Mineral Industry Surveys

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COPPER IN SEPTEMBER 2023

In September 2023, mine production of recoverable copper in the United States was 93,100 metric tons (t). The average daily mine output was 3,100 t, essentially unchanged from that in August and 9% less than that in September 2022 (fig. 1). Year-to-date mine production through September 2023 was 835,000 t, a decrease of 10% compared with that in the same time period in 2022 (table 2). Production declined at a majority of U.S. copper mines in 2023 because of reduced copper ore grades, lower mining rates, and (or) unplanned maintenance.

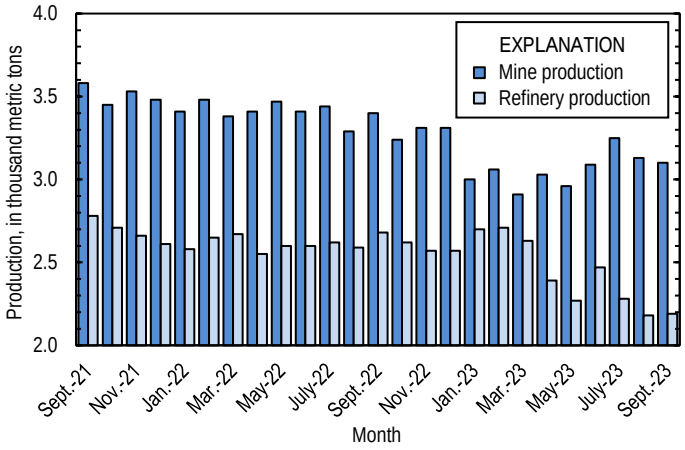

Figure 1. Average daily copper mine (recoverable) and refinery (primary and secondary) production in the United States from September 2021 through September 2023.

To avoid disclosing company proprietary data, smelter and electrolytic refinery production in September 2023 were estimated based on public information and do not reflect output reported to the U.S. Geological Survey. Estimated domestic copper smelter production was 25,000 t in September 2023. Year-to-date estimated smelter output was 285,000 t, an increase of 6% from that in the same time period in 2022. The smelter production estimates reported in table 3 represent primary production only in 2022 and primary and secondary output in 2023. A secondary copper smelter in Shelby, NC, with a production capacity of roughly 4,200 metric tons per month of anodes began operating in late 2022 (Toto, 2023).

Total U.S. refinery production of copper in September 2023 was 65,700 t; data for electrolytic and electrowon output, as well as refined production from scrap, are reported in table 4. The average daily refinery production was 2,190 t, essentially unchanged compared with that in August and 18% lower than that in September 2022 (fig. 1). Year-to-date refinery output through September 2023 was 661,000 t, a decrease of 7% relative to the same time period in 2022. Domestic refined copper production in 2023 was affected by a major rebuild of the Rio Tinto Group smelter and electrolytic refinery near Salt Lake City, UT, that began in May and was completed in September (Rio Tinto Group, 2023, p. 14).

Prices

In September 2023, the average Commodity Exchange Inc. (COMEX) copper price was $3.72 per pound, essentially unchanged from $3.76 per pound in August and 7% higher than $3.48 per pound in September 2022 (fig. 2, table 11). The average U.S. dealers buying price of number 2 copper scrap was $2.95 per pound in September 2023, unchanged from that in August and 16% greater than $2.55 per pound in September 2022 (fig. 2, table 12).

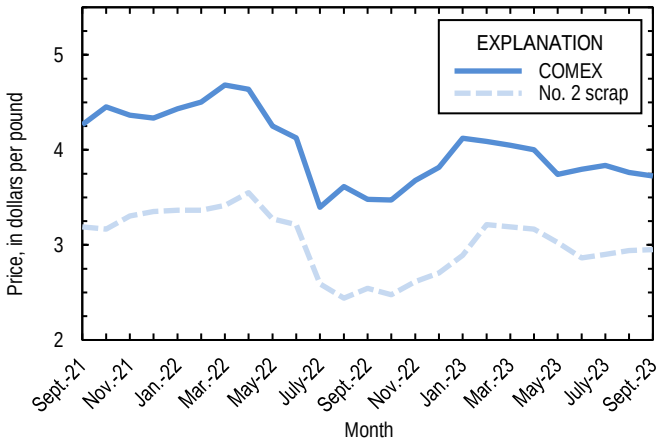

Figure 2. Monthly average Commodity Exchange Inc. (COMEX) copper price and no. 2 copper scrap U.S. dealers buying price from September 2021 through September 2023. Sources: Fastmarkets-AMM and S&P Global Platts Metals Week.

