

Mineral Industry Surveys

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COPPER IN OCTOBER 2019

In October 2019, mine production of recoverable copper in the United States was 109,000 metric tons (t). The average daily mine production was 3,510 t, a decrease of 6% from that in September and 8% higher than that in October 2018 (fig. 1). Year-to-date mine output through October 2019 was 1.07 million metric tons, an increase of 5% relative to the same period in 2018 (table 2).

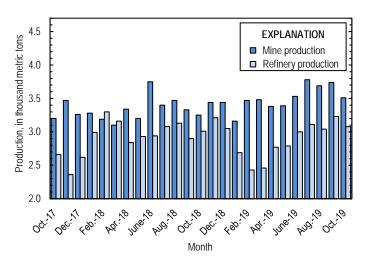


Figure 1. Average daily U.S. copper mine (recoverable) and refinery production from October 2017 through October 2019.

Smelter production in October 2019 was 43,800 t. The average daily smelter output was 1,410 t, a slight decline from that in September and a decrease of 9% compared with the daily average in October 2018. Year-to-date output through October 2019 was 399,000 t, 11% lower than that through October 2018 (table 3).

Total domestic refinery production was 95,500 t in October 2019; data for electrolytic and electrowon output, as well as refined production from scrap, are in table 4. The average daily refinery production was 3,080 t, 5% less than that in September and a slight increase from that in October 2018 (fig. 1). Year-to-

date refinery production through October 2019 was 870,000 t, a decline of 5% relative to the same period in 2018 (table 4).

Prices

The average October 2019 COMEX spot copper price was \$2.61 per pound, a slight increase from \$2.60 per pound in September and 5% lower than \$2.76 per pound in October 2018 (fig. 2, table 11). The average price of New York dealers' number 2 scrap in October 2019 was \$1.71 per pound, unchanged from that in September and a decrease of 9% compared with \$1.88 per pound in October 2018 (fig. 2, table 12).

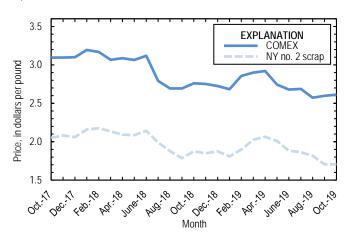


Figure 2. Monthly average COMEX copper price and New York no. 2 copper scrap price from October 2017 through October 2019. Sources: American Metal Market, Platts Metals Week.

Stocks

Refined U.S. copper stocks totaled 115,000 t at the end of October 2019, a slight decline from those in September and 59% less than those in October 2018. London Metal Exchange Ltd. stocks in U.S. warehouses decreased by 9%, COMEX stocks declined by 8%, and stocks at wire-rod mills were 8% higher than those at the end of September (fig. 3, table 10).

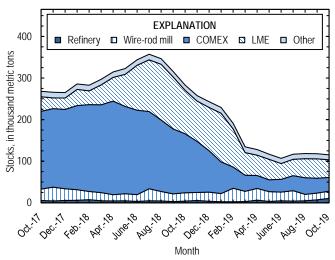


Figure 3. Monthly domestic refined copper stocks, by type, from October 2017 through October 2019. Sources: American Metal Market, London Metal Exchange Ltd., and U.S. Geological Survey.

Industry News

Chile.—Owing to violent protests across the country in response to increases in public transportation costs, operations were disrupted at several leading global copper mines, including Antofagasta plc's (United Kingdom) Los Pelambres Mine, BHP Group's (Australia) Escondida and Spence Mines, and Corporación Nacional del Cobre de Chile's Andina and Chuquicamata Mines. Most copper mines in Chile were operating normally by the end of the month, but uncertainty remained as the protests continued into November (Cambero and Esposito, 2019; CRU International Ltd., 2019, p. 12; Decena, 2019c).

