

# Mineral Industry Surveys

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## COPPER IN OCTOBER 2018

In October 2018, domestic mine production of recoverable copper was 101,000 metric tons (t). The average daily mine production was 3,260 t, a slight decrease from that in September and a slight increase from that in October 2017 (fig. 1). Year-to-date recoverable mine production through October 2018 was 1.01 million metric tons (Mt), a decline of 4% relative to the same period in 2017 (table 2).

Total refinery production in the United States was 93,400 t in October 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 3,010 t, an increase of 4% compared with that in September and 13% more than that in October 2017 (fig. 1). Year-to-date refinery production through October 2018 was 920,000 t, a slight decline relative to the same period in 2017 (table 4).

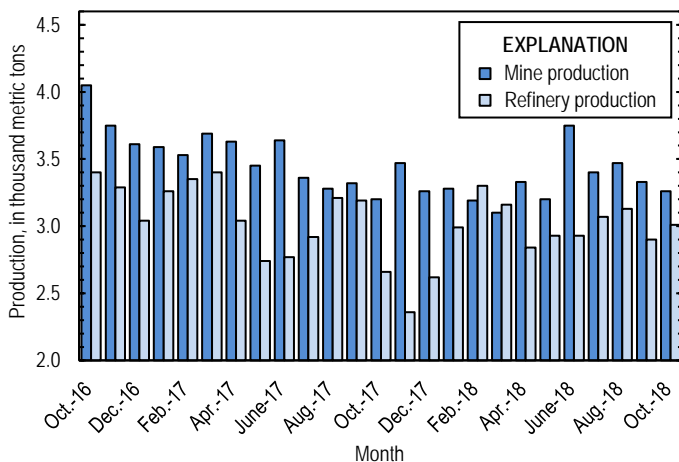


Figure 1. Average daily U.S. copper mine (recoverable) and refinery production from October 2016 through October 2018.

Smelter production in October 2018 was 48,200 t. The average daily smelter output was 1,560 t, 14% higher than that in September and an increase of 65% compared with the daily average in October 2017, when one U.S. smelter was closed temporarily. Year-to-date smelter production through October

2018 was 450,000 t, 8% greater than that through October 2017 (table 3).

**Prices**

The average October 2018 COMEX spot copper price was \$2.76 per pound, slightly higher than \$2.69 per pound in September and 11% lower than \$3.10 per pound in October 2017 (fig. 2, table 11). The average price of New York dealers' number 2 scrap in October 2018 was \$1.88 per pound, an increase of 5% from \$1.78 per pound in September and 9% less than \$2.05 per pound in October 2017 (fig. 2, table 12).

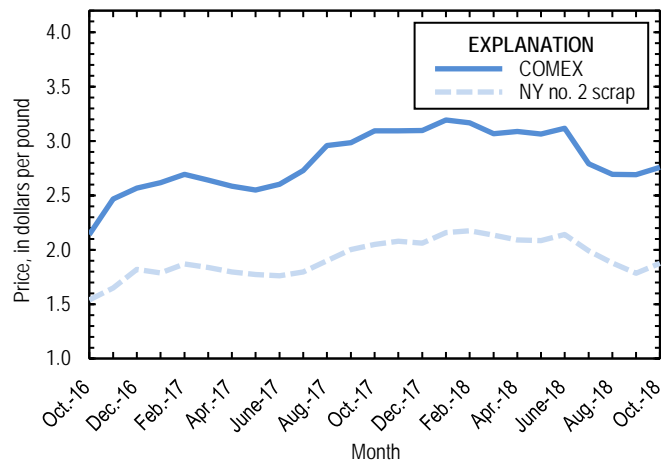


Figure 2. Monthly average COMEX copper price and New York no. 2 copper scrap price from October 2016 through October 2018. Sources: American Metal Market, Platts Metals Week.

**Stocks**

Refined copper stocks in the United States fell for the third consecutive month and totaled 283,000 t at the end of October 2018, a decrease of 10% from those in September and 6% more than those in October 2017. COMEX stocks fell by 9%, stocks at wire-rod mills increased by 8%, and London Metal Exchange Ltd. stocks in U.S. warehouses declined by 17% compared with those at the end of September (fig. 3, table 10).

