93,900	83,200	796,000
Secondary recoverable copper:³						
Refineries	(5)	40,100	3,390	3,220	3,810	30,100
Ingot makers ⁴	(5)	57,600	4,800	4,800	4,800	43,200
Brass and wire-rod mills	(5)	645,000	54,700	54,800	54,700	487,000
Foundries, etc. ⁴	(5)	46,800	3,900	3,900	3,900	35,100
Consumption:						
Apparent	(8)	1,870,000	139,000 ^r	149,000	173,000	1,340,000
Refined (reported)	(7)	1,800,000	144,000 ^r	161,000 ^r	162,000	1,370,000
Purchased copper-base scrap (gross weight)	(9)	924,000	78,100	78,000	78,600	697,000
Stocks at end of period:						
Total refined	(10)	265,000	357,000	347,000	316,000	316,000
Bliester, etc.	(10)	12,600	9,670	9,010	9,110	9,110
Price, U.S. producers cathode (cents per pound) ⁵	(11)	285.393	285.626	276.087	276.107	304.636
Imports:⁶						
Ore and concentrates	(13)	14,000	--	--	1,510	24,400
Refined	(13)	813,000	59,500	59,700	67,300	617,000
Exports:⁶						
Ore and concentrates	(14)	237,000	15,900	22,000	24,400	178,000
Refined	(14)	94,200	11,300	15,700	15,600	110,000

^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 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						
January–September	652,000	303,000	955,000	417,000	559,000	976,000
September	75,000	24,500	99,500	46,700	55,000	102,000
October	66,900	32,400	99,300	46,600	54,800	101,000
November	72,800	31,200	104,000	46,600	59,700	106,000
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 ^r	27,700	89,200 ^r	40,500 ^r	50,700 ^r	91,300 ^r
March	68,200	27,800	96,000	44,300	53,700	98,000
April	65,400	34,600	100,000	43,200	58,800	102,000
May	69,300	29,800	99,100	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 ^r	38,600 ^r	108,000 ^r	45,400	64,600 ^r	110,000 ^r
September	63,000	37,200	100,000	43,000	59,500	103,000
January–September	603,000	309,000	912,000	400,000	531,000	931,000

^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
<u>2017:^P</u>	
January–September	389,000
September	49,000
October	29,300
November	14,500
December	37,800
January–December	<u>470,000</u>
<u>2018:</u>	
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
January–September	<u>401,000</u>

^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					
January–September	398,000	417,000	815,000	30,300	845,000
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	67,700	3,240	70,900
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	40,500 ^r	89,000	3,260	92,300
March	50,400	44,300	94,800	3,220	98,000
April	38,700	43,200	81,900	3,260	85,200
May	41,600	46,000	87,500	3,330	90,900
June	39,800	44,900	84,600	3,400	88,000
July	45,900	46,000	91,900	3,390	95,300
August	48,400	45,400	93,900	3,220	97,100
September	40,200	43,000	83,200	3,810	87,000
January–September	396,000	400,000	796,000	30,100	826,000

^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 ⁶	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2017: ^p									
January–September	15,100	15,200	7,200	36,000	458,000	28,000	27,500	7,610	595,000
September	1,680	1,630	800	4,000	49,200	2,870	3,060	845	64,100
October	1,680	1,600	800	4,000	52,200	3,350	3,060	845	67,600
November	1,680	1,560	800	4,000	49,900	3,110	3,060	845	65,000
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
January–September	15,100	15,000	7,200	36,000	459,000	28,100	27,500	7,610	596,000

⁶Estimated. ^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 3,120 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						
January–September	663,000	1,010,000	662,000	1,000,000	29,700	27,800
September	74,000	115,000	73,600	109,000	29,700	27,800
October	74,100	117,000	74,100	118,000	29,700	26,700
November	72,500	106,000	72,800	108,000	29,300	24,100
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 ^r	73,800	114,000	28,900	22,200 ^r
July	73,400	99,300 ^r	73,700	102,000 ^r	28,700	19,600 ^r
August	73,800	124,000 ^r	74,200	120,000 ^r	28,300	23,900 ^r
September	73,500	110,000	73,300	111,000	28,400	23,000
January–September	662,000	1,010,000	663,000	1,010,000	28,400	23,000

^PPreliminary. ^rRevised.

