

Mineral Industry Surveys

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COPPER IN NOVEMBER 2022

In November 2022, mine output of recoverable copper in the United States was 99,300 metric tons (t). The average daily mine production was 3,310 t, a slight increase from that in October and 6% lower than that in November 2021 (fig. 1). Year-to-date recoverable mine production was 1.13 million metric tons, essentially unchanged compared with that through November 2021 (table 2).

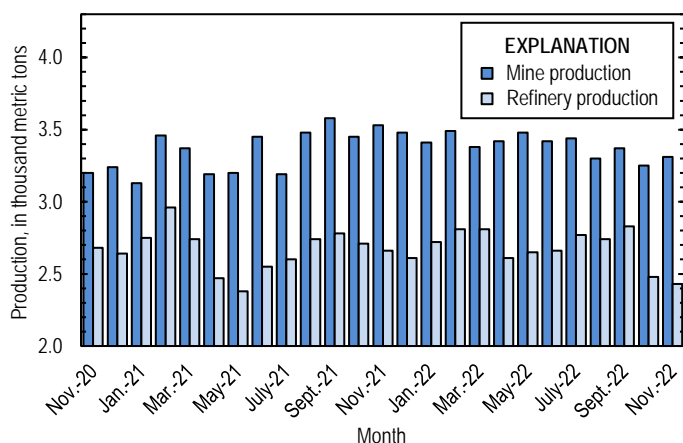


Figure 1. Average daily copper mine (recoverable) and refinery (primary and secondary) production in the United States from November 2020 through November 2022.

Owing to indefinite closures of ASARCO LLC's smelter in Arizona and electrolytic refinery in Texas since October 2019, smelter and electrolytic refinery production reported to the U.S. Geological Survey in November 2022 were withheld to avoid disclosing company proprietary data. Smelter and electrolytic refinery output in tables 3 and 4 are estimates based on information in annual and quarterly company reports. As of November 2022, ASARCO had not publicly announced when, or if, operations were expected to resume. The company was reportedly in talks with Freeport-McMoRan Inc. at the end of October for a potential sale of the smelter, but no agreement was imminent (Hunter and Attwood, 2022). ASARCO's three copper mines and two electrowon refineries in Arizona continued to operate during the smelter and electrolytic refinery stoppages (Grupo México, S.A.B. de C.V., 2021, p. 83).

Estimated domestic smelter production was 25,000 t in November 2022. Year-to-date estimated smelter output was 350,000 t, an increase of 6% from that through November 2021 (table 3).

Total U.S. refinery production was 72,900 t in November 2022; data for electrolytic and electrowon output, as well as refined production from scrap, are reported in table 4. The average daily refinery production was 2,430 t, a slight decrease from that in October and 8% less than that in November 2021 (fig. 1). Year-to-date refinery output was 896,000 t, essentially unchanged relative to the same time period in 2021.

Prices

In November 2022, the average Commodity Exchange Inc. (COMEX) copper price was \$3.68 per pound, 6% higher than \$3.47 per pound in October and a decrease of 16% from \$4.37 per pound in November 2021 (fig. 2, table 11). The average U.S. dealers buying price of number 2 copper scrap was \$2.62 per pound in November 2022, an increase of 6% compared with \$2.48 per pound in October and 21% lower than \$3.31 per pound in November 2021 (fig. 2, table 12).

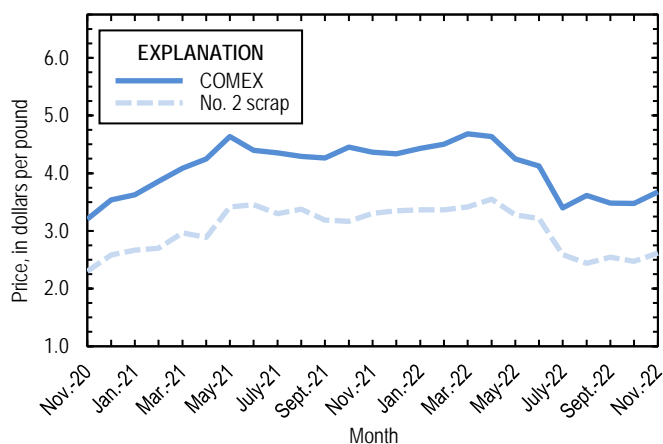


Figure 2. Monthly average Commodity Exchange Inc. (COMEX) copper price and no. 2 copper scrap U.S. dealers buying price from November 2020 through November 2022. Sources: Fastmarkets-AMM and S&P Global Platts Metals Week.

Stocks

Refined copper stocks in the United States totaled 90,300 t at the end of November 2022, a decrease of 15% from those in October and 14% less than those in November 2021. COMEX stocks were unchanged at 33,400 t, and London Metal Exchange Ltd. stocks in U.S. warehouses decreased by 12,800 t (39%) compared with those at the end of October (fig. 3, table 10).