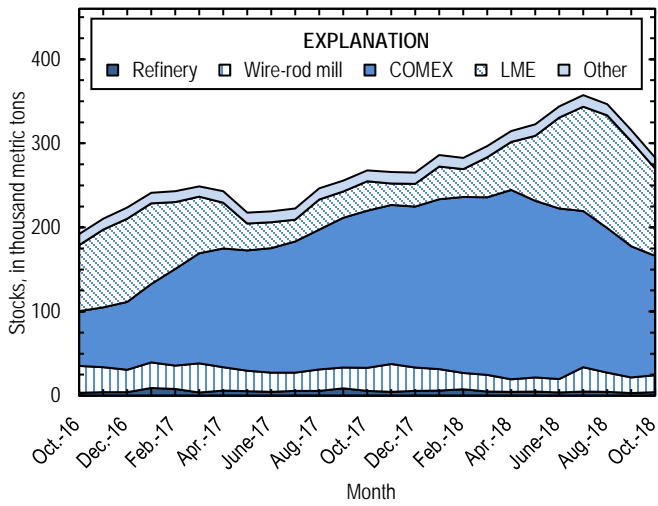


Figure 3. Monthly domestic refined copper stocks, by type, from October 2016 through October 2018. Sources: American Metal Market, London Metal Exchange Ltd., and U.S. Geological Survey.

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TABLE 1  
SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES<sup>1</sup>

(Metric tons of copper content, unless otherwise specified)

	Source table <sup>2</sup>	2017 <sup>P</sup>	2018			
			August	September	October	January– October
<b>Production:</b>						
<b>Primary:</b>						
Mine, recoverable	(2)	1,260,000	108,000	99,800 <sup>r</sup>	101,000	1,010,000
Smelter, total	(3)	470,000	46,100	40,800	48,200	450,000
<b>Refinery:</b>						
Electrolytic, domestic and foreign	(4)	482,000	48,400	40,200	46,100	442,000
Electrowon	(4)	557,000	45,400	43,000	43,100	443,000
Total	(4)	1,040,000	93,900	83,200	89,200	886,000
<b>Secondary recoverable copper:<sup>3</sup></b>						
Refineries	(5)	40,100	3,220	3,810	4,180	34,300
Ingot makers <sup>4</sup>	(5)	57,600	4,800	4,800	4,800	48,000
Brass and wire-rod mills	(5)	645,000	54,800	54,700	56,100	543,000
Foundries, etc. <sup>4</sup>	(5)	46,800	3,900	3,900	3,900	39,000
<b>Consumption:</b>						
Apparent	(8)	1,870,000	149,000	173,000	159,000	1,500,000
Refined (reported)	(7)	1,800,000	161,000	162,000	152,000	1,520,000
Purchased copper-base scrap (gross weight)	(9)	924,000	78,000	78,600	79,400	777,000
<b>Stocks at end of period:</b>						
Total refined	(10)	265,000	347,000	316,000	283,000	283,000
Blister, etc.	(10)	12,600	9,010	9,110	8,940	8,940
Price, U.S. producers cathode (cents per pound) <sup>5</sup>	(11)	285.393	276.087	276.107	282.498	302.422
<b>Imports:<sup>6</sup></b>						
Ore and concentrates	(13)	14,000	--	1,510	2,380	26,800
Refined	(13)	813,000	59,700	67,300	64,700	682,000
<b>Exports:<sup>6</sup></b>						
Ore and concentrates	(14)	237,000	22,000	24,400	10,800	188,000
Refined	(14)	94,200	15,700	15,600	31,000	141,000

<sup>P</sup>Preliminary. <sup>r</sup>Revised. -- Zero.

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

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

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

<sup>4</sup>Estimated based on the monthly average of 2016 annual data.

<sup>5</sup>Source: Platts Metals Week.