Stocks

Refined copper stocks in the United States totaled 126,000 t at the end of September 2023, an increase of 20% compared with those in August and 10% greater than those in September 2022. Total domestic stocks at producers and fabricators (brass mills, refineries, wire-rod mills, and other manufacturers) decreased by 1,670 t (4%) and total stocks at exchanges (COMEX and London Metal Exchange Ltd.) increased by 22,400 t (34%) from those at the end of August (fig. 3, table 10).

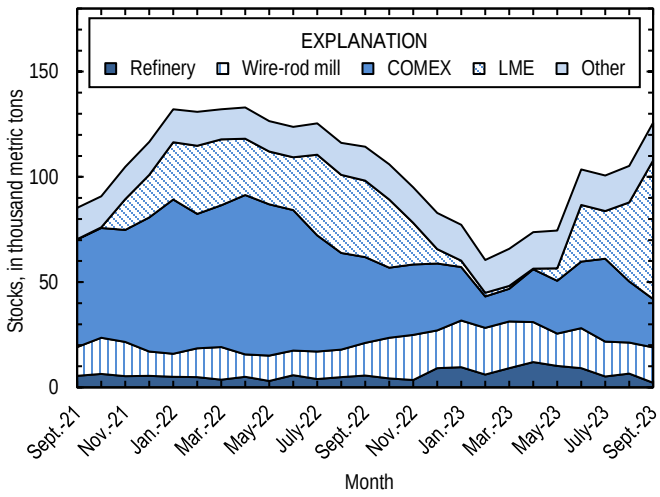

Figure 3. Domestic refined copper stocks at end of month, by type, from September 2021 through September 2023. Sources: London Metal Exchange Ltd., S&P Global Platts Metals Week, and U.S. Geological Survey.

Industry News

Russia.—Udokan Copper LLC began producing copper concentrates at the Udokan Mine in September 2023. Following the expected startup of an electrowon plant in 2024, the first stage of the mine will produce up to 150,000 t of copper per year. A second stage, projected to come online in 2028, will increase total annual output to 450,000 t. Udokan Copper reported that the Udokan deposit contained 26.7 million metric tons of copper resources as of September 2023, sufficient for a mine life of 70 years (Udokan Copper LLC, 2023a, b; undated).

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TABLE 1

SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES[1]

(Metric tons, copper content, unless otherwise specified)

	Source table[2]	2022[p]	2023			
			July	August	September	January–September
Production:						
Primary (from ore):						
Mine, recoverable[3]	(2)	1,230,000	101,000 [r]	96,900 [r]	93,100	835,000
Smelter[e, 4]	(3)	357,000	25,000	25,000	25,000	285,000
Refinery:						
Electrolytic	(4)	357,000	20,000 [e]	20,000 [e]	20,000 [e]	240,000 [e]
Electrowon	(4)	555,000	47,500 [r]	44,300 [r]	42,400	392,000
Total	(4)	912,000	67,500 [r]	64,300 [r]	62,400	632,000
Secondary (from copper-base scrap):[5]						
Refineries[6]	(5)	40,000	3,270	3,220	3,300	29,200
Ingot makers[e, 7]	(5)	39,500	3,290	3,290	3,290	29,600
Brass and wire-rod mills	(5)	650,000	55,800	56,700	54,700	503,000
Foundries, etc.[e, 7]	(5)	40,000	3,330	3,330	3,330	30,000
Consumption:						
Reported, refined copper	(7)	1,720,000	133,000	139,000	135,000	1,200,000
Apparent, primary refined copper and copper from old scrap[8]	(8)	1,800,000	138,000	123,000	109,000	1,340,000
Reported, purchased copper-base scrap (gross weight)	(9)	890,000	75,600	76,500	74,500	681,000
Stocks at end of period:						
Blister and anodes	(10)	13,300	20,400	17,700 [r]	15,000	15,000
Refined[9]	(10)	82,800	101,000	105,000	126,000	126,000
Price, U.S. producers cathode (cents per pound)[10]	(11)	410.775	393.570	386.330	382.360	400.338
Imports for consumption:[11]						
Ore and concentrates	(13)	11,700	2	(12)	--	3,290
Refined	(13)	732,000	60,300	54,300	59,700	665,000
Exports:[11]						
Ore and concentrates	(14)	353,000	29,700	21,600	23,000	265,000
Refined	(14)	27,600	4,700	3,580	3,650	22,100

[e]Estimated. [p]Preliminary. [r]Revised. -- Zero.