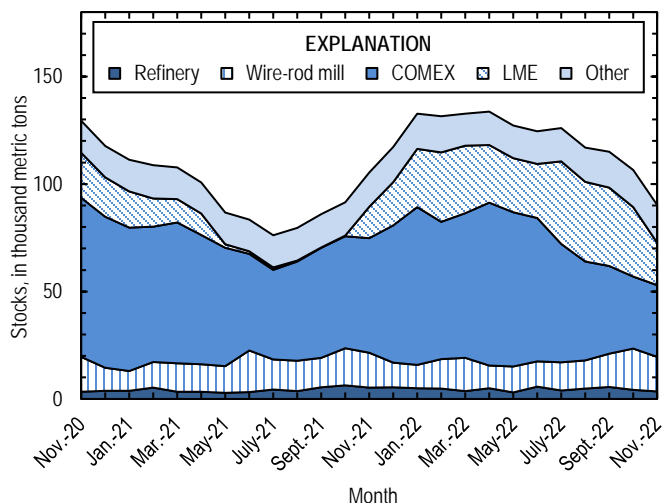


Figure 3. Domestic refined copper stocks at end of month, by type, from November 2020 through November 2022. Sources: London Metal Exchange Ltd., S&P Global Platts Metals Week, and U.S. Geological Survey.

Industry News

Chile.—Mining in central Chile has been impacted by a significant drought in recent years. In November, Anglo American plc signed a contract with Aguas Pacífico SpA, a desalinated water provider, that will supply the Los Bronces Mine with 45% of the water it needs to operate, beginning in 2025. Los Bronces produced 328,000 t of copper in 2021 and was ranked among the fifteen leading global copper mines (Anglo American plc, 2022a; 2022b, p. 276; S&P Capital IQ, undated).

The Corporación Nacional del Cobre de Chile (Codelco) halted processing of copper concentrates at the Chuquicamata smelter on November 15 for planned maintenance. Codelco anticipated that the smelter, one of the largest in the world by capacity, would be shut down for 135 days and planned to sell copper concentrates instead of refined copper cathodes until production resumed. Cathode output at Chuquicamata in 2021 was 319,000 t (Corporación Nacional del Cobre de Chile, 2022, p. 27; Luk and Rostás, 2022).

Peru.—The Las Bambas Mine operated at 30% of capacity for most of November owing to road blockades by local communities. Roadblocks by protesters have frequently disrupted the mine since its opening in late 2015. In 2021, Las Bambas ranked among the leading twenty copper mines in the world and produced 290,000 t of copper in concentrates (García, 2022; MMG Ltd., 2022, p. 23; S&P Capital IQ, undated).

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TABLE 1
SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES¹

(Metric tons, copper content, unless otherwise specified)

	Source table ²	2021 ^P	2022			
			September	October	November	January– November
Production:						
Primary (from ore):						
Mine, recoverable ³	(2)	1,230,000	101,000 ^r	101,000 ^r	99,300	1,130,000
Smelter ^{e, 4}	(3)	360,000	35,000 ^r	25,000 ^r	25,000	350,000
Refinery:						
Electrolytic ^c	(4)	360,000	35,000 ^r	25,000 ^r	25,000	350,000
Electrowon	(4)	562,000	46,700	48,700	44,600	509,000
Total	(4)	922,000	81,700 ^r	73,700 ^r	69,600	859,000
Secondary (from copper-base scrap): ⁵						
Refineries ⁶	(5)	48,900	3,220	3,220	3,280	36,800
Ingot makers ^{e, 7}	(5)	51,600	4,300	4,300	4,300	47,300
Brass and wire-rod mills	(5)	655,000	54,100	54,300	55,000	595,000
Foundries, etc. ^{e, 7}	(5)	38,800	3,230	3,230	3,230	35,500
Consumption:						
Reported, refined copper	(7)	1,770,000	141,000	145,000 ^r	129,000	1,610,000
Apparent, primary refined and copper from old scrap ⁸	(8)	1,960,000	145,000 ^r	144,000 ^r	136,000	1,700,000
Reported, purchased copper-base scrap (gross weight)	(9)	919,000	75,100	75,200	76,100	828,000
Stocks at end of period:						
Refined ⁹	(10)	117,000	115,000	107,000 ^r	90,300	90,300
Blister and anodes	(10)	16,100	14,900	18,500	14,600	14,600
Price, U.S. producers cathode (cents per pound) ¹⁰	(11)	432.264	359.021	358.386	378.483	412.492
Imports for consumption: ¹¹						
Ore and concentrates	(13)	11,000	1,430	1,180	146	11,700
Refined	(13)	919,000	50,700	49,700	37,900	694,000
Exports: ¹¹						
Ore and concentrates	(14)	347,000	36,800	30,400	37,400	314,000
Refined	(14)	47,600	2,470	1,190	1,430	25,700

^eEstimated. ^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.

