

# Mineral Industry Surveys

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## COPPER IN SEPTEMBER 2019

In September 2019, mine production of recoverable copper in the United States was 112,000 metric tons (t). The average daily mine production was 3,740 t, a slight increase from that in August and 12% higher than that in September 2018 (fig. 1). Year-to-date mine output through September 2019 was 959,000 t, an increase of 5% relative to the same period in 2018 (table 2).

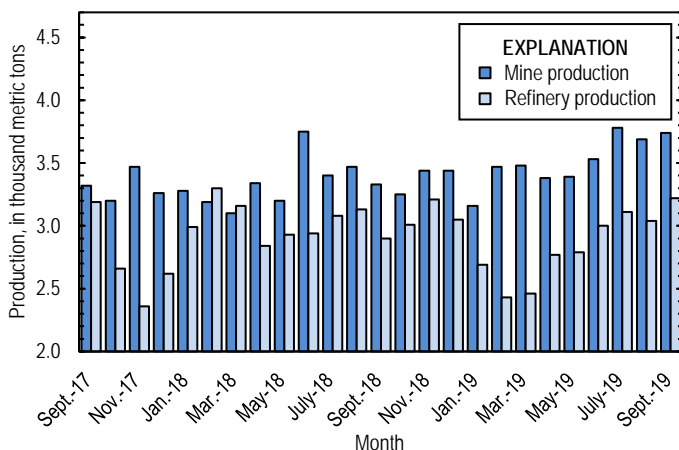


Figure 1. Average daily U.S. copper mine (recoverable) and refinery production from September 2017 through September 2019.

Smelter production in September 2019 was 43,200 t. The average daily smelter output was 1,440 t, a decrease of 9% from that in August and an increase of 6% compared with the daily average in September 2018. Year-to-date output through September 2019 was 355,000 t, 12% lower than that through September 2018 (table 3).

Total domestic refinery production was 96,700 t in September 2019; data for electrolytic and electrowon output, as well as refined production from scrap, are in table 4. The average daily refinery production was 3,220 t, an increase of 6% from that in August and 11% greater than that in September 2018 (fig. 1). Year-to-date refinery production through September 2019 was 774,000 t, a decline of 6% relative to the same period in 2018 (table 4). Smelter and refinery output through the third quarter

were adversely impacted by maintenance at Rio Tinto plc’s (United Kingdom) facility in Utah and the Freeport-McMoRan Inc. (Phoenix, AZ) smelter in Arizona (Freeport-McMoRan Inc., 2019, p. 3; Rio Tinto plc, 2019a, p. 5; 2019b, p. 6).

**Prices**

The average September 2019 COMEX spot copper price was \$2.60 per pound, a slight increase compared with \$2.57 per pound in August and 4% lower than \$2.69 per pound in September 2018 (fig. 2, table 11). The average price of New York dealers’ number 2 scrap in September 2019 was \$1.71 per pound, 6% less than \$1.82 per pound in August and a decline of 4% from \$1.78 per pound in September 2018 (fig. 2, table 12).

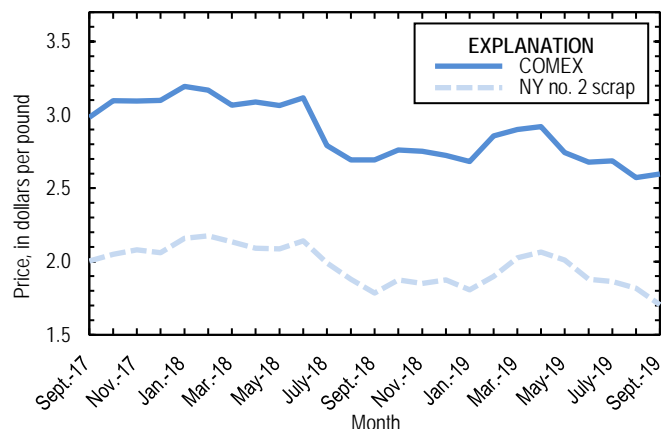


Figure 2. Monthly average COMEX copper price and New York no. 2 copper scrap price from September 2017 through September 2019. Sources: American Metal Market, Platts Metals Week.