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

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

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

[4]Consists of primary production in 2022 and primary and secondary production in 2023.

[5]Copper 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.

[6]Electrolytically refined and fire-refined copper.

[7]Plants are surveyed by the U.S. Geological Survey on an annual basis; data after 2021 not yet available. Monthly data are estimated based on the monthly average of 2021 annual data.

[8]Primary 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 refined stock changes. Old scrap consists of copper items used by consumers.

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

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

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

[12]Less than ½ unit.

TABLE 2

MINE PRODUCTION OF COPPER IN THE UNITED STATES[1]

(Metric tons)

Period	Recoverable copper[2]			Contained copper		
	Arizona	Others[3]	Total	Electrowon	Concentrates[4]	Total
2022:[p]						
January–September	648,000	283,000	931,000	415,000	535,000	950,000
September	69,700	32,400	102,000	46,700	57,400	104,000
October	69,200	31,200	100,000	48,500	53,800	102,000
November	66,800	32,400	99,300	44,500	56,800	101,000
December	71,400	31,200	103,000	46,900	57,800	105,000
January–December	855,000	378,000	1,230,000	555,000	704,000	1,260,000
2023:						
January	67,900	25,000	92,900	45,400	48,500	94,000
February	62,400	23,200	85,600	37,700	49,200	86,800
March	66,100	24,100	90,200	43,300	50,200	93,600
April	68,000	23,000	91,000	43,300	49,600	92,900
May	66,800	24,800	91,600	42,100	50,700	92,700
June	69,300	23,600	92,800	45,800	49,900	95,700
July	69,200 [r]	31,400 [r]	101,000 [r]	47,500 [r]	55,200 [r]	103,000 [r]
August	67,400 [r]	29,500 [r]	96,900 [r]	44,300 [r]	54,700 [r]	99,000 [r]
September	65,000	28,100	93,100	42,400	52,600	95,000
January–September	602,000	233,000	835,000	392,000	461,000	852,000

[p]Preliminary. [r]Revised.

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

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

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

[4]Also includes 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]
2022:[p]	
January–September	269,000
September	30,500
October	29,400
November	29,400
December	29,400
January–December	357,000
2023:	
January	40,000
February	40,000
March	40,000
April	30,000
May	30,000
June	30,000
July	25,000
August	25,000
September	25,000
January–September	285,000

[e]Estimated. [p]Preliminary.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Data reflect primary production in 2022 and primary and secondary production in 2023.
[3]To avoid disclosing company proprietary data, anode production data are estimated based on public information and do not reflect output reported to the U.S. Geological Survey.

TABLE 4
U.S. PRODUCTION OF REFINED COPPER[1]

(Metric tons)

Period	From primary materials			From scrap[3]	Total refined
	Electrolytic[2]	Electrowon	Total primary		
2022:[p]					
January–September	269,000	415,000	684,000	30,300	714,000
September	30,500	46,700	77,200	3,220	80,400
October	29,400	48,500	77,900	3,220	81,100
November	29,400	44,500	73,900	3,280	77,200
December	29,400	46,900	76,300	3,240	79,600
January–December	357,000	555,000	912,000	40,000	952,000
2023:					
January	35,000 [e]	45,400	80,400	3,220	83,600
February	35,000 [e]	37,700	72,700	3,230	75,900
March	35,000 [e]	43,300	78,300	3,220	81,600
April	25,000 [e]	43,300	68,300	3,220	71,500
May	25,000 [e]	42,100	67,100	3,260	70,300
June	25,000 [e]	45,800	70,800	3,230	74,000
July	20,000 [e]	47,500 [r]	67,500 [r]	3,270	70,800 [r]
August	20,000 [e]	44,300 [r]	64,300 [r]	3,220	67,500 [r]
September	20,000 [e]	42,400	62,400	3,300	65,700
January–September	240,000 [e]	392,000	632,000	29,200	661,000

[e]Estimated. [p]Preliminary. [r]Revised.