³Includes the recoverable copper content of concentrates (of copper and other metals), copper produced by solvent extraction and electrowinning, and copper recovered as precipitates.

⁴May contain small quantities of copper from scrap.

⁵Copper recovered from copper-base scrap and converted to refined metal, alloys, and other forms. Does not include copper recovered from scrap other than copper-base.

⁶Electrolytically refined and fire-refined copper.

⁷Plants are surveyed by the U.S. Geological Survey on an annual basis; data after 2020 not yet available. Monthly data are estimated based on the monthly average of 2020 annual data.

⁸Primary refined copper production plus copper recovered from old scrap (of copper-base and non-copper-base) plus refined imports for consumption minus refined exports, including adjustments for changes in refined stocks. Old scrap consists of copper items used by consumers.

⁹Stocks of refined copper at brass mills, exchanges, refineries, wire-rod mills, and other manufacturers.

¹⁰Source: S&P Global Platts Metals Week. Sum of the monthly average Commodity Exchange Inc. (COMEX) price and New York dealers cathode premium; reflects the delivered spot price of copper cathode to U.S. consumers by U.S. producers.

¹¹Source: U.S. Census Bureau. See tables 13 and 14 for listings of the relevant Harmonized Tariff Schedule (imports) and Schedule B (exports) codes.

TABLE 2
MINE PRODUCTION OF COPPER IN THE UNITED STATES¹

(Metric tons)

Period	Recoverable copper ²			Contained copper		
	Arizona	Others ³	Total	Electrowon	Concentrates ⁴	Total
2021: ^p						
January–November	793,000	331,000	1,120,000	515,000	633,000	1,150,000
November	73,400	32,600	106,000	45,700	62,600	108,000
December	75,100	32,700	108,000	46,800	63,400	110,000
January–December	868,000	363,000	1,230,000	562,000	696,000	1,260,000
2022:						
January	72,200	33,500	106,000	45,400	62,800	108,000
February	65,500	32,100	97,600	40,300	59,400	99,800
March	73,100	31,700	105,000	48,500	58,400	107,000
April	72,200	30,400	103,000	44,900	59,900	105,000
May	77,900	29,800	108,000	49,100	60,900	110,000
June	73,900	28,600	103,000	46,500	58,200	105,000
July	73,300	33,500	107,000	47,600	61,400	109,000
August	69,600 ^r	32,600	102,000 ^r	46,800 ^r	57,500 ^r	104,000 ^r
September	69,700 ^r	31,500	101,000 ^r	46,700	56,500 ^r	103,000 ^r
October	68,400 ^r	32,300	101,000 ^r	48,700	53,900 ^r	103,000 ^r
November	65,900	33,400	99,300	44,600	56,700	101,000
January–November	782,000	350,000	1,130,000	509,000	646,000	1,150,000

^pPreliminary. ^rRevised.

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

²Includes the recoverable copper content of concentrates (of copper and other metals), copper produced by solvent extraction and electrowinning, and copper recovered as precipitates.

³Includes production from Michigan, Missouri, Montana, Nevada, New Mexico, and Utah.

⁴Includes the contained copper content of concentrates (of copper and other metals) and copper recovered as precipitates.

TABLE 3
COPPER PRODUCED AT SMELTERS IN
THE UNITED STATES^{1, 2}

(Metric tons, copper content)

Period	Anode production ^{e, 3}
2021: ^p	
January–November	330,000
November	30,000
December	30,000
January–December	360,000
2022:	
January	35,000
February	35,000
March	35,000
April	30,000
May	30,000
June	30,000
July	35,000 ^r
August	35,000 ^r
September	35,000 ^r
October	25,000 ^r
November	25,000
January–November	350,000

^eEstimated. ^pPreliminary. ^rRevised.

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

²Primary production. May contain small quantities of copper from scrap.

³To avoid disclosing company proprietary data, monthly smelter production data are estimated based on information in annual and quarterly public company reports and do not reflect actual production reported to the U.S. Geological Survey.

TABLE 4
U.S. PRODUCTION OF REFINED COPPER¹

(Metric tons)

Period	From primary materials			From scrap ³	Total refined
	Electrolytic ^{e,2}	Electrowon	Total primary		
2021: ^p					
January–November	330,000	515,000	845,000	44,900	890,000
November	30,000	45,700	75,700	3,990	79,700
December	30,000	46,800	76,800	4,060	80,800
January–December	360,000	562,000	922,000	48,900	971,000
2022:					
January	35,000	45,400	80,400	3,990	84,400
February	35,000	40,300	75,300	3,280	78,600
March	35,000	48,500	83,500	3,490	87,000
April	30,000	44,900	74,900	3,250	78,200
May	30,000	49,100	79,100	3,220	82,300
June	30,000	46,500	76,500	3,370	79,900
July	35,000 ^r	47,600	82,600 ^r	3,250	85,800 ^r
August	35,000 ^r	46,800 ^r	81,800 ^r	3,260	85,000 ^r
September	35,000 ^r	46,700	81,700 ^r	3,220	84,900 ^r
October	25,000 ^r	48,700	73,700 ^r	3,220	76,900 ^r
November	25,000	44,600	69,600	3,280	72,900
January–November	350,000	509,000	859,000	36,800	896,000

^eEstimated. ^pPreliminary. ^rRevised.