**Stocks**

Refined copper stocks in the United States totaled 119,000 t at the end of September 2019, unchanged from those in August and 62% lower than those in September 2018. COMEX stocks fell by 10%, London Metal Exchange Ltd. stocks in U.S. warehouses increased slightly, and stocks at wire-rod mills were 14% higher than those at the end of August (fig. 3, table 10).

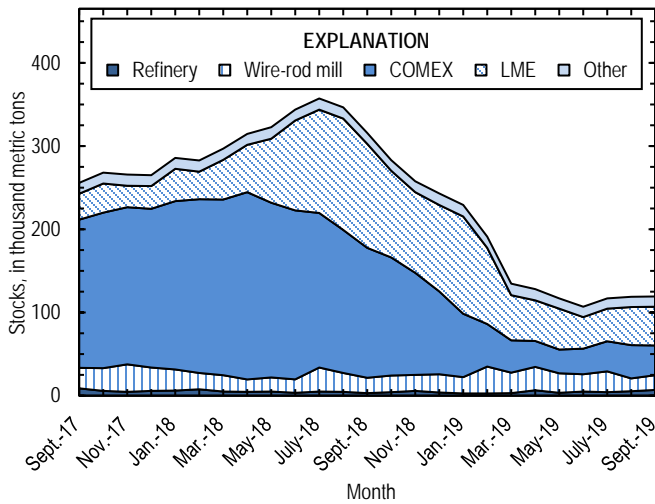


Figure 3. Monthly domestic refined copper stocks, by type, from September 2017 through September 2019. Sources: American Metal Market, London Metal Exchange Ltd., and U.S. Geological Survey.

## References Cited

- Freeport-McMoRan Inc., 2019, Freeport-McMoRan reports first-quarter 2019 results: Phoenix, AZ, Freeport-McMoRan Inc. news release, April 25, 26 p. (Accessed September 12, 2019, at [https://s22.q4cdn.com/529358580/files/doc\\_news/2019/FCX\\_190425.pdf](https://s22.q4cdn.com/529358580/files/doc_news/2019/FCX_190425.pdf).)
- Rio Tinto plc, 2019a, Rio Tinto releases first quarter production results: London, United Kingdom, Rio Tinto plc media release, April 16, 25 p. (Accessed April 19, 2019, at <https://mc-56397411-4872-452d-b48e-428890-cdn-endpoint.azureedge.net/-/media/Content/Documents/Invest/Financial-news-and-performance/Production/RT-First-Quarter-Operations-Review-2019-pdf.pdf?rev=7c1a6a92ca474881afd64157f34f1a38>.)
- Rio Tinto plc, 2019b, Rio Tinto releases third quarter production results: London, United Kingdom, Rio Tinto plc media release, October 16, 25 p. (Accessed October 18, 2019, at <https://mc-56397411-4872-452d-b48e-428890-cdn-endpoint.azureedge.net/-/media/Content/Documents/Invest/Financial-news-and-performance/Production/RT-Third-Quarter-Operations-Review-2019-pdf.pdf?rev=5e467c0dc3c54e38b53dfb36ba09609b>.)