Peru.—The armed forces and police cleared road blockades preventing the transport of concentrates from MMG Ltd.'s (Australia) Las Bambas Mine to port. Demonstrators, seeking compensation for MMG's use of the road and mine lands, began erecting roadblocks on September 22. Shipments from the mine also were affected by protests from mid-February through mid-April. Las Bambas was one of the leading global copper mines in 2018 and produced 385,000 t of copper in concentrates, equivalent to nearly 2% of worldwide mined copper output (Decena, 2019a, b; Ignacio, 2019; Mir, 2019; MMG Ltd., 2019, p. 22).

United States.—On October 13, unionized workers at ASARCO LLC's (Tucson, AZ) domestic operations went on strike over wages and benefits. The company subsequently announced that it would temporarily close its smelter in Hayden,

AZ, and refinery in Amarillo, TX, but the timing of the closures was not announced. The strike had not been resolved as of the end of February 2020. In 2018, ASARCO's three mines in Arizona produced 118,000 t of copper and accounted for 10% of mined copper output in the United States (table 2; Grupo México, S.A.B. de C.V., 2019a, p. 164, 166, 173; 2019b, p. 5; KOLD News 13, 2019).

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 $\label{table 1} {\sf TABLE~1}$ SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES 1

(Metric tons of copper content, unless otherwise specified)

				201	9	
	Source					January-
	table ²	2018 ^p	August	September	October	October
Production:						
Primary:						
Mine, recoverable	(2)	1,220,000	114,000	112,000	109,000	1,070,000
Smelter	(3)	536,000	49,200	43,200	43,800	399,000
Refinery:						
Electrolytic, domestic and foreign	(4)	538,000	41,800	49,000 ^r	46,500	389,000
Electrowon	(4)	532,000	46,500	44,700	45,800	443,000
Total	(4)	1,070,000	88,300	93,700 ^r	92,300	832,000
Secondary recoverable copper: ³						
Refineries	(5)	41,200	5,860	3,360	3,220	37,900
Ingot makers ⁴	(5)	56,800	4,730	4,730	4,730	47,300
Brass and wire-rod mills	(5)	652,000	55,800	52,000	53,500	545,000
Foundries, etc. ⁴	(5)	36,300	3,030	3,030	3,030	30,300
Consumption:						
Apparent	(8)	1,800,000	145,000	158,000 ^r	167,000	1,540,000
Refined (reported)	(7)	1,810,000	155,000	149,000 ^r	157,000	1,540,000
Purchased copper-base scrap (gross weight)	(9)	918,000	80,900	74,400	76,000	773,000
Stocks at end of period:						
Total refined	(10)	243,000	118,000 ^r	118,000 ^r	115,000	115,000
Blister, etc.	(10)	9,230	14,500	8,340 ^r	22,200	22,200
Price, U.S. producers cathode (cents per pound) ⁵	(11)	298.737	264.293	266.490	268.065	279.822
Imports: ⁶						
Ore and concentrates	(13)	32,200	2,270	3,510	1,180	27,000
Refined	(13)	778,000	50,600	60,700	69,300	557,000
Exports: ⁶						
Ore and concentrates	(14)	253,000	28,100	25,600	26,000	275,000
Refined	(14)	190,000	6,960	8,410	8,530	108,000

^pPreliminary. ^rRevised.

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

²Numbers in parentheses refer to the tables where these data are located.

 $^{^3\}mathrm{Copper}$ recovered from copper-base scrap only.

⁴Estimated based on the monthly average of 2017 annual data.

⁵Source: Platts Metals Week.

⁶Source: U.S. Census Bureau.

 $\label{eq:table 2} \textbf{MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES}^1$

	Red	coverable cop	per		Contained copper	
Period	Arizona	Others ²	Total	Electrowon	Concentrates ³	Total
2018: ^p						
January-October	667,000	346,000	1,010,000	443,000	590,000	1,030,000
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
2019:						
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	72,400 ^r	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
October	72,800	35,900	109,000	45,800	65,200	111,000
January-October	722,000	346,000	1,070,000	443,000	648,000	1,090,000

^pPreliminary. ^rRevised.

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

 $^{^2 \}mbox{Includes}$ 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)

	Anode
Period	production
2018: ^p	
January-October	450,000
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
October	43,800
January-October	399,000

^pPreliminary.