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

[2]Electrolytic production data in 2022 are sourced from quarterly company reports. To avoid disclosing company proprietary data, electrolytic production data in 2023 are estimated based on public information and do not reflect output reported to the U.S. Geological Survey.

[3]Electrolytically 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	
2022:[p]									
January–September	15,100	15,200	3,150	26,400	453,000	32,800	6,660	23,300	576,000
September	1,680	1,540	350	2,940	50,800	3,340	740	2,590	64,000
October	1,680	1,540	350	2,940	51,100	3,230	740	2,590	64,200
November	1,680	1,600	350	2,940	51,800	3,270	740	2,590	65,000
December	1,680	1,560	350	2,940	51,800	2,600	740	2,590	64,200
January–December	20,100	19,900	4,200	35,300	608,000	41,900	8,880	31,100	769,000
2023:									
January	1,680	1,540	350	2,940	54,300	4,360	740	2,590	68,500
February	1,680	1,550	350	2,940	53,000	3,360	740	2,590	66,200
March	1,680	1,540	350	2,940	53,400	3,620	740	2,590	66,900
April	1,680	1,540	350	2,940	52,500	3,300	740	2,590	65,700
May	1,680	1,580	350	2,940	51,900	2,960	740	2,590	64,700
June	1,680	1,550	350	2,940	49,900	2,950	740	2,590	62,700
July	1,680	1,590	350	2,940	52,600	3,260	740	2,590	65,700
August	1,680	1,540	350	2,940	53,500	3,280	740	2,590	66,600
September	1,680	1,620	350	2,940	51,800	2,960	740	2,590	64,600
January–September	15,100	14,100	3,150	26,400	473,000	30,000	6,660	23,300	592,000

[e]Estimated. [p]Preliminary.

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

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

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

[4]Plants are surveyed by the U.S. Geological Survey on an annual basis; data after 2021 not yet available. Monthly data are estimated based on the monthly average of 2021 annual data.

[5]Does not include an estimate, based on 2021 annual data, of 2,970 tons per month from new scrap and 1,700 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 SEMIFABRICATES[1]

(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
2022:[p]						
January–September	682,000	1,020,000	682,000	1,030,000	29,800	15,600
September	79,900	116,000	79,400	119,000	29,800	15,600
October	75,400	115,000	75,100	114,000	30,000	16,600
November	74,900	94,800	74,800	94,700	30,200	16,600
December	74,800	90,300	74,300	88,400	30,700	18,600
January–December	908,000	1,330,000	906,000	1,330,000	30,700	18,600
2023:						
January	76,400	95,600	75,400	95,600	31,700	18,500
February	75,300	98,500	74,500	102,000	32,500	15,100
March	77,000	108,000	75,000	105,000	34,500	17,600
April	73,500	97,500	74,700	91,700	33,400	23,400
May	72,900	100,000	74,000	101,000	32,300	22,700
June	73,100	85,200	73,000	93,500	32,400	14,400
July	73,700	101,000	73,200	97,000	32,800	18,700
August	74,800	103,000	74,900	101,000	32,700	20,800
September	74,100	103,000	73,900	101,000	32,900	23,600
January–September	671,000	892,000	669,000	887,000	32,900	23,600

[p]Preliminary.

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

TABLE 7
U.S. CONSUMPTION OF REFINED COPPER[1]

(Metric tons)

Period	Brass mills	Wire-rod mills	Other plants[e, 2]	Total
2022:[p]				
January–September	315,000	975,000	32,300	1,320,000
September	34,900	101,000	3,590	140,000
October	35,000	105,000	3,590	144,000
November	35,000	83,700	3,590	122,000
December	35,200	88,700	3,590	127,000
January–December	420,000	1,250,000	43,000	1,720,000
2023:				
January	34,700	91,100	3,590	129,000
February	36,200	91,200	3,590	131,000
March	34,100	104,000	3,590	142,000
April	35,800	92,400	3,590	132,000
May	35,900	96,600	3,590	136,000
June	35,200	86,400	3,590	125,000
July	35,500	94,400	3,590	133,000
August	35,200	99,800	3,590	139,000
September	35,000	96,100	3,590	135,000
January–September	318,000	852,000	32,300	1,200,000

[e]Estimated. [p]Preliminary.