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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>	2018 <sup>p</sup>	2019			
			July	August	September	January– September
<b>Production:</b>						
<b>Primary:</b>						
Mine, recoverable	(2)	1,220,000	117,000	114,000	112,000	959,000
Smelter	(3)	536,000	34,500	49,200	43,200	355,000
<b>Refinery:</b>						
Electrolytic, domestic and foreign	(4)	538,000	45,100	41,800	48,600	342,000
Electrowon	(4)	532,000	47,600	46,500	44,700	397,000
Total	(4)	1,070,000	92,600	88,300	93,300	740,000
<b>Secondary recoverable copper:<sup>3</sup></b>						
Refineries	(5)	41,200	3,860	5,860	3,360	34,700
Ingot makers <sup>4</sup>	(5)	56,800	4,730	4,730	4,730	42,600
Brass and wire-rod mills	(5)	652,000	52,700	55,800	52,000	491,000
Foundries, etc. <sup>4</sup>	(5)	36,300	3,030	3,030	3,030	27,200
<b>Consumption:</b>						
Apparent	(8)	1,800,000	154,000	145,000	157,000	1,370,000
Refined (reported)	(7)	1,810,000	147,000	155,000	158,000	1,390,000
Purchased copper-base scrap (gross weight)	(9)	918,000	75,600	80,900	74,400	697,000
<b>Stocks at end of period:</b>						
Total refined	(10)	243,000	117,000	119,000	119,000	119,000
Blister, etc.	(10)	9,230	15,500	14,500	17,800	17,800
Price, U.S. producers cathode (cents per pound) <sup>5</sup>	(11)	298.737	275.657	264.293	266.490	281.128
<b>Imports:<sup>6</sup></b>						
Ore and concentrates	(13)	32,200	3,240	2,270	3,510	25,800
Refined	(13)	778,000	68,200	50,600	60,700	488,000
<b>Exports:<sup>6</sup></b>						
Ore and concentrates	(14)	253,000	25,800	28,100	25,600	249,000
Refined	(14)	190,000	9,810	6,960	8,410	99,500

<sup>p</sup>Preliminary.

<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 2017 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
<b>2018:<sup>P</sup></b>						
January–September	603,000	309,000	912,000	400,000	531,000	931,000
September	63,000	36,800	99,800	43,000	59,100	102,000
October	64,000	36,900	101,000	43,100	59,800	103,000
November	65,200	38,000	103,000	43,000	62,400	105,000
December	69,300	37,300	107,000	45,800	63,000	109,000
January–December	801,000	421,000	1,220,000	532,000	716,000	1,250,000
<b>2019:</b>						
January	67,900	29,900	97,800	42,400	57,600	99,900
February	63,600	33,500	97,100	39,800	59,500	99,200
March	72,300	35,500	108,000	44,600	65,700	110,000
April	69,700	31,600	101,000	41,300	62,300	104,000
May	71,500	33,700	105,000	44,700	62,800	108,000
June	73,400	32,400	106,000	45,900	62,100	108,000
July	79,200	38,000	117,000	47,600	72,300	120,000
August	77,300	37,200	114,000	46,500	70,500	117,000
September	74,000	38,100	112,000	44,700	69,900	115,000
January–September	649,000	310,000	959,000	397,000	583,000	980,000

<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 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
2018: <sup>P</sup>	
January–September	401,000
September	40,800
October	48,200
November	45,300
December	40,600
January–December	536,000
2019:	
January	34,700
February	17,700
March	37,000
April	32,900
May	54,100
June	51,800
July	34,500
August	49,200
September	43,200
January–September	355,000

<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		
2018: <sup>P</sup>					
January–September	396,000	400,000	797,000	30,100	827,000
September	40,200	43,000	83,200	3,810	87,000
October	46,100	43,100	89,200	4,180	93,400
November	50,000	43,000	93,000	3,370	96,400
December	45,300	45,800	91,200	3,520	94,700
January–December	538,000	532,000	1,070,000	41,200	1,110,000
2019:					
January	37,100	42,400	79,500	3,770	83,200
February	25,000	39,800	64,800	3,330	68,100
March	27,800	44,600	72,400	3,950	76,300
April	38,100	41,300	79,400	3,600	83,000
May	38,300	44,700	83,000	3,470	86,500
June	40,600	45,900	86,500	3,480	90,000
July	45,100	47,600	92,600	3,860	96,500
August	41,800	46,500	88,300	5,860	94,100
September	48,600	44,700	93,300	3,360	96,700
January–September	342,000	397,000	740,000	34,700	774,000

