

# Mineral Industry Surveys

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## COPPER IN APRIL 2022

In April 2022, domestic mine output of recoverable copper was 104,000 metric tons (t). The average daily mine production was 3,470 t, an increase of 3% from that in March (revised) and 9% higher than that in April 2021 (fig. 1). Year-to-date recoverable mine production was 412,000 t, an increase of 5% compared with that through April 2021 (table 2).

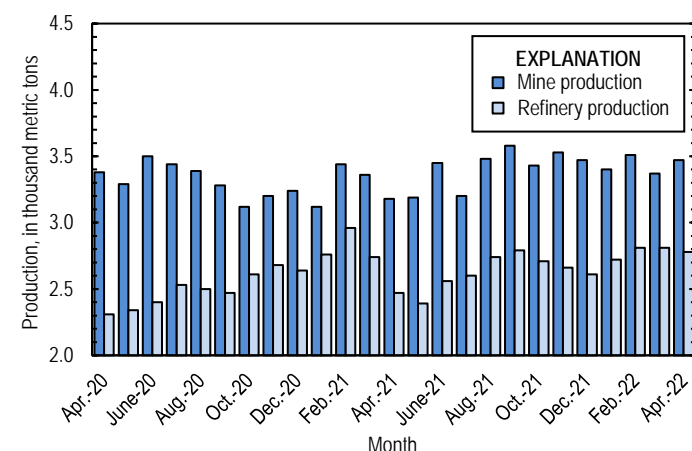


Figure 1. Average daily copper mine (recoverable) and refinery (primary and secondary) production in the United States from April 2020 through April 2022.

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 April 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 April 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 35,000 t in April 2022. Year-to-date estimated smelter production was 140,000 t, 8% greater than that through April 2021 (table 3).

Total U.S. refinery production was 83,300 t in April 2022; data for electrolytic and electrowon output, as well as refined

production from scrap, are reported in table 4. Average daily refinery production was 2,780 t, essentially unchanged from that in March and 12% higher than that in April 2021 (fig. 1). Year-to-date refinery output was 334,000 t, a slight increase relative to the same time period in 2021.

## Prices

In April 2022, the average Commodity Exchange Inc. (COMEX) copper price was \$4.64 per pound, essentially unchanged compared with \$4.68 per pound in March and 9% greater than \$4.25 per pound in April 2021 (fig. 2, table 11). The average U.S. dealers buying price of number 2 copper scrap was \$3.55 per pound in April 2022, an increase of 4% from \$3.42 per pound in March and 23% more than \$2.89 per pound in April 2021 (fig. 2, table 12).

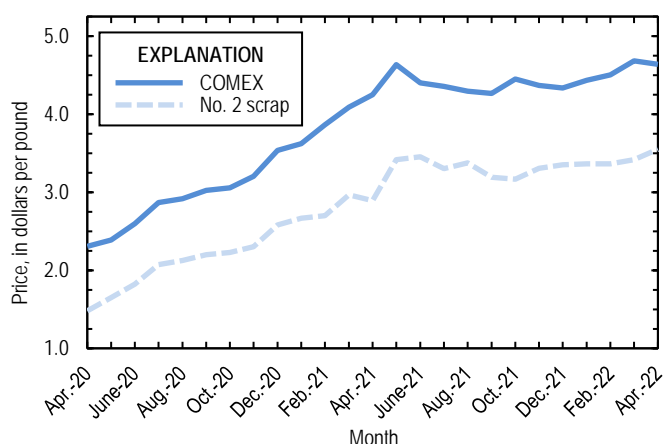


Figure 2. Monthly average Commodity Exchange Inc. (COMEX) copper price and no. 2 copper scrap U.S. dealers buying price from April 2020 through April 2022. Sources: Fastmarkets-AMM and S&P Global Platts Metals Week.

## Stocks

Refined copper stocks in the United States totaled 134,000 t at the end of April 2022, essentially unchanged from those in March (revised) and 33% higher than those in April 2021. COMEX stocks rose by 8,320 t (12%), and London Metal Exchange Ltd. stocks in U.S. warehouses fell by 4,500 t (14%) compared with those at the end of March (fig. 3, table 10).