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				
January–September	314,000	1,000,000	45,600	1,360,000
September	35,200	115,000	5,070	156,000
October	35,400	118,000	5,070	159,000
November	34,700	106,000	5,070	145,000
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 ^r	5,070	146,000 ^r
July	34,800	104,000 ^r	5,070	144,000 ^r
August	35,100	121,000 ^r	5,070	161,000 ^r
September	35,100	122,000	5,070	162,000
January–September	314,000	1,010,000	45,600	1,370,000

^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						
January–September	815,000	109,000	624,000	79,800	32,200	1,440,000
September	92,400	11,800	84,400	7,170	9,220	172,000
October	79,100	12,300	70,600	5,210	12,300	144,000
November	67,700	12,000	66,500	4,400	-1,620	143,000
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	81,900	12,200	62,400	13,700	17,700	125,000
May	87,500	12,200	64,600	13,800	8,150	142,000
June	84,600	12,000	66,200	11,200	21,000 ^r	131,000 ^r
July	91,900	12,100	59,500	11,300	13,500 ^r	139,000 ^r
August	93,900	12,100	48,300	15,700	-10,200 ^r	149,000
September	83,200	12,300	62,300	15,600	-30,900	173,000
January–September	796,000	109,000	597,000	110,000	50,700	1,340,000

^PPreliminary. ^rRevised.

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

²Includes electrolytic 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 ^e	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2017: ^p									
January–September	15,600	14,400	18,600	46,200	530,000	28,800	32,900	8,600	695,000
September	1,730	1,690	2,060	5,130	57,100	2,920	3,660	956	75,200
October	1,730	1,650	2,060	5,130	60,200	3,460	3,660	956	78,900
November	1,730	1,610	2,060	5,130	57,900	3,180	3,660	956	76,200
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
January–September	15,600	15,500	18,600	46,200	531,000	28,900	32,900	8,600	697,000

^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 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								
September	12,100	8,740	24,600	7,440	5,470	178,000	31,300	256,000
October	13,600	5,620	27,400	7,650	5,470	187,000	34,800	268,000
November	16,700	4,700	32,900	8,190	5,470	189,000	25,600	266,000
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 ^r	7,980	5,470	203,000	108,000	344,000 ^r
July	9,670	4,980	28,700 ^r	8,180	5,470	186,000	124,000	357,000
August	9,010	4,600	22,600 ^r	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

^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 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:			
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
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
January–September	304.636	298.604	301.369

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:				
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
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
January–September	288.73	260.03	204.86	155.24

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	September	January–September	2017	September	January–September	2017	September	January–September	2017	September	January–September
Belgium	--	--	--	69	--	164	--	--	--	(4)	--	10,100
Bolivia	--	--	--	--	--	--	--	--	--	1,560	--	840
Brazil	--	--	--	--	--	--	--	--	--	3,580	--	297
Canada	6	--	40	284	41	385	--	--	(4)	209,000	14,200	135,000
Chile	--	--	--	--	--	--	--	--	--	486,000	46,600	391,000
China	--	--	8	33	--	2	--	--	--	50	13	67
Congo (Kinshasa)	--	--	--	--	--	--	--	--	--	9,190	--	3,380
Finland	--	--	--	--	--	--	359	40	226	4	--	--
Germany	--	--	--	7	--	--	(4)	--	(4)	2,310	20	722
India	--	--	--	--	--	--	--	--	--	224	(4)	(4)
Japan	--	--	--	76	4	4	2	--	2	4,630	319	2,930
Malaysia	--	--	--	--	--	--	126	--	54	--	--	--
Mexico	14,000	1,510	24,400	588	(4)	434	--	--	--	75,200	5,070	48,800
Netherlands	--	--	--	166	43	109	3	--	2	3	--	(4)
Peru	--	--	--	--	--	--	--	--	--	18,000	1,110	9,120
South Africa	--	--	--	--	--	--	--	--	--	1,510	--	963
Other	9	--	--	397	49	85	14	1	4	1,230	16	14,300
Total	14,000	1,510	24,400	1,620	137	1,180	504	41	288	813,000	67,300	617,000