<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>c</sup>	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2018: <sup>p</sup>									
January–September	15,100	15,000	6,390	36,200	459,000	28,100	19,800	7,470	587,000
September	1,680	2,130	710	4,020	51,900	2,850	2,200	830	66,300
October	1,680	2,500	710	4,020	52,700	3,490	2,200	830	68,100
November	1,680	1,690	710	4,020	53,900	1,470	2,200	830	66,500
December	1,680	1,840	710	4,020	50,800	2,700	2,200	830	64,800
January–December	20,100	21,000	8,520	48,300	617,000	35,800	26,400	9,960	787,000
2019:									
January	1,680	2,100	710	4,020	52,100	3,520	2,200	830	67,200
February	1,680	1,660	710	4,020	51,900	3,170	2,200	830	66,200
March	1,680	2,270	710	4,020	52,200	3,310	2,200	830	67,200
April	1,680	1,930	710	4,020	51,400	3,340	2,200	830	66,100
May	1,680	1,790	710	4,020	51,600	3,330	2,200	830	66,100
June	1,680	1,800	710	4,020	51,400	3,550	2,200	830	66,100
July	1,680	2,190	710	4,020	49,100	3,590	2,200	830	64,300
August	1,680	4,180	710	4,020	52,800	3,030	2,200	830	69,400
September	1,680	1,680	710	4,020	49,700	2,330	2,200	830	63,200
January–September	15,100	19,600	6,390	36,200	462,000	29,200	19,800	7,470	596,000

<sup>c</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 2017 annual data.

<sup>4</sup>Does not include an estimate, based on reported 2017 annual data, of 3,190 tons per month from new scrap and 2,560 tons per month from old scrap of copper recovered from scrap other than copper-base.

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
<b>2018:<sup>P</sup></b>						
January–September	662,000	1,010,000	663,000	1,010,000	28,400	23,000
September	73,500	110,000	73,300	111,000	28,400	23,000
October	74,300	114,000	73,900	120,000	28,800	16,900
November	73,500	113,000	73,400	108,000	28,900	21,300
December	73,800	97,700	73,000	92,100	29,700	27,000
January–December	884,000	1,330,000	884,000	1,330,000	29,700	27,000
<b>2019:</b>						
January	74,200	113,000	73,800	116,000	30,000	23,700
February	73,500	103,000	73,600	110,000	29,900	17,100
March	74,200	117,000	73,800	112,000	30,400	22,400
April	73,700	104,000	73,900	111,000	30,200	23,800
May	73,800	116,000	74,100	112,000	29,800	28,400
June	73,600	109,000	73,500	116,000	30,000	22,100
July	70,300	110,000	70,900	113,000	29,400	25,200
August	73,800	112,000	73,700	116,000	29,500	22,700
September	73,200	120,000	73,300	116,000	29,400	27,000
January–September	660,000	1,010,000	661,000	1,020,000	29,400	27,000

<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
<b>2018:<sup>P</sup></b>				
January–September	314,000	1,010,000	46,500	1,370,000
September	35,100	122,000	5,170	163,000
October	34,900	112,000	5,170	152,000
November	34,700	113,000	5,170	153,000
December	34,600	98,000	5,170	138,000
January–December	419,000	1,330,000	62,100	1,810,000
<b>2019:</b>				
January	34,900	116,000	5,170	156,000
February	34,800	106,000	5,170	146,000
March	34,900	123,000	5,170	163,000
April	34,900	119,000	5,170	159,000
May	35,400	114,000	5,170	154,000
June	34,200	110,000	5,170	150,000
July	34,100	107,000	5,170	147,000
August	34,000	116,000	5,170	155,000
September	34,100	119,000	5,170	158,000
January–September	312,000	1,030,000	46,500	1,390,000