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

²To avoid disclosing company proprietary data, monthly electrolytically refined production data are estimated based on information in annual and quarterly public company reports and do not reflect actual production reported to the U.S. Geological Survey.

³Electrolytically refined and fire-refined copper.

TABLE 5
COPPER RECOVERED AS REFINED COPPER AND IN ALLOYS AND OTHER FORMS FROM PURCHASED
COPPER-BASE SCRAP IN THE UNITED STATES^{1, 2}

(Metric tons)

Period	Refineries ³		Ingot makers ^{e, 4}		Brass and wire-rod mills		Foundries, etc. ^{e, 4}		Total ⁵
	New scrap ^e	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2021: ^p									
January–November	18,400	26,400	4,330	43,000	566,000	38,700	8,390	27,100	732,000
November	1,680	2,320	394	3,910	50,900	3,080	763	2,470	65,500
December	1,680	2,380	394	3,910	48,500	2,480	763	2,470	62,600
January–December	20,100	28,800	4,730	46,900	614,000	41,100	9,160	29,600	795,000
2022:									
January	1,680	2,310	394	3,910	51,800	4,470	763	2,470	67,800
February	1,680	1,600	394	3,910	48,100	3,530	763	2,470	62,500
March	1,680	1,810	394	3,910	50,900	3,950	763	2,470	65,900
April	1,680	1,570	394	3,910	49,900	3,750	763	2,470	64,400
May	1,680	1,540	394	3,910	49,800	3,640	763	2,470	64,100
June	1,680	1,690	394	3,910	49,800	3,710	763	2,470	64,400
July	1,680	1,570	394	3,910	50,700	3,110	763	2,470	64,600
August	1,680	1,580	394	3,910	51,400	3,330	763	2,470	65,600
September	1,680	1,540	394	3,910	50,800	3,340	763	2,470	64,900
October	1,680	1,540	394	3,910	51,100	3,230	763	2,470	65,100
November	1,680	1,600	394	3,910	51,800	3,270	763	2,470	65,800
January–November	18,400	18,400	4,330	43,000	556,000	39,300	8,390	27,100	715,000

^eEstimated. ^pPreliminary.

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

²New scrap refers to material generated during the manufacturing process. Old scrap consists of copper items used by consumers.

³Electrolytically refined and fire refined from scrap based on source of material at smelter or refinery level.

⁴Plants are surveyed by the U.S. Geological Survey on an annual basis; data after 2020 not yet available. Monthly data are estimated based on the monthly average of 2020 annual data.

⁵Does not include an estimate, based on 2020 annual data, of 2,670 tons per month from new scrap and 1,870 tons per month from old scrap of copper recovered from scrap other than copper-base.

TABLE 6
U.S. 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
2021: ^p						
January–November	818,000	1,270,000	817,000	1,260,000	28,800	29,200
November	74,500	115,000	74,300	110,000	28,800	29,200
December	74,400	86,100	74,200	95,100	29,100	20,200
January–December	892,000	1,360,000	892,000	1,360,000	29,100	20,200
2022:						
January	74,300	117,000	74,300	114,000	29,100	25,400
February	76,000	103,000	75,800	107,000	29,300	19,300
March	76,900	118,000	77,000	116,000	29,300	21,500
April	76,300	117,000	76,100	112,000	29,500	26,200
May	74,200	112,000	74,300	116,000	29,400	21,900
June	74,800	111,000	74,900	115,000	29,300	17,200
July	74,600	117,000	74,800	114,000	29,100	21,000
August	75,300	112,000	75,200	115,000	29,200	17,900
September	79,900	116,000	79,400	119,000	29,800	15,600
October	75,400	115,000 ^r	75,100	114,000 ^r	30,000	16,600 ^r
November	74,900	94,800	74,800	94,700	30,200	16,600
January–November	833,000	1,230,000	832,000	1,240,000	30,200	16,600

^pPreliminary. ^rRevised.