¹Includes blister and copper anode from primary or secondary sources.

 $^{^2\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

 ${\it TABLE~4}$ PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY 1

	Prin	nary materials			
	Electrolytically				Total
Period	refined ²	Electrowon	Total	Scrap	refined
2018: ^p					
January-October	442,000	443,000	886,000	34,300	920,000
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	72,500 ^r	3,950	76,400
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	49,000 ^r	44,700	93,700 ^r	3,360	97,000
October	46,500	45,800	92,300	3,220	95,500
January-October	389,000	443,000	832,000	37,900	870,000

^pPreliminary. ^rRevised.

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

²From domestic and foreign source materials.

 ${\it TABLE~5}$ COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP $^{\rm I}$

(Metric tons, copper content)

	Refine	eries ²	Ingot m	akers ³	Brass and wi	re-rod mills	Foundrie	es, etc. ³	
Period	New scrap ^e	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	Total ⁴
2018: ^p	_								
January-October	16,800	17,500	7,100	40,200	512,000	31,600	22,000	8,300	655,000
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
October	1,680	1,540	710	4,020	51,000	2,490	2,200	830	64,400
January-October	16,800	21,100	7,100	40,200	513,000	31,700	22,000	8,300	660,000

^eEstimated ^PPreliminary.

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

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

 $^{^{3}}$ Monthly data estimated based on the monthly average of 2017 annual data.

⁴Does 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.

 ${\it TABLE~6}$ PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD SEMIFABRICATES 1

	Pro	duction	Shi	pments	Stocks, end of period	
Period	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills
2018: ^p						
January-October	737,000	1,120,000	737,000	1,130,000	28,800	16,900
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
2019:						
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	113,000 ^r	73,300	110,000 ^r	29,400	26,400 1
October	73,900	112,000	74,000	114,000	29,200	23,800
January-October	734,000	1,110,000	735,000	1,130,000	29,200	23,800

^pPreliminary. ^rRevised.

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

TABLE 7 CONSUMPTION OF REFINED COPPER 1

	Brass	Wire-rod	Other	
Period	mills	mills	plants ²	Total
2018: ^p			_	
January-October	349,000	1,120,000	51,700	1,520,000
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
2019:				
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	110,000 ^r	5,170	149,000
October	34,200	118,000	5,170	157,000
January-October	346,000	1,140,000	51,700	1,540,000

^pPreliminary. ^rRevised.

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

 $^{^2}$ Monthly consumption data by ingot makers, chemical plants, foundries, and miscellaneous manufacturers are estimated based on the monthly average of 2017 annual data.

 $\label{eq:table 8} \textbf{U.S. APPARENT CONSUMPTION OF COPPER}^1$

Period	Refined copper production ²	Copper in old scrap ³	Refined general imports ⁴	Refined exports ⁴	Stock change during period	Apparent consumption
2018: ^p						
January-October	886,000	123,000	652,000	141,000	17,800	1,500,000
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	72,500 ^r	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	1,580 ^r	145,000
September	93,700 ^r	11,400	61,200	8,410	-484 ^r	158,000 ^r
October	92,300	11,400	69,600	8540	-2,550	167,000
January-October	832,000	127,000	556,000	108,000	-127,000	1,540,000

^pPreliminary. ^rRevised.

 $^{^{1}\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

²Includes electrowon production and electrolytically-refined copper from primary materials. All refined copper consumed in scrap form is included in "Copper in old scrap."

³Includes reported monthly production of copper from old scrap of copper-base, an estimate for annual reporters, and a monthly average of copper from non-copper-base materials based on 2017 annual data.

⁴Source: U.S. Census Bureau.

 $\label{eq:table 9} \textbf{CONSUMPTION OF PURCHASED COPPER-BASE SCRAP}^{\textbf{I}}$

-	Smelt	ers			Brass	and			
	and refin	neries	Ingot m	akers ²	wire-rod	l mills ³	Foundrie	es, etc. ²	Total scrap
Period	New scrap ^e	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	used
2018: ^p									
January-October	17,300	17,000	20,300	50,400	592,000	32,500	26,200	9,350	765,000
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	20,700	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
October	1,730	1,730	2,030	5,040	59,200	2,720	2,620	935	76,000
January-October	17,300	21,900	20,300	50,400	594,000	33,500	26,200	9,350	773,000

^eEstimated. ^pPreliminary.