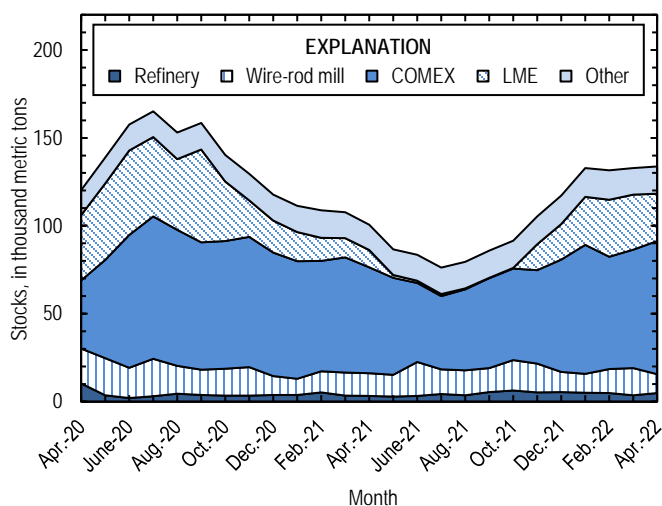


Figure 3. Domestic refined copper stocks at end of month, by type, from April 2020 through April 2022. Sources: London Metal Exchange Ltd., S&P Global Platts Metals Week, and U.S. Geological Survey.

### Industry News

**China.**—In late March, the Government of China enacted a citywide lockdown of Shanghai to control an outbreak of the coronavirus. Numerous copper fabricators in adjacent provinces, which typically obtain source materials from warehouses in Shanghai, were forced to halt or reduce production because of cathode shortages. The lockdown was still in effect as of the end of April (AP News, 2022; CRU International Ltd., 2022).

**Russia.**—PJSC MMC Norilsk Nickel (Nornickel), the leading producer of copper in Russia, announced that its operations were mostly unaffected by the geopolitical situation resulting from recent actions by Russia in Ukraine. The company produced 91,400 t of saleable copper in the first quarter of 2022 and 91,300 t in the fourth quarter of 2021. According to International Copper Study Group data, Nornickel accounted for 52% of mined copper capacity in Russia in 2021 (International Copper Study Group, 2022, p. 140–143; PJSC MMC Norilsk Nickel, 2022).

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TABLE 1  
SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES<sup>1</sup>

(Metric tons, copper content, unless otherwise specified)

	Source table <sup>2</sup>	2021 <sup>P</sup>	2022			
			February	March	April	January– April
<b>Production:</b>						
Primary (from ore):						
Mine, recoverable <sup>3</sup>	(2)	1,230,000	98,100 <sup>r</sup>	104,000 <sup>r</sup>	104,000	412,000
Smelter <sup>e, 4</sup>	(3)	360,000	35,000	35,000	35,000	140,000
Refinery:						
Electrolytic <sup>c</sup>	(4)	360,000	35,000	35,000	35,000	140,000
Electrowon	(4)	563,000	40,400 <sup>r</sup>	48,600	45,000	180,000
Total	(4)	923,000	75,400 <sup>r</sup>	83,600	80,000	320,000
Secondary (from copper-base scrap): <sup>5</sup>						
Refineries <sup>6</sup>	(5)	48,900	3,280	3,490	3,250	14,000
Ingot makers <sup>e, 7</sup>	(5)	51,600	4,300	4,300	4,300	17,200
Brass and wire-rod mills	(5)	655,000	51,700 <sup>r</sup>	54,800	53,700	216,000
Foundries, etc. <sup>e, 7</sup>	(5)	38,800	3,230	3,230	3,230	12,900
<b>Consumption:</b>						
Reported, refined copper	(7)	1,770,000	141,000 <sup>r</sup>	155,000 <sup>r</sup>	153,000	600,000
Apparent, primary refined and copper from old scrap <sup>8</sup>	(8)	1,960,000	121,000 <sup>r</sup>	142,000 <sup>r</sup>	155,000	636,000
Reported, purchased copper-base scrap (gross weight)	(9)	919,000	72,800 <sup>r</sup>	76,500	74,800	302,000
<b>Stocks at end of period:</b>						
Refined <sup>9</sup>	(10)	117,000	131,000 <sup>r</sup>	133,000 <sup>r</sup>	134,000	134,000
Blister and anodes	(10)	16,100	13,300	12,200	16,100	16,100
Price, U.S. producers cathode (cents per pound) <sup>10</sup>	(11)	432.264	458.711	477.228	473.388	465.235
<b>Imports for consumption:<sup>11</sup></b>						
Ore and concentrates	(13)	11,000	936	1,950	609	3,490
Refined	(13)	919,000	34,300	48,700	64,800	288,000
<b>Exports:<sup>11</sup></b>						
Ore and concentrates	(14)	347,000	27,500	26,100	23,100	102,000
Refined	(14)	47,600	3,110	2,590	2,820	11,100