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

TABLE 7
U.S. CONSUMPTION OF REFINED COPPER¹

(Metric tons)

Period	Brass mills	Wire-rod mills	Other plants ^{e, 2}	Total
2021: ^p				
January–November	380,000	1,210,000	56,900	1,650,000
November	34,300	110,000	5,180	150,000
December	34,700	81,800	5,180	122,000
January–December	415,000	1,290,000	62,100	1,770,000
2022:				
January	34,900	111,000	5,180	151,000
February	34,800	101,000	5,180	141,000
March	36,600	114,000	5,180	155,000
April	34,600	113,000	5,180	153,000
May	34,900	109,000	5,180	149,000
June	34,800	107,000	5,180	147,000
July	34,900	112,000	5,180	152,000
August	35,000	106,000	5,180	146,000
September	34,900	101,000	5,180	141,000
October	35,000	105,000 ^r	5,180	145,000 ^r
November	35,000	89,200	5,180	129,000
January–November	385,000	1,170,000	56,900	1,610,000

^eEstimated. ^pPreliminary. ^rRevised.

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

²Chemical plants, foundries, ingot makers, and miscellaneous manufacturers. These plants are surveyed by the U.S. Geological Survey on an annual basis; data after 2020 not yet available. Monthly data are estimated based on the monthly average of 2020 annual data.

TABLE 8
U.S. APPARENT CONSUMPTION OF COPPER¹

(Metric tons)

Period	Primary refined copper production	Copper in old scrap ²	Refined imports for consumption ³	Refined exports ³	Refined stock change during period	Apparent consumption ⁴
2021: ^p						
January–November	845,000	156,000	842,000	44,000	-12,400	1,810,000
November	75,700	13,600	60,000	2,630	13,900	133,000
December	76,800	13,100	77,300	3,630	11,900	152,000
January–December	922,000	169,000	919,000	47,600	-513	1,960,000
2022:						
January	80,400	15,000	140,000	2,530	15,500	218,000
February	75,300	13,400	34,300	3,110	-1,320	121,000
March	83,500	14,000	48,700	2,590	1,350	142,000
April	74,900	13,600	64,800	2,820	794	150,000
May	79,100	13,400	74,300	2,890	-6,470	170,000
June	76,500	13,600	75,900	1,720	-2,560	167,000
July	82,600 ^r	12,900	80,900	1,900	1,560	173,000 ^r
August	81,800 ^r	13,200	36,400	3,060	-9,190	137,000 ^r
September	81,700 ^r	13,100	50,700	2,470	-1,970	145,000 ^r
October	73,700 ^r	13,000	49,700	1,190	-8,330 ^r	144,000 ^r
November	69,600	13,100	37,900	1,430	-16,300	136,000
January–November	859,000	148,000	694,000	25,700	-27,000	1,700,000

^pPreliminary. ^rRevised.

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

²Copper recovered from old scrap (of copper-base and non-copper-base) and converted to refined metal, alloys, and other forms. Includes reported monthly production and estimates for annual reporters based on the monthly average of 2020 annual data. Old scrap consists of copper items used by consumers.

³Source: U.S. Census Bureau. Includes Harmonized Tariff Schedule (imports) and Schedule B (exports) codes 7403.11.0000, 7403.12.0000, 7403.13.0000, and 7403.19.0000.

⁴Primary refined copper production plus copper in old scrap plus refined imports for consumption minus refined exports minus refined stock change during period.

TABLE 9
U.S. CONSUMPTION OF PURCHASED COPPER-BASE SCRAP^{1, 2}

(Metric tons, gross weight)

Period	Smelters and refineries		Ingot makers ^{e, 3}		Brass and wire-rod mills ⁴		Foundries, etc. ^{e, 3}		Total
	New scrap ^c	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2021: ^p									
January–November	19,000	27,300	11,600	50,600	655,000	40,600	9,870	31,900	846,000
November	1,730	2,390	1,050	4,600	59,000	3,240	897	2,900	75,800
December	1,730	2,450	1,050	4,600	56,500	2,610	897	2,900	72,800
January–December	20,700	29,700	12,600	55,200	711,000	43,200	10,800	34,800	919,000
2022:									
January	1,730	2,380	1,050	4,600	59,800	4,610	897	2,900	78,000
February	1,730	1,650	1,050	4,600	56,200	3,720	897	2,900	72,800
March	1,730	1,870	1,050	4,600	59,200	4,250	897	2,900	76,500
April	1,730	1,620	1,050	4,600	58,100	3,980	897	2,900	74,800
May	1,730	1,590	1,050	4,600	57,800	3,810	897	2,900	74,400
June	1,730	1,740	1,050	4,600	57,900	3,880	897	2,900	74,700
July	1,730	1,620	1,050	4,600	58,800	3,220	897	2,900	74,800
August	1,730	1,630	1,050	4,600	59,500	3,490	897	2,900	75,800
September	1,730	1,590	1,050	4,600	58,900	3,510	897	2,900	75,100
October	1,730	1,590	1,050	4,600	59,100	3,340	897	2,900	75,200
November	1,730	1,650	1,050	4,600	59,800	3,420	897	2,900	76,100
January–November	19,000	18,900	11,600	50,600	645,000	41,200	9,870	31,900	828,000

^cEstimated. ^pPreliminary.