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

[2]Chemical plants, foundries, ingot makers, and miscellaneous manufacturers. These plants are surveyed by the U.S. Geological Survey on an annual basis; data after 2021 not yet available. Monthly data are estimated based on the monthly average of 2021 annual data.

TABLE 8
U.S. APPARENT CONSUMPTION OF COPPER[1]

(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]
2022:[p]						
January–September	684,000	113,000	606,000	22,900	-2,320	1,380,000
September	77,200	12,100	50,700	2,470	-1,970	139,000
October	77,900	12,000	49,700	1,190	-8,330	147,000
November	73,900	12,100	37,900	1,430	-10,800	133,000
December	76,300	11,400	38,800	2,100	-12,300	137,000
January–December	912,000	149,000	732,000	27,600	-33,800	1,800,000
2023:						
January	80,400	13,100	39,000	1,190	-5,510	137,000
February	72,700	12,100	48,700	2,000	-16,800	148,000
March	78,300	12,400	126,000	1,290	5,250	210,000
April	68,300	12,100	97,900	2,020	8,080	168,000
May	67,100	11,800	86,700	1,910	587	163,000
June	70,800	11,700	92,800	1,770	29,200	144,000
July	67,500 [r]	12,100	60,300	4,700	-2,990	138,000
August	64,300 [r]	12,000	54,300	3,580	4,450	123,000
September	62,400	11,800	59,700	3,650	20,700	110,000
January–September	632,000	109,000	665,000	22,100	43,000	1,340,000

[p]Preliminary. [r]Revised.

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

[2]Copper 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 2021 annual data. Old scrap consists of copper items used by consumers.

[3]Source: 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.

[4]Primary 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[e]	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2022:[p]									
January–September	15,600	15,700	8,400	31,100	526,000	34,500	7,840	27,400	667,000
September	1,730	1,590	933	3,450	58,900	3,510	871	3,040	74,000
October	1,730	1,590	933	3,450	59,100	3,340	871	3,040	74,100
November	1,730	1,650	933	3,450	59,800	3,420	871	3,040	74,900
December	1,730	1,610	933	3,450	59,900	2,710	871	3,040	74,200
January–December	20,700	20,500	11,200	41,400	705,000	43,900	10,500	36,500	890,000
2023:									
January	1,730	1,590	933	3,450	62,400	4,500	871	3,040	78,500
February	1,730	1,600	933	3,450	61,100	3,500	871	3,040	76,200
March	1,730	1,590	933	3,450	61,500	3,740	871	3,040	76,800
April	1,730	1,590	933	3,450	60,600	3,430	871	3,040	75,600
May	1,730	1,630	933	3,450	59,900	3,090	871	3,040	74,700
June	1,730	1,600	933	3,450	57,900	3,060	871	3,040	72,600
July	1,730	1,640	933	3,450	60,600	3,360	871	3,040	75,600
August	1,730	1,590	933	3,450	61,500	3,400	871	3,040	76,500
September	1,730	1,670	933	3,450	59,800	3,060	871	3,040	74,500
January–September	15,600	14,500	8,400	31,100	545,000	31,200	7,840	27,400	681,000

[e]Estimated. [p]Preliminary.

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

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

[3]Plants are surveyed by the U.S. Geological Survey on an annual basis; data after 2021 not yet available. Monthly data are estimated based on the monthly average of 2021 annual data.