<sup>e</sup>Estimated. <sup>P</sup>Preliminary. <sup>r</sup>Revised.

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

<sup>2</sup>Numbers in parentheses refer to the tables where these data are located.

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

<sup>4</sup>May contain small quantities of copper from scrap.

<sup>5</sup>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.

<sup>6</sup>Electrolytically refined and fire-refined copper.

<sup>7</sup>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.

<sup>8</sup>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 changes in refined stocks. Old scrap consists of copper items used by consumers.

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

<sup>10</sup>Source: 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.

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

TABLE 2  
MINE PRODUCTION OF COPPER IN THE UNITED STATES<sup>1</sup>

(Metric tons)

Period	Recoverable copper <sup>2</sup>			Contained copper		
	Arizona	Others <sup>3</sup>	Total	Electrowon	Concentrates <sup>4</sup>	Total
2021: <sup>p</sup>						
January–April	285,000	107,000	393,000	181,000	220,000	401,000
April	66,900	28,600	95,500	44,000	53,600	97,600
May	68,400	30,600	99,000	44,400	56,800	101,000
June	74,200	29,200	103,000	46,600	59,000	106,000
July	68,200	31,000	99,200	47,200	54,100	101,000
August	76,000	31,800	108,000	51,300	58,800	110,000
September	75,400	32,100	107,000	49,000	60,800	110,000
October	73,100	33,200	106,000	50,400	57,900	108,000
November	73,500	32,300	106,000	45,800	62,300	108,000
December	75,000	32,400	107,000	46,900	63,000	110,000
January–December	869,000	360,000	1,230,000	563,000	692,000	1,260,000
2022:						
January	72,200 <sup>r</sup>	33,200 <sup>r</sup>	105,000 <sup>r</sup>	45,500 <sup>r</sup>	62,200 <sup>r</sup>	108,000 <sup>r</sup>
February	66,500 <sup>r</sup>	31,600 <sup>r</sup>	98,100 <sup>r</sup>	40,400 <sup>r</sup>	60,000 <sup>r</sup>	100,000 <sup>r</sup>
March	73,100 <sup>r</sup>	31,200 <sup>r</sup>	104,000 <sup>r</sup>	48,600	57,900 <sup>r</sup>	106,000 <sup>r</sup>
April	71,500	32,700	104,000	45,000	61,400	106,000
January–April	283,000	129,000	412,000	180,000	241,000	421,000

<sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

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

<sup>3</sup>Includes production from Michigan, Missouri, Montana, Nevada, New Mexico, and Utah.

<sup>4</sup>Includes 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<sup>1, 2</sup>

(Metric tons, copper content)

Period	Anode production <sup>e, 3</sup>
2021: <sup>p</sup>	
January–April	130,000
April	25,000
May	25,000
June	25,000
July	30,000
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	35,000
January–April	140,000

<sup>e</sup>Estimated. <sup>p</sup>Preliminary.

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

<sup>2</sup>Primary production. May contain small quantities of copper from scrap.