<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 2017 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
2018: <sup>P</sup>						
January–September	797,000	110,000	597,000	110,000	50,700	1,340,000
September	83,200	12,400	62,300	15,600	-30,900	173,000
October	89,200	13,400	54,400	31,000	-32,900	159,000
November	93,000	10,600	51,000	36,200	-25,400	144,000
December	91,200	12,000	44,800	12,400	-14,900	150,000
January–December	1,070,000	146,000	747,000	190,000	-22,500	1,800,000
2019:						
January	79,500	13,000	57,600	12,600	-13,800	151,000
February	64,800	12,200	37,000	13,100	-37,900	139,000
March	72,400	13,000	39,900	10,200	-56,500	172,000
April	79,400	12,700	65,000	13,500	-6,390	150,000
May	83,000	12,500	52,000	11,000	-11,200	148,000
June	86,500	12,800	54,800	13,800	-10,100	150,000
July	92,600	13,200	68,200	9,810	10,000	154,000
August	88,300	14,600	51,100	6,960	1,810	145,000
September	93,300	11,400	61,200	8,410	373	157,000
January–September	740,000	115,000	487,000	99,500	-124,000	1,370,000

<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 2017 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	
2018: <sup>p</sup>									
January–September	15,600	15,500	18,300	45,300	531,000	28,900	23,600	8,420	687,000
September	1,730	2,200	2,030	5,040	59,900	2,970	2,620	935	77,500
October	1,730	1,590	2,030	5,040	60,700	3,580	2,620	935	78,200
November	1,730	1,750	2,030	5,040	61,900	1,510	2,620	935	77,500
December	1,730	1,900	2,030	5,040	58,700	2,770	2,620	935	75,800
January–December	20,800	20,700	24,400	60,500	712,000	36,800	31,500	11,200	918,000
2019:									
January	1,730	2,160	2,030	5,040	60,100	3,610	2,620	935	78,300
February	1,730	1,710	2,030	5,040	59,900	3,260	2,620	935	77,200
March	1,730	2,340	2,030	5,040	60,200	3,410	2,620	935	78,300
April	1,730	1,990	2,030	5,040	59,400	3,450	2,620	935	77,200
May	1,730	1,850	2,030	5,040	59,700	3,540	2,620	935	77,500
June	1,730	1,850	2,030	5,040	59,400	3,910	2,620	935	77,500
July	1,730	2,260	2,030	5,040	57,100	3,880	2,620	935	75,600
August	1,730	4,310	2,030	5,040	61,000	3,240	2,620	935	80,900
September	1,730	1,730	2,030	5,040	57,800	2,510	2,620	935	74,400
January–September	15,600	20,200	18,300	45,300	535,000	30,800	23,600	8,420	697,000

<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 2017 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		
2018: <sup>P</sup>								
September	9,110	3,120	18,500	7,710	5,350	156,000	125,000	316,000
October	8,940	4,290	19,900	7,460	5,350	142,000	104,000	283,000
November	7,380	5,580	19,200	7,660	5,350	123,000	96,900	258,000
December	9,230	3,850	21,800	8,210	5,350	99,600	104,000	243,000
2019:								
January	9,550	2,700	19,700	8,370	5,350	76,100	117,000	229,000
February	10,200	2,750	32,300	8,270	5,350	51,200	91,300	191,000
March	15,000	2,970	24,800	8,400	5,350	38,700	54,400	135,000
April	8,860	6,630	28,100	8,370	5,350	31,100	48,600	128,000
May	9,210	3,550	23,200	7,250	5,350	28,700	49,000	117,000
June	13,600	5,000	20,700	7,120	5,350	30,700	38,000	107,000
July	15,500	4,350	25,000	7,070	5,350	36,000	39,200	117,000
August	14,500	5,280	15,400	6,930	5,350	40,000	45,700	119,000
September	17,800	6,830	17,600	6,800	5,350	36,000	46,500	119,000

