

Mineral Industry Surveys

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COPPER IN AUGUST 2022

In August 2022, domestic mine output of recoverable copper was 97,400 metric tons (t). The average daily mine production was 3,140 t, a decrease of 4% from that in July and 10% lower than that in August 2021 (fig. 1). Year-to-date recoverable mine production was 818,000 t, a slight increase compared with that through August 2021 (table 2).

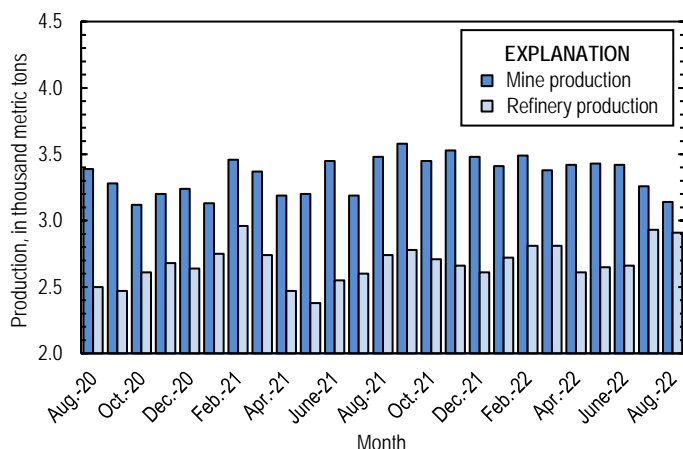


Figure 1. Average daily copper mine (recoverable) and refinery (primary and secondary) production in the United States from August 2020 through August 2022.

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 August 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 August 2022, ASARCO had not publicly announced when operations were expected to resume. The company'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 smelter output in the United States was 40,000 t in August 2022. Year-to-date estimated smelter production was 275,000 t, 15% higher than that through August 2021 (table 3).

Total U.S. refinery production was 90,100 t in August 2022; data for electrolytic and electrowon output, as well as refined

production from scrap, are reported in table 4. Average daily refinery production was 2,910 t, essentially unchanged from that in July and 6% greater than that in August 2021 (fig. 1). Year-to-date refinery output was 671,000 t, an increase of 4% relative to the same time period in 2021.

Prices

In August 2022, the average Commodity Exchange Inc. (COMEX) copper price was \$3.62 per pound, an increase of 6% from \$3.40 per pound in July and a decrease of 16% compared with \$4.29 per pound in August 2021 (fig. 2, table 11). The average U.S. dealers buying price of number 2 copper scrap was \$2.44 per pound in August 2022, a decline of 6% from \$2.59 per pound in July and 28% less than \$3.38 per pound in August 2021 (fig. 2, table 12).

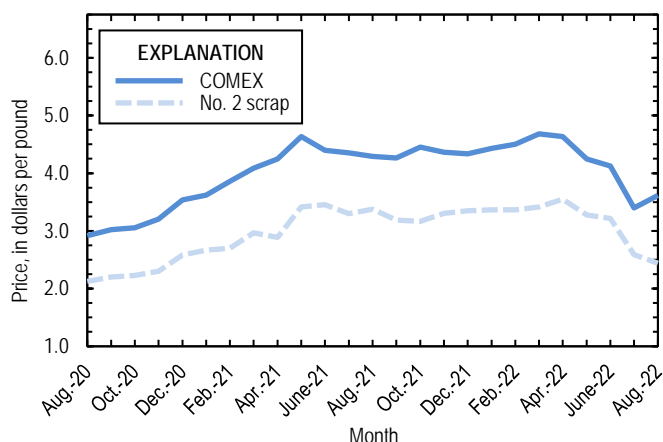


Figure 2. Monthly average Commodity Exchange Inc. (COMEX) copper price and no. 2 copper scrap U.S. dealers buying price from August 2020 through August 2022. Sources: Fastmarkets-AMM and S&P Global Platts Metals Week.

Stocks

Refined copper stocks in the United States totaled 117,000 t at the end of August 2022, a decrease of 7% compared with those in July and 47% higher than those in August 2021. COMEX stocks fell by 9,090 t (16%) and London Metal Exchange Ltd. stocks in U.S. warehouses were 1,350 t (4%) lower relative to those at the end of July (fig. 3, table 10).