<sup>3</sup>To 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 COPPER<sup>1</sup>

(Metric tons)

Period	From primary materials			From scrap <sup>3</sup>	Total refined
	Electrolytic <sup>e,2</sup>	Electrowon	Total primary		
2021: <sup>p</sup>					
January–April	130,000	181,000	311,000	16,000	328,000
April	25,000	44,000	69,000	5,190	74,200
May	25,000	44,400	69,400	4,560	74,000
June	25,000	46,600	71,600	5,060	76,700
July	30,000	47,200	77,200	3,340	80,500
August	30,000	51,300	81,300	3,750	85,000
September	30,000	49,000	79,000	4,590	83,500
October	30,000	50,400	80,400	3,540	84,000
November	30,000	45,800	75,800	3,990	79,800
December	30,000	46,900	76,900	4,060	80,900
January–December	360,000	563,000	923,000	48,900	972,000
2022:					
January	35,000	45,500 <sup>r</sup>	80,500 <sup>r</sup>	3,990	84,400 <sup>r</sup>
February	35,000	40,400 <sup>r</sup>	75,400 <sup>r</sup>	3,280	78,700 <sup>r</sup>
March	35,000	48,600	83,600	3,490	87,100
April	35,000	45,000	80,000	3,250	83,300
January–April	140,000	180,000	320,000	14,000	334,000

<sup>e</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

<sup>2</sup>To 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.

<sup>3</sup>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<sup>1, 2</sup>

(Metric tons)

Period	Refineries <sup>3</sup>		Ingot makers <sup>e, 4</sup>		Brass and wire-rod mills		Foundries, etc. <sup>e, 4</sup>		Total <sup>5</sup>
	New scrap <sup>e</sup>	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2021: <sup>p</sup>									
January–April	6,710	9,340	1,580	15,600	210,000	15,100	3,050	9,870	271,000
April	1,680	3,510	394	3,910	51,700	3,740	763	2,470	68,200
May	1,680	2,890	394	3,910	50,600	3,600	763	2,470	66,300
June	1,680	3,390	394	3,910	50,100	3,430	763	2,470	66,100
July	1,680	1,660	394	3,910	50,400	3,330	763	2,470	64,600
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 <sup>r</sup>	3,530	763	2,470	62,500 <sup>r</sup>
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
January–April	6,710	7,300	1,580	15,600	201,000	15,700	3,050	9,870	261,000

<sup>e</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

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

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

<sup>4</sup>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.

<sup>5</sup>Does 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 SEMIFABRICATES<sup>1</sup>

(Metric tons, gross weight)

Period	Production		Shipments		Stocks, end of period	
	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills
2021: <sup>p</sup>						
January–April	298,000	454,000	298,000	458,000	28,500	15,200
April	75,000	115,000	75,300	117,000	28,500	15,200
May	73,200	120,000	73,300	117,000	28,400	18,300
June	74,200	119,000	74,000	119,000	28,600	19,100
July	74,600	112,000	74,800	114,000	28,400	17,000
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 <sup>r</sup>	75,800	107,000 <sup>r</sup>	29,300	19,300 <sup>r</sup>
March	76,900	118,000	77,000	116,000	29,300	21,500 <sup>r</sup>
April	76,300	117,000	76,100	112,000	29,500	26,200
January–April	304,000	456,000	303,000	449,000	29,500	26,200

<sup>p</sup>Preliminary. <sup>r</sup>Revised.

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



TABLE 7  
U.S. CONSUMPTION OF REFINED COPPER<sup>1</sup>

(Metric tons)

Period	Brass mills	Wire-rod mills	Other plants <sup>e, 2</sup>	Total
2021: <sup>p</sup>				
January–April	139,000	426,000	20,700	586,000
April	34,300	108,000	5,180	147,000
May	34,100	119,000	5,180	158,000
June	34,200	112,000	5,180	151,000
July	34,400	108,000	5,180	147,000
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 <sup>r</sup>	5,180	141,000 <sup>r</sup>
March	36,600	114,000 <sup>r</sup>	5,180	155,000 <sup>r</sup>
April	34,600	113,000	5,180	153,000
January–April	141,000	439,000	20,700	600,000

<sup>e</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

<sup>2</sup>Chemical 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 COPPER<sup>1</sup>

(Metric tons)