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

²New scrap refers to material generated during the manufacturing process. Old scrap consists of copper items used by consumers.

³Plants are surveyed by the U.S. Geological Survey on an annual basis; data after 2020 not yet available. Monthly data are estimated based on the monthly average of 2020 annual data.

⁴Consumption at brass and wire-rod mills assumed equal to receipts.

TABLE 10
COPPER STOCKS IN THE UNITED STATES AT END OF PERIOD¹

(Metric tons, copper content)

Period	Blister and anodes	Refined copper						Total refined
		Refineries	Wire-rod mills	Brass mills	Other ^{e, 2}	COMEX ³	LME ⁴	
2021: ^p								
November	15,900	5,250	16,300	9,080	6,850	53,200	14,700	105,000
December	16,100	5,440	11,500	9,500	6,850	63,800	20,200	117,000
2022:								
January	11,800	5,000	10,900	9,530	6,850	73,300	27,200	133,000
February	13,300	4,870	13,700	9,860	6,850	63,900	32,300	131,000
March	12,200	3,690	15,400	8,160	6,850	67,400	31,300	133,000
April	16,100	4,990	10,600	8,620	6,850	75,800	26,800	134,000
May	11,500	3,090	12,000	8,330	6,850	71,800	25,100	127,000
June	13,100	5,800	11,700	8,330	6,850	66,700	25,100	125,000
July	12,900	3,980	13,100	8,640	6,850	55,100	38,400	126,000
August	14,200	4,790	13,100	9,010	6,850	46,000	37,100	117,000
September	14,900	5,570	15,500	9,840	6,850	40,800	36,400	115,000
October	18,500	4,300	19,200 ^r	10,400	6,850	33,400	32,400	107,000 ^r
November	14,600	3,470	16,100	10,800	6,850	33,400	19,700	90,300

^eEstimated. ^pPreliminary. ^rRevised.

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

²Chemical plants, foundries, ingot makers, and miscellaneous manufacturers. These plants are surveyed by the U.S. Geological Survey on an annual basis; data after 2020 not yet available. Monthly data are estimated based on yearend 2020 stocks.

³Commodity Exchange Inc.

⁴London Metal Exchange Ltd., U.S. warehouses.

TABLE 11
AVERAGE PRICES FOR REFINED COPPER IN THE UNITED STATES
AND ON THE LONDON METAL EXCHANGE

(Cents per pound)

Period	COMEX	U.S. producers	LME
	first position ¹	cathode ²	grade A cash ³
2021:			
November	436.574	445.074	442.914
December	433.320	441.820	433.140
Year	424.306	432.264	422.496
2022:			
January	443.113	451.613	443.364
February	450.211	458.711	450.870
March	468.228	477.228	464.329
April	463.763	473.388	461.863
May	424.929	434.929	424.657
June	412.540	422.540	409.684
July	339.610	350.610	341.513
August	361.500	372.500	361.070
September	348.021	359.021	350.800
October	347.386	358.386	345.649
November	367.683	378.483	364.184
January–November	402.453	412.492	401.635

¹Listed as “COMEX high grade first position.” COMEX refers to the Commodity Exchange Inc.

²Sum of “COMEX high grade first position” and “NY dealer premium cathode.” Reflects the delivered spot price of copper cathode to U.S. consumers by U.S. producers.

³LME refers to the London Metal Exchange Ltd.

Source: S&P Global Platts Metals Week.

TABLE 12
AVERAGE BUYING PRICES FOR COPPER SCRAP IN THE UNITED STATES

(Cents per pound)

Period	Brass mills no. 1 scrap	Refiners no. 2 scrap	Dealers	
			No. 2 scrap	Red brass turnings and borings
2021:				
November	423.05	383.05	330.50	222.00
December	420.45	380.45	335.00	230.00
Year	408.14	369.04	314.79	212.63
2022:				
January	433.10	393.50	336.50	235.00
February	440.32	399.84	336.50	225.00
March	459.30	423.17	341.50	217.00
April	454.35	418.85	355.00	211.50
May	414.90	379.40	327.50	196.50
June	401.81	366.31	321.50	185.00
July	329.10	295.60	259.00	172.50
August	350.65	322.65	244.00	153.00
September	335.52	307.81	254.50	148.00
October	333.62	308.71	247.50	148.00
November	356.15	332.15	261.50	150.50
January–November	391.71	358.91	298.64	185.64

Source: Fastmarkets-AMM.