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

TABLE 2  
MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES<sup>1</sup>

(Metric tons)

Period	Recoverable copper			Contained copper		
	Arizona	Others <sup>2</sup>	Total	Electrowon	Concentrates <sup>3</sup>	Total
2017: <sup>p</sup>						
January–October	719,000	335,000	1,050,000	463,000	614,000	1,080,000
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	27,700	89,200	40,500	50,700	91,300
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	38,600	108,000	45,400	64,600	110,000
September	63,000	36,800 <sup>r</sup>	99,800 <sup>r</sup>	43,000	59,100 <sup>r</sup>	102,000 <sup>r</sup>
October	64,300	36,900	101,000	43,100	60,400	103,000
January–October	667,000	345,000	1,010,000	443,000	591,000	1,030,000

<sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

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

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

TABLE 3  
COPPER PRODUCED AT SMELTERS IN  
THE UNITED STATES<sup>1,2</sup>

(Metric tons, copper content)

Period	Anode production
<b>2017:<sup>P</sup></b>	
January–October	418,000
October	29,300
November	14,500
December	37,800
January–December	470,000
<b>2018:</b>	
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
January–October	450,000

<sup>P</sup>Preliminary.

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

<sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 4  
 PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY<sup>1</sup>

(Metric tons)

Period	Primary materials			Scrap	Total refined
	Electrolytically refined <sup>2</sup>	Electrowon	Total		
2017: <sup>P</sup>					
January–October	430,000	463,000	894,000	33,600	927,000
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	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
October	46,100	43,100	89,200	4,180	93,400
January–October	442,000	443,000	886,000	34,300	920,000

<sup>P</sup>Preliminary.

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

<sup>2</sup>From domestic and foreign source materials.

TABLE 5  
COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP<sup>1</sup>

(Metric tons, copper content)

Period	Refineries <sup>2</sup>		Ingot makers <sup>3</sup>		Brass and wire-rod mills		Foundries, etc. <sup>3</sup>		Total <sup>4</sup>
	New scrap <sup>6</sup>	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2017: <sup>p</sup>									
January–October	16,800	16,800	8,000	40,000	510,000	31,300	30,600	8,450	662,000
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
October	1,680	2,500	800	4,000	52,700	3,490	3,060	845	69,000
January–October	16,800	17,500	8,000	40,000	512,000	31,600	30,600	8,450	665,000

<sup>6</sup>Estimated. <sup>p</sup>Preliminary.

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

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

<sup>3</sup>Monthly data estimated based on the monthly average of 2016 annual data.

<sup>4</sup>Does 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 SEMIFABRICATES<sup>1</sup>

(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: <sup>P</sup>						
January–October	737,000	1,120,000	736,000	1,120,000	29,700	26,700
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	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
January–October	737,000	1,120,000	737,000	1,130,000	28,800	16,900

<sup>P</sup>Preliminary.

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



TABLE 7  
CONSUMPTION OF REFINED COPPER<sup>1</sup>

(Metric tons)

Period	Brass mills	Wire-rod mills	Other plants <sup>2</sup>	Total
2017: <sup>P</sup>				
January–October	350,000	1,120,000	50,700	1,520,000
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	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
January–October	349,000	1,120,000	50,700	1,520,000

<sup>P</sup>Preliminary.

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

<sup>2</sup>Monthly 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 COPPER<sup>1</sup>

(Metric tons)

Period	Refined copper production <sup>2</sup>	Copper in old scrap <sup>3</sup>	Refined general imports <sup>4</sup>	Refined exports <sup>4</sup>	Stock change during period	Apparent consumption
2017: <sup>P</sup>						
January–October	894,000	121,000	695,000	85,000	44,500	1,580,000
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	1,860,000
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	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
January–October	886,000	122,000	651,000	141,000	17,800	1,500,000

<sup>P</sup>Preliminary.

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

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

<sup>3</sup>Includes reported monthly production of copper from old scrap of copper-base, an estimate for annual reporters, and a monthly average of copper from non-copper-base materials based on 2016 annual data.

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

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

(Metric tons, gross weight)

Period	Smelters and refineries		Ingot makers <sup>2</sup>		Brass and wire-rod mills <sup>3</sup>		Foundries, etc. <sup>2</sup>		Total scrap used
	New scrap <sup>e</sup>	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2017: <sup>p</sup>									
January–October	17,300	16,100	20,600	51,300	590,000	32,300	36,600	9,560	774,000
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
October	1,730	1,590	2,060	5,130	60,700	3,580	3,660	956	79,400
January–October	17,300	17,000	20,600	51,300	592,000	32,500	36,600	9,560	777,000

<sup>e</sup>Estimated. <sup>p</sup>Preliminary.

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

<sup>2</sup>Monthly data estimated based on the monthly average of 2016 annual data.