Period	Primary refined copper production	Copper in old scrap <sup>2</sup>	Refined imports for consumption <sup>3</sup>	Refined exports <sup>3</sup>	Refined stock change during period	Apparent consumption <sup>4</sup>
2021: <sup>p</sup>						
January–April	311,000	57,400	300,000	16,000	-17,000	670,000
April	69,000	15,500	85,900	5,280	-7,000	172,000
May	69,400	14,700	66,600	5,600	-14,100	159,000
June	71,600	15,100	69,600	6,880	-3,100	152,000
July	77,200	13,200	57,100	5,270	-7,320	150,000
August	81,300	13,900	105,000	1,830	3,260	195,000
September	79,000	14,300	90,700	2,300	6,480	175,000
October	80,400	13,600	92,300	3,490	5,550	177,000
November	75,800	13,600	60,000	2,630	13,900	133,000
December	76,900	13,100	77,300	3,630	11,900	152,000
January–December	923,000	169,000	919,000	47,600	-513	1,960,000
2022:						
January	80,500 <sup>r</sup>	15,000	140,000	2,530	15,500	218,000
February	75,400 <sup>r</sup>	13,400	34,300	3,110	-1,320 <sup>r</sup>	121,000 <sup>r</sup>
March	83,600	14,000	48,700	2,590	1,350 <sup>r</sup>	142,000 <sup>r</sup>
April	80,000	13,600	64,800	2,820	794	155,000
January–April	320,000	56,000	288,000	11,100	16,300	636,000

<sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

<sup>2</sup>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 2020 annual data. Old scrap consists of copper items used by consumers.

<sup>3</sup>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.

<sup>4</sup>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<sup>1, 2</sup>

(Metric tons, gross weight)

Period	Smelters and refineries		Ingot makers <sup>e, 3</sup>		Brass and wire-rod mills <sup>4</sup>		Foundries, etc. <sup>e, 3</sup>		Total
	New scrap <sup>e</sup>	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2021: <sup>p</sup>									
January–April	6,920	9,630	4,200	18,400	242,000	15,700	3,590	11,600	313,000
April	1,730	3,620	1,050	4,600	60,000	4,010	897	2,900	78,800
May	1,730	2,980	1,050	4,600	58,800	3,820	897	2,900	76,700
June	1,730	3,490	1,050	4,600	58,200	3,680	897	2,900	76,600
July	1,730	1,710	1,050	4,600	58,500	3,520	897	2,900	74,900
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 <sup>r</sup>	3,720	897	2,900	72,800 <sup>r</sup>
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
January–April	6,920	7,520	4,200	18,400	233,000	16,600	3,590	11,600	302,000

<sup>e</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

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

<sup>3</sup>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.

<sup>4</sup>Consumption at brass and wire-rod mills assumed equal to receipts.

TABLE 10  
COPPER STOCKS IN THE UNITED STATES AT END OF PERIOD<sup>1</sup>

(Metric tons, copper content)

Period	Blister and anodes	Refined copper						Total refined
		Refineries	Wire-rod mills	Brass mills	Other <sup>e, 2</sup>	COMEX <sup>3</sup>	LME <sup>4</sup>	
2021: <sup>p</sup>								
April	12,400	3,330	12,800	7,550	6,850	60,200	9,950	101,000
May	13,100	2,860	12,400	7,850	6,850	55,100	1,630	86,600
June	10,300	3,230	19,300	7,950	6,850	45,000	1,180	83,500
July	12,300	4,410	14,000	8,190	6,850	41,600	1,180	76,200
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 <sup>r</sup>	9,860	6,850	63,900	32,300	131,000 <sup>r</sup>
March	12,200	3,690	15,400 <sup>r</sup>	8,160	6,850	67,400	31,300	133,000 <sup>r</sup>
April	16,100	4,990	10,600	8,620	6,850	75,800	26,800	134,000

<sup>e</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

<sup>2</sup>Chemical 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.

<sup>3</sup>Commodity Exchange Inc.

<sup>4</sup>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	U.S. producers	LME
	first position <sup>1</sup>	cathode <sup>2</sup>	grade A cash <sup>3</sup>
2021:			
April	424.783	432.183	423.453
May	463.535	471.410	461.937
June	439.832	448.082	436.012
July	435.479	443.779	427.900
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
January–April	456.329	465.235	455.107

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

<sup>2</sup>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.

<sup>3</sup>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
2021:				
April	406.52	365.52	289.00	186.50
May	444.95	405.23	341.50	239.00
June	421.77	381.68	345.50	230.50
July	417.36	374.12	330.00	227.00
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
January–April	446.77	408.84	342.38	222.13

Source: Fastmarkets-AMM.