TABLE 13
U.S. IMPORTS FOR CONSUMPTION OF UNMANUFACTURED COPPER¹

(Metric tons, copper content)

Country or locality	Ore and concentrates ²			Matte, ash, and precipitates ³			Blister and anodes ⁴			Refined ⁵		
	2022			2022			2022			2022		
	2021	November	January– November	2021	November	January– November	2021	November	January– November	2021	November	January– November
Belgium	--	--	--	236	154	384	--	--	--	29	--	2
Bolivia	--	--	--	--	--	--	--	--	--	763	--	--
Brazil	--	--	--	--	--	--	--	--	(6)	5,720	--	(6)
Canada	11,000	146	11,700	651	155	538	(6)	--	(6)	141,000	9,780	109,000
Chile	--	--	--	--	--	--	--	--	--	613,000	23,600	457,000
China	--	--	--	--	--	--	--	--	(6)	654	1	891
Congo (Kinshasa)	--	--	--	--	--	--	--	--	--	22,200	--	8,910
Finland	--	--	--	--	--	--	371	15	233	35	--	39
Germany	--	--	(6)	155	--	94	(6)	--	(6)	2,150	425	3,100
Japan	1	--	(6)	483	--	--	1	--	(6)	1,440	309	1,200
Mexico	--	--	--	8	2	21	(6)	--	(6)	87,300	1,210	69,200
Peru	--	--	--	--	--	--	--	--	--	28,500	2,510	43,000
Russia	--	--	--	--	--	--	--	--	--	3,900	--	--
South Africa	--	--	--	--	--	--	--	--	--	277	--	--
Zambia	--	--	--	--	--	--	--	--	--	11,400	--	1,230
Other	10	--	19	49	--	57	12	1	24	155	51	322
Total	11,000	146	11,700	1,580	311	1,090	384	16	258	919,000	37,900	694,000

-- Zero.

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

²Harmonized Tariff Schedule of the United States (HTS) code 2603.00.0010. Includes copper ore and concentrates only; excludes copper contained in ore and concentrates of other metals.

³HTS codes 2620.30.0010 and 7401.00.0000. Includes copper matte, ash, and precipitates only; excludes the copper content of mattes and ashes of other metals.

⁴HTS code 7402.00.0000.

⁵HTS codes 7403.11.0000, 7403.12.0000, 7403.13.0000, and 7403.19.0000.

⁶Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 14
U.S. EXPORTS OF UNMANUFACTURED COPPER¹

(Metric tons, copper content)

Country or locality	Ore and concentrates ²			Matte, ash, and precipitates ³			Blister and anodes ⁴			Refined ⁵		
	2022			2022			2022			2022		
	2021	November	January– November	2021	November	January– November	2021	November	January– November	2021	November	January– November
Belgium	246	--	37	6,120	417	5,650	1,490	11	204	--	--	--
Canada	39,500	3,540	34,100	16,200	870	12,000	18,800	1,540	4,090	24,700	1,050	12,500
China	65,600	7,290	52,800	548	86	238	171	20	60	3,190	156	2,300
Dominican Republic	202	8	122	--	--	6	--	--	--	10	(6)	(6)
Finland	783	--	552	--	--	--	--	--	--	--	--	--
Germany	784	--	--	430	93	235	190	--	244	20	--	1
Hong Kong	2	1	1	44	--	(6)	310	--	22	9	--	8
India	--	--	--	30	--	16	433	199	1,480	--	20	34
Italy	--	--	--	--	--	--	113	22	155	22	1	10
Japan	6,350	--	11,000	760	26	324	17	--	20	11	(6)	23
Korea, Republic of	2,370	11	59	171	42	157	1,320	73	1,480	30	57	133
Malaysia	5	23	164	47	--	147	188	29	168	13	--	33
Mexico	228,000	26,600	205,000	33	(6)	30	258	1	252	19,100	81	7,490
Philippines	2,350	--	7,770	1	--	(6)	39	--	67	--	--	35
Singapore	--	--	--	300	34	279	92	--	40	22	--	22
Slovakia	--	--	--	1,450	25	1,200	--	--	--	--	--	--
Spain	--	--	--	1,130	129	1,050	20	20	42	(6)	55	241
Taiwan	1,490	--	--	19	--	43	291	--	137	282	--	23
Trinidad and Tobago	--	--	--	--	--	--	157	--	--	--	--	--
Other	92	5	2,800	208	118	1,140	499	25	498	125	18	2,840
Total	347,000	37,400	314,000	27,500	1,840	22,500	24,400	1,940	8,950	47,600	1,430	25,700

-- Zero.

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

²Schedule B of the United States code 2603.00.0010. Includes copper ore and concentrates only; excludes copper contained in ore and concentrates of other metals.

³Schedule B codes 2620.30.0000, 7401.00.0010, and 7401.00.0050. Includes copper matte, ash, and precipitates only; excludes the copper content of mattes and ashes of other metals.

⁴Schedule B code 7402.00.0000.

⁵Schedule B codes 7403.11.0000, 7403.12.0000, 7403.13.0000, and 7403.19.0000.