<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 2017 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
<b>2018:</b>			
September	276.107	269.232	273.044
October	282.498	275.935	281.918
November	281.598	275.098	280.882
December	279.026	272.338	276.397
Year	298.737	292.567	295.960
<b>2019:</b>			
January	275.588	268.238	269.052
February	293.129	285.566	284.754
March	297.974	289.974	292.581
April	299.820	292.007	292.317
May	282.232	274.282	273.412
June	274.968	267.843	266.166
July	275.657	268.657	269.397
August	264.293	257.243	258.890
September	266.490	259.740	260.588
January–September	281.128	273.728	274.129

<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
2018:				
September	261.16	228.50	178.45	141.47
October	267.65	239.80	187.50	141.00
November	267.50	240.10	185.00	130.00
December	264.52	238.72	187.50	141.00
Year	283.19	254.90	200.31	150.76
2019:				
January	260.33	235.19	180.79	139.00
February	278.66	252.39	189.82	140.42
March	282.69	253.31	202.50	145.00
April	284.26	252.17	206.50	147.00
May	265.41	231.95	201.05	143.18
June	257.40	225.70	188.00	138.00
July	258.48	227.95	186.32	138.00
August	247.20	217.00	181.68	134.18
September	250.05	220.50	170.50	131.00
January–September	264.94	235.13	189.68	139.53

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		
	2019			2019			2019			2019		
	2018	September	January–September	2018	September	January–September	2018	September	January–September	2018	September	January–September
Belgium	--	--	--	283	--	228	--	--	--	10,100	--	2,300
Bolivia	--	--	--	--	--	--	--	--	--	1,460	--	1,390
Canada	40	--	(4)	613	50	269	(4)	--	(4)	172,000	13,800	101,000
Chile	--	--	--	--	--	--	--	--	--	483,000	39,200	314,000
China	8	--	--	2	--	--	--	--	(4)	111	(4)	189
Congo (Brazzaville)	--	--	--	--	--	--	--	--	--	1,040	--	--
Congo (Kinshasa)	--	--	--	--	--	--	--	--	--	3,380	--	--
Finland	--	--	--	--	--	--	292	--	174	--	--	38
Germany	--	--	--	--	--	--	(4)	--	--	1,260	128	1,530
Japan	--	--	--	10	--	50	2	(4)	(4)	3,990	159	2,030
Malaysia	--	--	--	--	--	--	54	--	--	--	--	--
Mexico	32,100	3,510	25,800	539	79	138	--	--	(4)	63,100	7,400	60,100
Netherlands	--	--	--	115	--	--	2	--	3	(4)	--	(4)
Peru	--	--	--	--	--	--	--	--	--	19,100	--	5,010
Saudi Arabia	--	--	--	85	--	98	--	--	--	--	--	--
Zambia	--	--	--	--	--	--	--	--	--	18,900	--	683
Other	--	--	2	175	(4)	537	5	(4)	39	562	59	188
Total	32,200	3,510	25,800	1,820	130	1,320	355	(4)	217	778,000	60,700	488,000

-- 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		
	2019			2019			2019			2019		
	2018	September	January– September	2018	September	January– September	2018	September	January– September	2018	September	January– September
Belgium	20	--	111	2,146	301	2,117	226	11	330	--	80	109
Brazil	3,040	3,320	8,690	--	--	--	62	--	39	23	--	1
Bulgaria	2,990	2,380	13,600	--	--	--	--	--	--	--	--	--
Canada	17,200	761	10,000	19,500	1,140	12,100	4,320	108	3,240	37,300	1,440	23,900
China	47,500	--	7	1,650	--	90	210	--	153	47,600	1	8
Germany	4,810	--	--	1,130	75	474	282	20	246	2	--	1
Hong Kong	--	--	--	--	--	19	462	20	279	(4)	--	20
India	--	--	--	44	--	--	585	2	198	9	--	36
Italy	1	--	--	10	--	--	281	41	171	24	(4)	26
Japan	13,500	169	10,300	230	40	48	36	1	24	14	(4)	4
Korea, Republic of	4,690	--	6,910	817	--	74	1,680	118	1,250	2,200	--	180
Malaysia	545	--	35	413	--	--	178	20	139	62	--	4
Mexico	147,000	14,000	179,000	1,430	--	1,210	80	--	25	102,000	6,880	75,100
Philippines	1,180	--	4,720	--	--	--	42	6	47	(4)	--	2
Slovakia	--	--	--	526	117	761	--	--	--	--	--	--
Spain	10,500	4,920	15,000	210	40	40	101	--	40	1	--	--
Other	120	10	509	1,850	26	538	503	182	903	278	9	144
Total	253,000	25,600	249,000	30,000	1,740	17,500	9,060	529	7,090	190,000	8,410	99,500