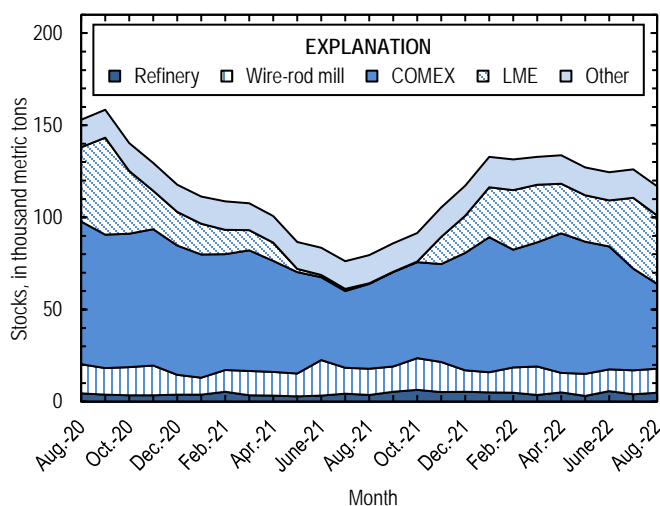


Figure 3. Domestic refined copper stocks at end of month, by type, from August 2020 through August 2022. Sources: London Metal Exchange Ltd., S&P Global Platts Metals Week, and U.S. Geological Survey.

Industry News

Chile.—Corporación Nacional del Cobre de Chile (Codelco), the leading global producer of mined copper, reported that it expected to produce 1.5 million metric tons (Mt) of copper from its wholly-owned mines in 2022, 7% less than 1.62 Mt in 2021. The company attributed the lower output primarily to reduced copper recoveries at the Ministro Hales Mine, where operations were affected by a landslide in late 2021, and decreased copper ore grades at the Chuquibambilla Mine (Corporación Nacional del Cobre de Chile, 2022, p. 35; Reuters, 2022).

China.—As a result of coronavirus disease 2019 (COVID-19) control measures, Jiangxi Copper Co. Ltd. reduced production of copper anode at its Guixi smelter by 300 to 500 metric tons per day until further notice, beginning on approximately August 20. The Guixi complex is the leading copper smelter and refinery in the world and produced 1.02 Mt of copper cathode in 2021. To compensate for the lower smelter output, Jiangxi planned to buy copper anode from the import and domestic markets to supply its refinery during the smelter curtailment. Other copper smelters and refineries in China were also reportedly affected by COVID-19 lockdowns and power restrictions owing to high temperatures and increased air conditioning demand. Tongling Nonferrous Metals Group Holding Co. Ltd., another leading producer of refined copper in China, decreased production at two of its plants. The total impact of the disruptions on copper smelter and refinery output in China were uncertain (CRU International Ltd., 2022, p. 19; Zhang and Luk, 2022).

United States.—In August 2022, ASARCO indefinitely shut down its wire-rod plant in Amarillo, TX, owing to high production costs, maintenance issues, and labor shortages. The exact date of the closure was unknown but was no later than August 23. ASARCO halted copper refining at the Amarillo facility in October 2019. Information about when, or if, the operations would eventually reopen was unavailable (Grupo México, S.A.B. de C.V., 2021, p. 83; Frazier, 2022; Oliva and Green, 2022).

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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			
			June	July	August	January– August
Production:						
Primary (from ore):						
Mine, recoverable ³	(2)	1,230,000	103,000 ^r	101,000 ^r	97,400	818,000
Smelter ^{c, 4}	(3)	360,000	30,000	40,000 ^r	40,000	275,000
Refinery:						
Electrolytic ^c	(4)	360,000	30,000	40,000 ^r	40,000	275,000
Electrowon	(4)	562,000	46,500 ^r	47,500 ^r	46,800	369,000
Total	(4)	922,000	76,500 ^r	87,500 ^r	86,800	644,000
Secondary (from copper-base scrap): ⁵						
Refineries ⁶	(5)	48,900	3,370	3,250	3,260	27,100
Ingot makers ^{c, 7}	(5)	51,600	4,300	4,300	4,300	34,400
Brass and wire-rod mills	(5)	655,000	53,500	53,900	54,800	432,000
Foundries, etc. ^{c, 7}	(5)	38,800	3,230	3,230	3,230	25,800
Consumption:						
Reported, refined copper	(7)	1,770,000	147,000	152,000	146,000	1,200,000
Apparent, primary refined and copper from old scrap ⁸	(8)	1,960,000	167,000	178,000 ^r	145,000	1,290,000
Reported, purchased copper-base scrap (gross weight)	(9)	919,000	74,700	74,800	75,800	602,000
Stocks at end of period:						
Refined ⁹	(10)	117,000	125,000	126,000	117,000	117,000
Blister and anodes	(10)	16,100	13,100	12,900	14,200	14,200
Price, U.S. producers cathode (cents per pound) ¹⁰	(11)	432.264	422.540	350.610	372.500	430.190
Imports for consumption: ¹¹						
Ore and concentrates	(13)	11,000	1,440	2,250	1,780	8,960
Refined	(13)	919,000	75,900	80,900	36,400	556,000
Exports: ¹¹						
Ore and concentrates	(14)	347,000	24,200	19,900	34,000	210,000
Refined	(14)	47,600	1,720	1,900	3,060	20,600