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

TABLE 10
COPPER STOCKS IN THE UNITED STATES AT END OF PERIOD[1]

(Metric tons, copper content)

Period	Blister and anodes	Refined copper						
		Refineries	Wire-rod mills	Brass mills	Other[e, 2]	COMEX[3]	LME[4]	Total refined
2022:[p]								
September	14,900	5,570	15,500	9,840	6,200	40,800	36,400	114,000
October	18,500	4,300	19,200	10,400	6,200	33,400	32,400	106,000
November	14,600	3,470	21,500	10,800	6,200	33,400	19,700	95,100
December	13,300	9,100	18,000	11,000	6,200	31,700	6,850	82,800
2023:								
January	13,600	9,640	22,100	10,900	6,200	25,400	3,050	77,300
February	13,000	6,040	22,200	9,380	6,200	15,000	1,680	60,500
March	14,300	9,160	22,200	11,400	6,200	15,400	1,400	65,700
April	35,100	12,000	19,000	11,200	6,200	25,100	300	73,800
May	39,900	10,100	15,400	11,700	6,200	25,100	5,950	74,400
June	34,500	9,050	19,000	10,700	6,200	31,700	26,900	104,000
July	20,400	5,210	16,500	10,800	6,200	39,400	22,600	101,000
August	17,700 [r]	6,560	14,700	11,100	6,200	29,000	37,600	105,000
September	15,000	2,170	16,800	11,700	6,200	23,000	65,900	126,000

[e]Estimated. [p]Preliminary. [r]Revised.

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

[2]Chemical plants, foundries, ingot makers, and miscellaneous manufacturers. These plants are surveyed by the U.S. Geological Survey on an annual basis; data after 2021 not yet available. Monthly data are estimated based on yearend 2021 stocks.

[3]Commodity Exchange Inc.

[4]London 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]
2022:			
September	348.021	359.021	350.800
October	347.386	358.386	345.649
November	367.683	378.483	364.184
December	381.645	391.895	379.511
Year	400.719	410.775	399.791
2023:			
January	412.233	423.233	408.200
February	408.824	418.824	406.165
March	404.915	414.915	400.734
April	400.037	410.037	399.767
May	374.173	384.173	373.469
June	379.598	389.598	380.362
July	383.570	393.570	383.041
August	376.330	386.330	378.804
September	372.360	382.360	375.129
January–September	390.227	400.338	389.519

[1]Listed as "COMEX high grade first position." COMEX refers to the Commodity Exchange Inc.
[2]Sum 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.
[3]LME 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
2022:				
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
December	371.67	348.57	270.50	155.50
Year	390.04	358.05	296.29	183.13
2023:				
January	401.30	379.30	289.00	159.00
February	397.03	374.29	321.50	159.00
March	392.67	369.41	319.00	156.50
April	389.50	365.84	316.50	158.00
May	365.86	341.68	302.50	154.00
June	371.69	347.00	286.50	154.00
July	376.35	351.85	290.00	168.00
August	369.28	343.74	294.00	187.50
September	367.05	341.55	295.00	190.00
January–September	381.19	357.18	301.56	165.11

Source: Fastmarkets-AMM.

TABLE 13

U.S. IMPORTS FOR CONSUMPTION OF UNMANUFACTURED COPPER[1]

(Metric tons, copper content)

Country or locality	Ore and concentrates[2]			Matte, ash, and precipitates[3]			Blister and anodes[4]			Refined[5]		
		2023			2023			2023			2023	
	2022	September	January–September	2022	September	January–September	2022	September	January–September	2022	September	January–September
Austria	--	--	--	--	--	--	--	--	--	54	--	--
Belgium	--	--	--	384	--	175	--	--	--	2	--	--
Canada	11,700	--	3,270	581	118	471	(6)	(6)	5	118,000	9,980	95,900
Chile	--	--	--	--	--	--	--	--	--	472,000	39,100	472,000
China	--	--	--	--	--	--	(6)	--	9	897	14	376
Congo (Kinshasa)	--	--	--	--	--	--	--	--	--	8,910	--	11,800
Finland	--	--	--	--	--	--	281	--	78	39	6	41
France	--	--	--	--	--	--	15	--	--	53	4	52
Germany	(6)	--	--	94	--	--	(6)	--	(6)	3,410	234	1,980
Hungary	9	--	19	--	--	--	--	--	--	--	--	--
India	11	--	--	--	--	(6)	--	--	(6)	57	--	--
Japan	(6)	--	(6)	--	--	--	(6)	--	(6)	1,370	70	1,660
Korea, Republic of	--	--	--	--	--	--	1	--	1	10	22	57
Mexico	--	--	2	25	2	20	(6)	--	--	75,500	1,600	11,600
Peru	--	--	--	--	--	--	--	--	--	50,100	8,620	67,500
Qatar	--	--	--	43	--	--	--	--	--	--	--	--
Slovakia	--	--	--	14	--	--	--	--	--	--	--	--
Spain	--	--	--	51	52	203	(6)	--	--	--	--	--
United Kingdom	(6)	--	--	(6)	--	(6)	5	1	2	138	--	--
Zambia	--	--	--	--	--	--	--	--	--	1,230	--	2,040
Other	(6)	--	--	1	--	--	4	14	14	11	--	23
Total	11,700	--	3,290	1,190	172	869	306	15	109	732,000	59,700	665,000