<sup>3</sup>Consumption at brass and wire-rod mills assumed equal to receipts.

TABLE 10  
COPPER STOCKS AT END OF PERIOD<sup>1</sup>

(Metric tons)

Period	Crude copper <sup>2</sup>	Refined copper					Total refined	
		Refineries <sup>3</sup>	Wire-rod mills <sup>3</sup>	Brass mills <sup>3</sup>	Other <sup>4</sup>	Comex		LME <sup>5</sup>
2017: <sup>P</sup>								
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	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

<sup>P</sup>Preliminary.

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

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

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

<sup>4</sup>Monthly estimates based on 2016 annual data, comprising stocks at ingot makers, chemical plants, foundries, and miscellaneous manufacturers.

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

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

(Cents per pound)

Period	U.S. producers cathode <sup>1</sup>	Comex first position <sup>2</sup>	LME cash price Grade A
2017:			
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
October	282.498	275.935	281.918
January–October	302.422	296.337	299.424

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

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

Source: Platts Metals Week.

TABLE 12  
AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

Period	Brass mills No. 1 scrap	Refiners No. 2 scrap	Dealers (New York)	
			No. 2 scrap	Red brass turnings and borings
2017:				
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
October	267.65	239.80	187.50	141.00
January–October	286.62	258.00	203.13	153.81

Source: American Metal Market.

TABLE 13  
U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY CLASS<sup>1</sup>

(Metric tons, copper content)

Country or locality	Ore and concentrates <sup>2</sup>			Matte, ash, and precipitates <sup>3</sup>			Blister and anodes			Refined		
	2018			2018			2018			2018		
	2017	October	January– October	2017	October	January– October	2017	October	January– October	2017	October	January– October
Belgium	--	--	--	69	88	252	--	--	--	(4)	(4)	10,100
Bolivia	--	--	--	--	--	--	--	--	--	1,560	616	1,460
Brazil	--	--	--	--	--	--	--	--	--	3,580	--	297
Canada	6	--	40	284	114	499	--	--	(4)	209,000	13,300	148,000
Chile	--	--	--	--	--	--	--	--	--	486,000	41,400	433,000
China	--	--	8	33	--	2	--	--	--	50	34	101
Congo (Kinshasa)	--	--	--	--	--	--	--	--	--	9,190	--	3,380
Finland	--	--	--	--	--	--	359	49	275	4	--	--
Germany	--	--	--	7	--	--	(4)	(4)	(4)	2,310	241	963
India	--	--	--	--	--	--	--	--	--	224	--	(4)
Japan	--	--	--	76	6	10	2	(4)	2	4,630	413	3,340
Malaysia	--	--	--	--	--	--	126	--	54	--	--	--
Mexico	14,000	2,380	26,700	588	(4)	434	--	--	--	75,200	3,750	52,600
Netherlands	--	--	--	166	--	109	3	(4)	2	3	--	(4)
Peru	--	--	--	--	--	--	--	--	--	18,000	2,000	11,100
South Africa	--	--	--	--	--	--	--	--	--	1,510	--	963
Other	9	--	--	397	24	109	14	(4)	4	1,230	2,960	17,300
Total	14,000	2,380	26,800	1,620	232	1,420	504	49	337	813,000	64,700	682,000

-- Zero.

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

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

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

<sup>4</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 14  
U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS<sup>1</sup>

(Metric tons, copper content)