^cEstimated. ^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–August	571,000	232,000	803,000	370,000	451,000	821,000
August	75,700	32,000	108,000	51,200	58,800	110,000
September	75,300	32,300	108,000	48,900	60,900	110,000
October	73,600	33,400	107,000	50,400	58,900	109,000
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 ^r	97,600 ^r	40,300	59,400 ^r	99,800 ^r
March	73,100	31,700 ^r	105,000	48,500	58,400 ^r	107,000
April	72,200 ^r	30,400 ^r	103,000 ^r	44,900 ^r	58,900	104,000
May	76,400 ^r	29,800 ^r	106,000 ^r	49,000 ^r	59,400 ^r	108,000 ^r
June	73,900	28,600 ^r	103,000 ^r	46,500 ^r	58,200 ^r	105,000 ^r
July	72,900 ^r	28,100 ^r	101,000 ^r	47,500 ^r	55,500 ^r	103,000 ^r
August	69,800	27,500	97,400	46,800	52,500	99,300
January–August	576,000	242,000	818,000	369,000	465,000	834,000

^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–August	240,000
August	30,000
September	30,000
October	30,000
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	40,000 ^r
August	40,000
January–August	275,000

^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–August	240,000	370,000	610,000	32,800	643,000
August	30,000	51,200	81,200	3,750	84,900
September	30,000	48,900	78,900	4,590	83,500
October	30,000	50,400	80,400	3,540	83,900
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 ^r	74,900 ^r	3,250	78,200
May	30,000	49,000 ^r	79,000 ^r	3,220	82,200
June	30,000	46,500 ^r	76,500 ^r	3,370	79,900
July	40,000 ^r	47,500 ^r	87,500 ^r	3,250	90,800
August	40,000	46,800	86,800	3,260	90,100
January–August	275,000	369,000	644,000	27,100	671,000

^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 ^c	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2021: ^p									
January–August	13,400	19,400	3,150	31,300	412,000	29,000	6,100	19,700	534,000
August	1,680	2,080	394	3,910	50,500	3,540	763	2,470	65,400
September	1,680	2,910	394	3,910	51,300	3,130	763	2,470	66,500
October	1,680	1,860	394	3,910	51,900	3,490	763	2,470	66,400
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
January–August	13,400	13,700	3,150	31,300	402,000	29,500	6,100	19,700	519,000

^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–August	594,000	923,000	595,000	921,000	28,600	21,200
August	74,600	117,000	74,500	113,000	28,600	21,200
September	74,000	118,000	74,300	120,000	28,300	18,800
October	74,600	115,000	74,400	110,000	28,600	23,400
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
January–August	602,000	908,000	602,000	910,000	29,200	17,900

^PPreliminary.

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 ^{6, 2}	Total
2021: ^P				
January–August	276,000	877,000	41,400	1,200,000
August	34,500	113,000	5,180	153,000
September	34,700	112,000	5,180	152,000
October	34,700	109,000	5,180	148,000
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
January–August	280,000	874,000	41,400	1,200,000

⁶Estimated; ^PPreliminary.