⁶Less 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 ²			Alloyed ³		
	2022			2022		
	2021	November	January– November	2021	November	January– November
Bahamas	--	--	--	608	41	575
Bolivia	114	--	39	442	--	76
Canada	19,900	1,230	16,400	48,200	2,900	38,700
Cayman Islands	--	--	--	219	47	217
Colombia	174	20	157	643	--	106
Costa Rica	729	54	640	1,480	99	1,210
Dominican Republic	1,550	70	1,270	2,720	95	2,000
Ecuador	88	--	24	277	--	57
El Salvador	--	--	--	583	22	905
Germany	210	39	238	191	--	50
Guatemala	--	--	--	484	33	302
Honduras	75	1	24	907	79	735
Jamaica	7	--	7	159	--	380
Mexico	12,600	1,170	10,800	43,800	3,010	39,700
Panama	1,040	44	1,120	496	32	378
Peru	19	--	--	439	--	225
Suriname	254	22	299	58	--	64
Uruguay	481	--	63	58	--	32
Venezuela	--	--	--	675	--	43
Vietnam	114	--	62	64	--	50
Other	301	9	122	2,060	148	1,780
Total	37,700	2,660	31,200	105,000	6,510	87,500

-- Zero.

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

²Harmonized Tariff Schedule of the United States (HTS) codes 7404.00.3020 and 7404.00.6020.

³HTS codes 7404.00.3045, 7404.00.3055, 7404.00.3065, 7404.00.3090, 7404.00.6045, 7404.00.6055, 7404.00.6065, and 7404.00.6090.

Source: U.S. Census Bureau.

TABLE 16
U.S. EXPORTS OF COPPER SCRAP¹

(Metric tons, gross weight)

Country or locality	Unalloyed ²							Alloyed ³				
	2022							2022				
	2021	No. 1		No. 2		Other		2021	Segregated		Unsegregated	
		November	January– November	November	January– November	November	January– November		November	January– November	November	January– November
Austria	1,250	--	53	40	1,110	--	--	193	99	775	17	290
Belgium	20,700	583	12,700	1,430	11,300	527	6,350	8,520	117	1,190	419	7,180
Canada	61,000	--	--	--	--	5,320	56,800	53,900	--	--	3,860	42,900
Chile	2,380	--	21	--	--	--	--	345	--	--	--	--
China	195,000	7,530	75,300	4,250	46,500	11,300	120,000	43,300	1,840	20,000	1,190	8,990
Germany	19,100	945	10,200	--	1,310	248	2,350	15,300	19	1,600	1,270	13,200
Greece	15,000	110	5,250	20	250	100	3,220	2,140	18	280	55	1,730
Hong Kong	23,100	193	1,300	591	8,920	328	5,510	7,570	--	321	83	3,250
India	12,800	480	7,690	98	2,900	579	7,860	39,600	1,210	23,700	3,310	38,100
Japan	19,900	533	3,330	1,140	16,800	93	3,370	7,490	176	1,450	259	4,960
Korea, Republic of	47,200	1,310	16,800	676	11,700	810	10,700	17,100	241	4,610	163	6,310
Malaysia	63,900	634	5,370	499	3,560	1,010	14,400	88,200	649	8,990	2,990	29,000
Mexico	3,590	170	2,920	--	--	--	104	4,640	--	1,240	158	6,650
Netherlands	2,950	642	5,670	--	296	26	1,260	569	--	20	56	1,440
Pakistan	476	--	1,150	--	233	--	109	24,400	60	1,410	1,730	23,700
Poland	11,300	191	2,550	--	337	1,050	11,000	2,280	--	39	118	854
Russia	1,410	--	--	--	39	--	77	766	--	--	--	38
Slovakia	1,850	98	1,400	--	--	--	--	1,760	155	2,030	94	270
Spain	2,960	122	2,150	24	225	--	1,160	7,070	139	2,190	416	4,680
Sweden	1,080	--	19	--	--	74	562	2,480	--	--	78	1,920
Taiwan	13,800	84	2,930	148	2,740	470	6,870	6,310	221	1,350	316	2,940
Thailand	9,750	426	3,200	37	646	1,090	17,400	35,900	410	2,880	3,110	34,000
United Arab Emirates	1,770	32	686	--	23	--	58	3,320	--	229	243	5,080
Other	6,440	436	4,120	64	522	98	1,010	5,020	21	653	837	5,750
Total	539,000	14,500	165,000	9,020	109,000	23,200	270,000	378,000	5,380	75,000	20,800	243,000

-- Zero.

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

²Schedule B of the United States codes 7404.00.0010 and 7404.00.0015 (no. 1), 7404.00.0025 (no. 2), and 7404.00.0030 (other).

³Schedule B codes for segregated alloyed copper scrap are 7404.00.0041, 7404.00.0046, 7404.00.0051, 7404.00.0056, 7404.00.0061, 7404.00.0066, and 7404.00.0075. Schedule B codes for unsegregated alloyed copper scrap are 7404.00.0085 and 7404.00.0095.

Source: U.S. Census Bureau.