Country or locality	Ore and concentrates <sup>2</sup>			Matte, ash, and precipitates <sup>3</sup>			Blister and anodes			Refined		
	2018			2018			2018			2018		
	2017	October	January– October	2017	October	January– October	2017	October	January– October	2017	October	January– October
Belgium	--	--	--	4,860	238	1,810	447	36	193	(4)	--	--
Canada	23,500	1,480	15,100	17,300	1,520	16,100	3,290	675	3,830	18,300	2,420	29,700
China	70,800	3,590	47,500	392	18	1,580	249	20	178	10,100	18,800	22,600
Germany	--	--	--	576	113	1,000	215	--	198	14	--	2
Hong Kong	--	--	--	--	--	--	1,110	79	458	1	--	(4)
India	1	--	--	(4)	18	44	730	36	512	15	1	9
Italy	--	--	1	73	--	10	325	23	239	14	--	21
Japan	1,540	--	48	189	--	115	80	--	36	16	--	14
Korea, Republic of	99	--	4,690	397	35	687	1,780	94	1,370	2,460	--	2,050
Mexico	141,000	5,730	109,000	99	303	1,430	102	3	77	62,600	9,760	86,500
Singapore	--	--	--	--	--	6	40	(4)	30	5	--	2
Spain	--	--	8,150	124	--	210	121	--	81	1	(4)	1
Switzerland	--	--	--	--	--	--	31	--	17	5	--	4
Taiwan	--	--	--	146	--	15	122	--	40	19	--	12
Vietnam	--	--	--	--	--	--	--	--	--	503	--	1
Other	137	17	3,610	1,090	480	1,710	1,040	48	568	142	8	332
Total	237,000	10,800	188,000	25,200	2,730	24,700	9,690	1,020	7,820	94,200	31,000	141,000

-- Zero.

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

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

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

<sup>4</sup>Less than ½ unit.

Source: U.S. Census Bureau.



TABLE 15  
U.S. IMPORTS FOR CONSUMPTION OF COPPER SCRAP<sup>1</sup>

(Metric tons, gross weight)

Country or locality	Unalloyed			Alloyed		
	2018			2018		
	2017	October	January– October	2017	October	January– October
Canada	18,900	1,410	13,900	81,900	7,290	61,200
Chile	57	--	177	301	20	248
Colombia	598	--	327	1,360	10	792
Costa Rica	636	7	365	1,060	57	651
Guatemala	36	5	89	446	65	438
Honduras	61	--	3	352	50	403
Mexico	10,400	875	9,060	35,300	3,530	32,000
Nicaragua	38	--	19	321	--	225
Pakistan	694	--	567	--	--	--
Panama	1,440	71	979	790	53	564
Venezuela	958	174	2,540	1,870	14	591
Other	1,720	192	1,330	6,190	1,200	6,520
Total	35,500	2,740	29,300	130,000	12,300	104,000

-- Zero.

<sup>1</sup>Data 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 SCRAP<sup>1</sup>

(Metric tons, gross weight)

Country or locality	Unalloyed							Alloyed					
	2018							2018					
	2017	No. 1		No. 2		Other		2017	Segregated		Unsegregated		
		October	January– October	October	January– October	October	January– October		October	January– October	October	January– October	
Belgium	7,870	597	5,090	1,310	7,240	309	2,830	8,560	256	766	1,620	8,280	
Canada	43,800	--	--	--	--	4,880	45,000	49,700	--	--	4,880	32,300	
China	352,000	734	62,500	1,540	62,700	1,640	62,000	336,000	782	34,800	700	41,600	
Germany	19,700	2,020	13,900	601	3,770	115	1,240	10,900	--	2,180	1,100	9,000	
Hong Kong	5,580	528	4,510	389	2,050	1,950	9,810	30,800	579	5,900	1,310	14,000	
India	4,810	991	6,770	612	3,210	171	1,930	20,100	3,640	18,200	1,520	7,410	
Japan	11,800	795	3,640	2,650	13,700	552	3,590	9,300	1,160	3,000	2,120	16,900	
Korea, Republic of	17,200	3,470	20,200	1,150	5,640	1,510	8,050	14,100	1,680	8,120	2,010	10,300	
Mexico	3,500	402	3,400	--	5	(2)	80	507	1	48	106	771	
Netherlands	7,260	299	3,390	20	294	433	3,410	1,120	--	119	57	1,620	
Pakistan	3,790	231	996	33	422	5	8	5,780	77	242	2,960	10,500	
Spain	1,220	55	332	--	153	--	79	6,280	98	1,880	680	6,140	
Taiwan	5,750	940	5,980	819	3,620	344	3,770	2,900	873	3,790	1,870	10,700	
Thailand	204	--	1,140	20	439	--	1,480	472	--	542	119	9,890	
Other	9,690	3,990	18,900	1,640	12,700	3,420	25,000	13,600	3,840	20,300	8,450	43,200	
Total	494,000	15,100	151,000	10,800	116,000	15,300	168,000	510,000	13,000	99,800	29,500	223,000	

-- Zero.

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

<sup>2</sup>Less than ½ unit.

Source: U.S. Census Bureau.