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–August	610,000	114,000	599,000	35,500	-38,300	1,330,000
August	81,200	13,900	105,000	1,830	3,260	195,000
September	78,900	14,300	90,700	2,300	6,480	175,000
October	80,400	13,600	92,300	3,490	5,550	177,000
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 ^r	13,600	64,800	2,820	794	150,000
May	79,000 ^r	13,400	74,300	2,890	-6,470	170,000
June	76,500 ^r	13,600	75,900	1,720	-2,560	167,000
July	87,500 ^r	12,900	80,900	1,900	1,560	178,000 ^r
August	86,800	13,200	36,400	3,060	-9,190	145,000
January–August	644,000	109,000	556,000	20,600	-343	1,290,000

^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–August	13,800	20,000	8,400	36,800	477,000	30,500	7,180	23,200	616,000
August	1,730	2,140	1,050	4,600	58,700	3,750	897	2,900	75,800
September	1,730	3,000	1,050	4,600	59,300	3,260	897	2,900	76,800
October	1,730	1,920	1,050	4,600	59,900	3,630	897	2,900	76,700
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
January–August	13,800	14,100	8,400	36,800	467,000	31,000	7,180	23,200	602,000

^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								
August	12,000	3,620	14,200	8,330	6,850	46,100	400	79,500
September	10,200	5,400	13,700	8,670	6,850	51,200	125	86,000
October	15,700	6,400	17,200	8,640	6,850	52,100	325	91,500
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

^eEstimated. ^pPreliminary.

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		
	first position ¹	U.S. producers cathode ²	LME grade A cash ³
2021:			
August	429.230	437.543	424.435
September	426.538	434.888	422.916
October	445.112	453.612	443.497
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
January–August	420.487	430.190	419.669

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:				
August	410.36	368.41	337.50	238.00
September	409.62	368.38	319.00	229.00
October	430.88	390.64	316.50	222.00
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
January–August	410.44	374.92	315.19	199.44

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	August	January– August	2021	August	January– August	2021	August	January– August	2021	August	January– August
Belgium	--	--	--	236	--	97	--	--	--	29	--	2
Bolivia	--	--	--	--	--	--	--	--	--	763	--	--
Brazil	--	--	--	--	--	--	--	--	--	5,720	--	(6)
Canada	11,000	1,780	8,940	651	40	290	(6)	(6)	(6)	141,000	8,680	74,700
Chile	--	--	--	--	--	--	--	--	--	613,000	19,300	372,000
China	--	--	--	--	--	--	--	--	(6)	654	241	887
Congo (Kinshasa)	--	--	--	--	--	--	--	--	--	22,200	--	8,910
Finland	--	--	--	--	--	--	371	--	95	35	--	39
Germany	--	--	--	155	--	94	(6)	(6)	(6)	2,150	148	2,070
Japan	1	--	(6)	483	--	--	1	--	(6)	1,440	17	753
Mexico	--	--	--	8	(6)	2	(6)	(6)	(6)	87,300	4,050	61,400
Peru	--	--	--	--	--	--	--	--	--	28,500	4,010	33,300
Russia	--	--	--	--	--	--	--	--	--	3,900	--	--
South Africa	--	--	--	--	--	--	--	--	--	277	--	--
Zambia	--	--	--	--	--	--	--	--	--	11,400	--	1,230
Other	10	--	19	49	43	56	12	2	21	155	3	125
Total	11,000	1,780	8,960	1,580	82	539	384	2	116	919,000	36,400	556,000

-- 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	August	January– August	2021	August	January– August	2021	August	January– August	2021	August	January– August
Belgium	246	--	37	6,120	426	3,950	1,490	15	175	--	--	--
Canada	39,500	3,670	23,600	16,200	989	9,590	18,800	5	870	24,700	461	9,760
China	65,600	3,370	32,100	548	23	51	171	--	20	3,190	75	2,100
Dominican Republic	202	11	91	--	--	6	--	--	--	10	(6)	(6)
Finland	783	--	552	--	--	--	--	--	--	--	--	--
Germany	784	--	--	430	3	42	190	--	138	20	--	1
Hong Kong	2	--	--	44	--	(6)	310	--	11	9	1	1
India	--	--	--	30	--	--	433	163	895	--	--	(6)
Italy	--	--	--	--	--	--	113	42	112	22	--	8
Japan	6,350	3,920	7,610	760	17	273	17	2	20	11	1	22
Korea, Republic of	2,370	--	48	171	6	91	1,320	76	1,150	30	19	19
Malaysia	5	3	101	47	19	67	188	--	99	13	20	33
Mexico	228,000	21,000	138,000	33	14	30	258	4	238	19,100	695	6,720
Philippines	2,350	2,070	4,390	1	--	(6)	39	7	67	--	--	35
Singapore	--	--	--	300	60	107	92	--	40	22	3	19
Slovakia	--	--	--	1,450	61	834	--	--	--	--	--	--
Spain	--	--	--	1,130	99	916	20	--	22	(6)	91	91
Taiwan	1,490	--	--	19	--	41	291	--	137	282	--	22
Trinidad and Tobago	--	--	--	--	--	--	157	--	--	--	--	--
Other	92	--	2,800	208	111	756	499	29	448	125	1,700	1,790
Total	347,000	34,000	210,000	27,500	1,830	16,700	24,400	343	4,440	47,600	3,060	20,600