-- 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	September	January– September	2017	September	January– September	2017	September	January– September	2017	September	January– September
Belgium	--	--	--	4,860	181	1,570	447	18	157	(4)	--	--
Canada	23,500	1,210	13,700	17,300	1,110	14,600	3,290	214	3,150	18,300	2,800	27,300
China	70,800	--	43,900	392	957	1,560	249	32	157	10,100	2,720	3,710
Germany	--	--	--	576	24	888	215	21	198	14	--	2
Hong Kong	--	--	--	--	--	--	1,110	--	379	1	--	(4)
India	1	--	--	(4)	--	25	730	73	475	15	2	8
Italy	--	--	1	73	--	10	325	1	216	14	(4)	21
Japan	1,540	--	48	189	--	115	80	--	36	16	3	14
Korea, Republic of	99	2,530	4,690	397	75	652	1,780	114	1,280	2,460	70	2,050
Mexico	141,000	9,530	104,000	99	1,120	1,120	102	7	74	62,600	9,930	76,800
Singapore	--	--	--	--	--	6	40	(4)	29	5	2	2
Spain	--	8,150	8,150	124	--	210	121	--	81	1	--	(4)
Switzerland	--	--	--	--	--	--	31	--	17	5	--	4
Taiwan	--	--	--	146	15	15	122	--	40	19	--	12
Vietnam	--	--	--	--	--	--	--	--	--	503	--	1
Other	137	2,990	3,590	1,090	178	1,230	1,040	40	519	142	28	324
Total	237,000	24,400	178,000	25,200	3,660	22,000	9,690	519	6,810	94,200	15,600	110,000

-- 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	September	January– September	2017	September	January– September
Canada	18,900	1,330	12,500	81,900	4,400	53,900
Chile	57	--	177	301	14	227
Colombia	598	--	327	1,360	70	782
Costa Rica	636	8	358	1,060	88	594
Guatemala	36	--	85	446	7	372
Honduras	61	1	3	352	45	353
Mexico	10,400	842	8,180	35,300	3,390	28,500
Nicaragua	38	--	19	321	--	225
Pakistan	694	19	567	--	--	--
Panama	1,440	28	907	790	49	510
Venezuela	958	--	2,360	1,870	17	577
Other	1,720	54	1,140	6,190	703	5,320
Total	35,500	2,290	26,600	130,000	8,780	91,300

-- 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	
		September	January– September	September	January– September	September	January– September		September	January– September	September	January– September
Belgium	7,870	892	4,490	1,410	5,930	366	2,530	8,560	163	510	1,090	6,660
Canada	43,800	--	--	--	--	4,250	40,100	49,700	--	--	3,580	27,400
China	352,000	1,320	61,700	1,820	61,100	1,920	60,300	336,000	484	34,000	562	40,900
Germany	19,700	1,080	11,800	325	3,170	71	1,130	10,900	1	2,180	928	7,890
Hong Kong	5,580	781	3,980	424	1,660	2,100	7,860	30,800	531	5,320	1,080	12,700
India	4,810	647	5,770	610	2,600	181	1,760	20,100	2,970	14,500	1,730	5,890
Japan	11,800	505	2,850	1,690	11,000	796	3,040	9,300	745	1,840	3,500	14,800
Korea, Republic of	17,200	2,390	16,800	937	4,480	1,390	6,540	14,100	1,260	6,440	1,110	8,300
Mexico	3,500	212	3,000	--	5	38	79	507	17	47	88	665
Netherlands	7,260	503	3,090	57	274	265	2,980	1,120	--	119	277	1,560
Pakistan	3,790	188	764	35	390	--	2	5,780	39	165	1,080	7,530
Spain	1,220	19	277	--	153	--	79	6,280	195	1,780	633	5,460
Taiwan	5,750	813	5,040	848	2,800	757	3,420	2,900	790	2,910	1,370	8,870
Thailand	204	40	1,140	40	419	--	1,480	472	19	542	121	9,770
Other	9,690	3,280	14,900	2,030	11,000	2,970	21,600	13,600	2,900	16,400	7,380	34,800
Total	494,000	12,700	136,000	10,200	105,000	15,100	153,000	510,000	10,100	86,800	24,500	193,000

-- Zero.

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

Source: U.S. Census Bureau.