-- 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		
	2019			2019		
	2018	September	January–September	2018	September	January–September
Bahamas	23	--	--	569	45	581
Canada	16,800	1,090	12,400	72,000	3,520	41,100
Chile	177	--	--	321	20	1,300
Colombia	367	38	158	926	36	864
Costa Rica	459	37	396	750	89	866
Dominican Republic	80	55	472	901	155	1,620
Guatemala	92	--	8	501	29	523
Honduras	5	9	48	589	50	411
Hong Kong	7	--	16	1,450	--	229
Japan	278	(2)	960	52	--	--
Mexico	10,800	795	9,160	38,600	3,110	31,300
Pakistan	567	38	132	--	--	--
Panama	1,020	43	487	640	28	320
Spain	--	--	--	637	--	--
Venezuela	2,540	--	28	646	35	471
Other	1,270	91	722	4,150	273	3,530
Total	34,500	2,190	25,000	123,000	7,390	83,000

-- 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.

TABLE 16  
U.S. EXPORTS OF COPPER SCRAP<sup>1</sup>

(Metric tons, gross weight)

Country or locality	Unalloyed							Alloyed					
	2018	2019						2018	2019				
		No. 1		No. 2		Other			Segregated		Unsegregated		
		September	January– September	September	January– September	September	January– September		September	January– September	September	January– September	
Belgium	19,500	646	5,200	1,340	9,120	165	1,870	11,800	--	597	1,470	10,300	
Canada	51,900	--	--	--	--	4,120	37,100	40,200	--	--	2,520	35,500	
China	193,000	1,480	21,400	1,550	23,300	889	19,000	78,600	37	5,210	568	7,010	
Germany	24,000	1,070	13,700	421	6,070	103	1,660	13,300	20	1,080	968	9,860	
Greece	7,630	205	5,010	39	494	100	1,170	1,150	37	235	36	298	
Hong Kong	20,700	345	5,890	249	4,880	448	6,510	23,600	595	8,300	1,910	17,900	
India	14,000	231	2,140	417	3,240	502	5,910	34,300	2,760	23,600	1,400	10,600	
Japan	29,300	417	4,650	1,050	10,800	479	2,920	26,700	99	4,240	1,350	12,100	
Korea, Republic of	45,800	2,490	16,400	764	3,990	1,170	9,870	25,900	1,300	9,490	1,140	9,260	
Malaysia	47,800	662	9,250	1,830	14,200	3,010	25,400	71,800	1,480	23,400	10,600	93,600	
Netherlands	8,030	59	618	--	414	217	2,810	2,280	--	216	38	637	
Pakistan	1,450	--	382	14	533	--	57	16,500	--	411	2,370	13,900	
Spain	760	29	318	--	161	--	413	10,100	99	2,220	330	4,780	
Taiwan	17,100	750	6,630	256	1,600	829	5,120	18,300	266	4,240	776	9,190	
Thailand	3,000	87	706	67	811	157	1,120	11,100	--	357	839	10,800	
Other	25,700	1,020	11,100	1,180	6,630	687	4,890	17,900	182	2,790	1,310	14,400	
Total	509,000	9,480	103,000	9,180	86,300	12,900	126,000	403,000	6,870	86,400	27,600	260,000	

-- 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.