-- Zero.

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

[2]Harmonized 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.

[3]HTS 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.

[4]HTS code 7402.00.0000.

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

[6]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 14
U.S. EXPORTS OF UNMANUFACTURED COPPER[1]

(Metric tons, copper content)

Country or locality	Ore and concentrates[2]			Matte, ash, and precipitates[3]			Blister and anodes[4]			Refined[5]		
		2023			2023			2023			2023	
	2022	September	January–September	2022	September	January–September	2022	September	January–September	2022	September	January–September
Belgium	70	21	97	5,950	373	4,250	211	11	602	--	--	66
Bulgaria	1,540	--	--	--	--	--	--	--	--	--	--	--
Canada	39,800	2,060	31,500	13,500	80	2,710	6,740	988	23,300	14,200	1,420	3,830
China	56,900	5,540	40,900	378	--	416	60	--	73	2,150	--	221
Costa Rica	--	--	5	345	--	4	--	--	11	(6)	--	3
Germany	1,590	--	--	235	38	258	244	20	68	1	21	3,550
India	--	--	9	16	1	38	1,560	--	187	34	--	37
Israel	--	--	--	--	--	--	115	4	30	98	5	16
Italy	--	--	--	--	--	2	155	--	107	10	--	2
Japan	11,000	--	4,260	361	35	87	20	--	31	23	2	4
Korea, Republic of	59	--	11	189	--	9	1,570	20	1,000	133	19	66
Madagascar	1,220	--	--	--	--	--	--	--	--	--	--	--
Malaysia	186	--	40	147	2,650	2,780	168	20	573	51	161	1,040
Mexico	232,000	14,100	178,000	30	105	1,180	260	--	115	7,680	2,020	10,200
Netherlands	--	--	--	40	--	29	4	--	--	1,070	--	2,010
Philippines	7,770	--	--	(6)	137	454	67	20	27	35	--	--
Poland	--	--	--	270	77	848	--	--	--	--	--	--
Singapore	--	--	5	414	--	181	40	--	2	22	(6)	80
Slovakia	--	--	--	1,210	52	350	--	--	--	--	--	--
Spain	26	--	--	1,510	273	2,120	42	--	--	376	--	178
Taiwan	--	--	6,000	86	--	1	137	--	45	25	--	14
Thailand	--	--	--	158	--	13	94	--	20	--	--	1
Turkey	--	--	--	233	--	159	20	--	20	20	--	--
United Kingdom	--	--	--	4	--	4	40	--	6	1,630	--	6
Other	718	1,240	4,870	194	23	182	378	30	287	57	3	815
Total	353,000	23,000	265,000	25,200	3,850	16,100	11,900	1,110	26,500	27,600	3,650	22,100

-- Zero.

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

[2]Schedule 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.

[3]Schedule 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.

[4]Schedule B code 7402.00.0000.

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

[6]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 15
U.S. IMPORTS FOR CONSUMPTION OF COPPER SCRAP[1]

(Metric tons, gross weight)