 $^{^{1}\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

²Monthly data estimated based on the monthly average of 2017 annual data.

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

$\label{eq:table 10} \text{COPPER STOCKS AT END OF PERIOD}^1$

]	Refined copper			
	Crude		Wire-rod					Total
Period	copper ²	Refineries ³	$mills^3$	Brass mills ³	Other ⁴	Comex	LME ⁵	refined
2018: ^p								
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	5,050 ^r	15,400	6,930	5,350	40,000	45,700	118,000
September	8,340 ^r	7,180 ^r	16,200 ^r	6,800	5,350	36,000	46,500	118,000
October	22,200	10,600	17,500	6,680	5,350	33,200	42,200	115,000

^pPreliminary. ^rRevised.

 $^{^{1}\}mathrm{Data}$ 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 2017 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)

		Comex	LME
	U.S. producers	first	cash price
Period	cathode1	position ²	Grade A
2018:			
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
2019:			
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
October	268.065	261.165	260.470
January-October	279.822	272.472	272.763

¹Sum of "Comex high grade first position" and "NY dealer premium cathode."

Source: Platts Metals Week.

²Listed as "Comex high grade first position."

TABLE 12 AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

			Dealers	(New York)
				Red brass
	Brass mills	Refiners	No. 2	turnings and
Period	No. 1 scrap	No. 2 scrap	scrap	borings
2018:				
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
October	250.04	221.04	170.50	128.00
January-October	263.45	233.72	187.77	138.38

Source: American Metal Market.

 ${\it TABLE~13}$ U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY ${\it CLASS}^1$

(Metric tons, copper content)

	Ore and concentrates ²			Matte, ash, and precipitates ³				Blister and an	odes	Refined		
		2019 January–			2019 January–			2019 January–			2019	
Country or												January-
locality	2018	October	October	2018	October	October	2018	October	October	2018	October	October
Belgium				283		228				10,100		2,300
Bolivia										1,460	115	1,510
Canada	40		(4)	613	104	373	(4)		(4)	172,000	13,800	115,000
Chile										483,000	45,400	359,000
China	8			2					(4)	111	73	262
Congo (Brazzaville)										1,040		
Congo (Kinshasa)										3,380		
Finland							292		174			38
Germany							(4)			1,260	197	1,720
Japan				10	245	295	2		(4)	3,990	157	2,190
Malaysia							54					
Mexico	32,100	1,160	27,000	539	(4)	138			(4)	63,100	6,520	66,600
Netherlands				115			2		3	(4)		(4)
Peru										19,100	3,010	8,020
Saudi Arabia				85		98						
Zambia										18,900		683
Other		25	27	175	61	598	5	1	40	562	58	246
Total	32,200	1,180	27,000	1,820	410	1,730	355	1	217	778,000	69,300	557,000

⁻⁻ 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.

 $\label{eq:table 14} \text{U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS}^1$

(Metric tons, copper content)

Country or	Ore	and concentrate	es ²	Matte,	ash, and precipit		Blister and and	odes	Refined			
		2019			2019			2019			2019	
		January–			January–			January–				January–
locality	2018	October	October	2018	October	October	2018	October	October	2018	October	October
Belgium	20		111	2,150	492	2,610	226	11	341		20	129
Brazil	3,040		8,690				62		39	23	(4)	1
Bulgaria	2,990		13,600									
Canada	17,200	1,550	11,600	19,500	1,250	13,400	4,320	371	3,610	37,300	2,080	26,000
China	47,500		7	1,650		90	210	20	173	47,600	1	10
Germany	4,810			1,130	25	498	282	20	266	2		1
Hong Kong						19	462		279	(4)		20
India				44			585	20	218	9		36
Italy	1			10			281	35	206	24	(4)	26
Japan	13,500		10,300	230		48	36		24	14	1	5
Korea, Republic of	4,690	2,550	9,450	817		74	1,680	96	1,350	2,200		180
Malaysia	545		35	413			178	29	168	62		4
Mexico	147,000	18,900	198,000	1,430		1,210	80	2	27	102,000	6,410	81,500
Philippines	1,180	3,010	7,730				42	3	50	(4)		2
Slovakia				526	79	839						
Spain	10,500		15,000	210	80	120	101		40	1		
Other	120	14	523	1,850	20	558	503	155	1,060	278	24	168
Total	253,000	26,000	275,000	30,000	1,950	19,400	9,060	762	7,850	190,000	8,530	108,000