-- 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	August	January– August	2021	August	January– August
Bahamas	--	--	--	608	32	457
Bolivia	114	--	--	442	19	76
Canada	19,900	1,280	12,300	48,200	3,280	28,100
Cayman Islands	--	--	--	219	14	134
Colombia	174	20	118	643	20	106
Costa Rica	729	79	481	1,480	79	956
Dominican Republic	1,550	138	1,050	2,720	195	1,660
Ecuador	88	--	24	277	--	57
El Salvador	--	--	--	583	11	713
Germany	210	15	172	191	6	12
Guatemala	--	--	--	484	28	217
Honduras	75	2	16	907	100	499
Jamaica	7	--	7	159	58	322
Mexico	12,600	903	7,530	43,800	4,010	29,700
Panama	1,040	88	881	496	12	275
Peru	19	--	--	439	20	205
Suriname	254	5	250	58	20	50
Uruguay	481	13	53	58	3	25
Venezuela	--	--	--	675	19	43
Vietnam	114	--	62	64	--	50
Other	301	7	105	2,060	86	1,420
Total	37,700	2,550	23,100	105,000	8,010	65,000

-- 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) 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					
	No. 1		No. 2		Other			Segregated		Unsegregated			
	2021	January–		January–		January–			2021	January–		January–	
		August	August	August	August	August	August	August		August	August	August	
Austria	1,250	--	--	195	839	--	--	193	483	599	32	32	
Belgium	20,700	1,050	10,500	1,060	7,720	395	4,530	8,520	39	957	624	5,340	
Canada	61,000	--	--	--	--	4,990	41,900	53,900	--	--	4,650	32,000	
Chile	2,380	--	21	--	--	--	--	345	--	--	--	--	
China	195,000	7,250	55,300	3,990	35,200	11,400	87,300	43,300	1,610	14,700	483	5,960	
Germany	19,100	711	7,150	235	954	140	1,590	15,300	59	1,410	1,290	9,830	
Greece	15,000	655	4,590	--	230	237	2,610	2,140	39	206	160	1,360	
Hong Kong	23,100	124	904	226	7,450	217	4,490	7,570	39	238	188	2,980	
India	12,800	474	5,910	318	1,870	516	6,050	39,600	3,190	17,400	4,050	24,300	
Japan	19,900	192	2,090	1,450	13,200	275	1,920	7,490	151	997	590	3,730	
Korea, Republic of	47,200	2,190	12,200	1,470	9,200	1,140	8,260	17,100	289	3,430	194	5,530	
Malaysia	63,900	460	3,240	219	2,340	1,230	11,500	88,200	741	7,150	3,740	21,300	
Mexico	3,590	395	2,220	--	--	39	104	4,640	78	1,100	358	2,970	
Netherlands	2,950	542	3,910	--	296	--	699	569	--	20	38	1,240	
Pakistan	476	--	1,110	21	175	--	70	24,400	280	1,030	2,530	17,600	
Poland	11,300	179	1,620	5	142	509	7,660	2,280	--	39	--	426	
Russia	1,410	--	--	--	39	--	77	766	--	--	--	38	
Slovakia	1,850	127	1,120	--	--	--	--	1,760	--	1,860	--	120	
Spain	2,960	228	1,870	19	144	254	1,120	7,070	423	1,690	480	3,240	
Sweden	1,080	--	--	--	--	37	369	2,480	--	--	259	1,390	
Taiwan	13,800	413	2,510	601	2,350	255	5,780	6,310	164	968	499	1,720	
Thailand	9,750	288	2,480	37	434	1,720	13,500	35,900	234	1,900	2,600	25,400	
United Arab Emirates	1,770	--	630	--	23	19	58	3,320	--	(4)	514	4,000	
Other	6,440	90	1,740	5	349	240	546	5,020	39	464	437	3,600	
Total	539,000	15,400	121,000	9,840	83,000	23,600	200,000	378,000	7,860	56,200	23,700	174,000	

-- 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.

⁴Less than ½ unit.

Source: U.S. Census Bureau.