Country or locality	Unalloyed[2]			Alloyed[3]		
		2023			2023	
	2022	September	January–September	2022	September	January–September
Antigua and Barbuda	--	--	--	188	14	101
Bahamas, The	--	--	--	612	40	440
Barbados	--	--	--	326	42	121
Bermuda	12	3	27	90	27	86
Bolivia	46	--	--	106	19	78
Brazil	14	--	113	69	--	228
Canada	17,600	1,020	11,200	41,800	2,190	24,900
Cayman Islands	--	--	--	243	16	163
Colombia	196	13	111	106	--	102
Costa Rica	712	47	574	1,350	117	760
Dominican Republic	1,350	68	886	2,090	74	1,010
Ecuador	24	--	--	57	--	111
El Salvador	--	--	--	1,090	82	670
Germany	260	48	369	50	--	68
Grenada	--	--	--	72	21	117
Guatemala	--	--	--	309	25	198
Haiti	--	--	--	104	19	187
Honduras	24	4	46	787	94	859
Jamaica	7	--	--	461	25	302
Mexico	12,200	746	9,550	42,900	3,490	34,200
Nicaragua	--	--	--	194	--	35
Panama	1,190	66	587	405	91	427
Peru	--	--	--	225	40	96
Saudi Arabia	--	--	--	134	--	--
Sint Maarten	1	--	--	54	77	195
Saint Lucia	25	--	--	269	4	148
Saint Vincent and the Grenadines	--	--	--	91	--	103
Suriname	360	23	199	69	--	65
Uruguay	73	18	45	20	3	15
Vietnam	62	--	--	50	--	--
Other	75	--	95	401	25	441
Total	34,200	2,050	23,800	94,700	6,530	66,300

-- Zero.

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

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

[3]HTS 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 SCRAP[1]

(Metric tons, gross weight)

Country or locality	Unalloyed[2]							Alloyed[3]				
		2023							2023			
		No. 1		No. 2		Other			Segregated		Unsegregated	
	2022	September	January–September	September	January–September	September	January–September	2022	September	January–September	September	January–September
Austria	1,300	52	179	19	344	--	--	1,210	209	1,010	58	461
Belgium	33,200	1,050	8,690	567	7,800	337	3,810	8,860	118	734	333	4,630
Canada	60,900	--	--	--	--	5,070	53,000	46,200	--	--	1,780	21,000
China	260,000	6,530	59,500	3,910	35,800	14,100	104,000	31,900	1,650	14,800	873	12,400
Germany	15,400	917	9,190	158	737	505	4,640	15,300	18	408	1,090	8,510
Greece	8,830	632	3,510	--	--	82	1,150	2,170	--	59	100	1,370
Hong Kong	16,800	159	710	457	6,420	488	4,400	3,760	99	482	753	2,430
India	19,900	933	6,710	107	1,090	891	6,680	65,700	2,020	13,000	2,580	26,700
Japan	25,400	361	3,290	577	8,620	310	2,760	6,980	19	692	407	4,460
Korea, Republic of	42,200	989	8,410	496	3,820	1,040	7,420	11,400	265	2,670	2,150	7,680
Malaysia	24,700	1,580	10,700	362	2,980	877	8,640	41,700	373	4,870	2,780	24,900
Mexico	3,120	229	1,860	(4)	3	27	187	8,380	--	228	111	1,420
Netherlands	7,600	20	947	41	139	--	716	1,540	70	70	427	624
Pakistan	1,020	41	218	65	70	--	41	26,300	--	80	1,090	12,500
Philippines	1,660	--	526	--	--	46	495	757	4	74	86	646
Poland	15,700	308	2,580	--	20	755	9,000	1,030	--	20	60	368
Singapore	1,210	--	1,710	21	41	--	--	264	--	--	30	241
Slovakia	1,550	61	678	--	--	--	--	2,500	--	642	--	330
Spain	3,860	55	391	23	79	102	848	7,380	80	922	97	2,760
Sweden	581	--	30	--	--	--	--	1,940	--	--	24	278
Taiwan	13,100	206	1,390	20	1,340	537	3,020	4,440	81	237	195	3,190
Thailand	23,900	571	5,720	--	278	1,940	16,200	39,600	334	2,700	3,170	23,600
Turkey	1,020	100	556	--	--	--	--	2,320	--	24	60	617
United Arab Emirates	766	--	295	--	--	--	--	5,790	25	25	161	6,410
Vietnam	139	--	1,020	--	226	--	1,110	929	35	69	--	241
Other	2,180	120	659	97	331	20	462	2,400	41	348	19	1,300
Total	586,000	14,900	129,000	6,920	70,200	27,100	229,000	341,000	5,440	44,200	18,400	169,000

-- Zero.

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

[2]Schedule 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).

[3]Schedule 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.

[4]Less than ½ unit.

Source: U.S. Census Bureau.