⁻⁻ 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.

 $\label{eq:table 15} \text{U.S. IMPORTS FOR CONSUMPTION OF COPPER SCRAP}^1$

		Unalloyed			Alloyed		
		20	19		2019		
Country or			January-			January-	
locality	2018	October	October	2018	October	October	
Bahamas	23			569	26	607	
Canada	16,800	1,740	14,100	72,000	3,690	44,700	
Chile	177			321		1,300	
Colombia	367	32	190	926	58	922	
Costa Rica	459	43	438	750	158	1,020	
Dominican Republic	80	44	516	901	153	1,780	
Guatemala	92		8	501	27	550	
Honduras	5	1	49	589	98	509	
Hong Kong	7		16	1,450		229	
Japan	278	83	1,040	52			
Mexico	10,800	974	10,100	38,600	4,100	35,400	
Pakistan	567	19	151				
Panama	1,020	53	541	640	74	394	
Spain				637			
Venezuela	2,540		28	646	55	526	
Other	1,270	63	785	4,150	363	3,900	
Total	34,500	3,050	28,000	123,000	8,800	91,900	

⁻⁻ Zero.

 $^{^{1}\}mbox{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

TABLE 16
U.S. EXPORTS OF COPPER SCRAP¹

				Unalloyed	Alloyed							
		2019							2019			
		No. 1		No. 2		Other			Segregated		Unsegregated	
Country or			January-		January-		January-			January-		January–
locality	2018	October	October	October	October	October	October	2018	October	October	October	October
Belgium	19,500	907	6,100	1,620	10,700	286	2,160	11,800	78	674	1,310	11,600
Canada	51,900					4,940	42,000	40,200			2,390	37,900
China	193,000	1,530	22,900	1,830	25,100	1,170	20,200	78,600	20	5,230	450	7,460
Germany	24,000	2,070	15,700	745	6,820	164	1,830	13,300	116	1,200	1,200	11,100
Greece	7,630	169	5,180		494		1,170	1,150	78	313	38	336
Hong Kong	20,700	299	6,190	348	5,230	269	6,780	23,600	209	8,510	1,370	19,200
India	14,000	141	2,280	379	3,620	703	6,610	34,300	2,460	26,100	797	11,400
Japan	29,300	471	5,120	810	11,600	397	3,310	26,700	251	4,490	961	13,100
Korea, Republic of	45,800	2,710	19,200	844	4,830	1,180	11,100	25,900	822	10,300	1,440	10,700
Malaysia	47,800	1,000	10,300	1,800	16,000	3,670	29,000	71,800	1,060	24,500	14,400	108,000
Netherlands	8,030	39	657		414	141	2,950	2,280		216	39	676
Pakistan	1,450	93	475	29	563		57	16,500		411	2,140	16,000
Spain	760	9	327	78	239		413	10,100	457	2,670	264	5,040
Taiwan	17,100	1,130	7,760	403	2,010	937	6,060	18,300	507	4,750	969	10,200
Thailand	3,000	77	783		811	89	1,210	11,100	242	599	1,070	11,900
Other	25,700	1,200	12,300	1,780	8,400	829	5,720	17,900	566	3,360	837	15,300
Total	509,000	11,800	115,000	10,700	96,900	14,800	141,000	403,000	6,870	93,300	29,700	290,000

⁻⁻ Zero.

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