TABLE 13  
U.S. IMPORTS FOR CONSUMPTION OF UNMANUFACTURED COPPER<sup>1</sup>

(Metric tons, copper content)

Country or locality	Ore and concentrates <sup>2</sup>			Matte, ash, and precipitates <sup>3</sup>			Blister and anodes <sup>4</sup>			Refined <sup>5</sup>		
	2022			2022			2022			2022		
	2021	April	January– April	2021	April	January– April	2021	April	January– April	2021	April	January– April
Belgium	--	--	--	236	--	97	--	--	--	29	--	2
Bolivia	--	--	--	--	--	--	--	--	--	763	--	--
Brazil	--	--	--	--	--	--	--	--	--	5,720	--	--
Canada	11,000	609	3,490	651	82	140	(6)	(6)	(6)	141,000	9,320	31,800
Chile	--	--	--	--	--	--	--	--	--	613,000	41,700	203,000
China	--	--	--	--	--	--	--	(6)	(6)	654	24	144
Congo (Kinshasa)	--	--	--	--	--	--	--	--	--	22,200	2,850	8,140
Finland	--	--	--	--	--	--	371	--	59	35	38	39
Germany	--	--	--	155	--	94	(6)	--	--	2,150	360	1,020
Japan	1	--	--	483	--	--	1	(6)	(6)	1,440	88	432
Mexico	--	--	--	8	1	2	(6)	--	--	87,300	7,950	29,500
Peru	--	--	--	--	--	--	--	--	--	28,500	1,740	13,300
Russia	--	--	--	--	--	--	--	--	--	3,900	--	--
South Africa	--	--	--	--	--	--	--	--	--	277	--	--
Zambia	--	--	--	--	--	--	--	--	--	11,400	730	1,230
Other	10	--	(6)	49	(6)	(6)	12	16	16	155	18	41
Total	11,000	609	3,490	1,580	83	332	384	16	75	919,000	64,800	288,000

-- Zero.

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

<sup>2</sup>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.

<sup>3</sup>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.

<sup>4</sup>HTS code 7402.00.0000.

<sup>5</sup>HTS codes 7403.11.0000, 7403.12.0000, 7403.13.0000, and 7403.19.0000.

<sup>6</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 14  
U.S. EXPORTS OF UNMANUFACTURED COPPER<sup>1</sup>

(Metric tons, copper content)

Country or locality	Ore and concentrates <sup>2</sup>			Matte, ash, and precipitates <sup>3</sup>			Blister and anodes <sup>4</sup>			Refined <sup>5</sup>		
	2022			2022			2022			2022		
	2021	January– April	April	2021	January– April	April	2021	January– April	April	2021	January– April	April
Belgium	246	20	20	6,120	479	2,020	1,490	70	106	--	--	--
Canada	39,500	1,950	9,860	16,200	910	4,980	18,800	69	425	24,700	1,860	5,790
China	65,600	4,590	14,700	548	28	28	171	20	20	3,190	--	1,340
Dominican Republic	202	11	55	--	--	--	--	--	--	10	--	(6)
Finland	783	--	--	--	--	--	--	--	--	--	--	--
Germany	784	--	--	430	--	19	190	--	20	20	(6)	1
Hong Kong	2	--	--	44	--	(6)	310	--	11	9	--	--
India	--	--	--	30	--	--	433	187	304	--	--	(6)
Italy	--	--	--	--	--	--	113	1	67	22	(6)	4
Japan	6,350	3,660	3,660	760	9	36	17	--	1	11	1	2
Korea, Republic of	2,370	--	38	171	--	60	1,320	93	415	30	--	--
Malaysia	5	--	--	47	--	48	188	--	40	13	--	1
Mexico	228,000	12,800	70,000	33	1	1	258	36	176	19,100	959	3,780
Philippines	2,350	--	2,320	1	(6)	(6)	39	--	--	--	6	35
Singapore	--	--	--	300	--	--	92	1	40	22	(6)	4
Slovakia	--	--	--	1,450	107	447	--	--	--	--	--	--
Spain	--	--	--	1,130	98	563	20	--	22	(6)	--	(6)
Taiwan	1,490	--	--	19	--	16	291	--	20	282	--	22
Trinidad and Tobago	--	--	--	--	--	--	157	--	--	--	--	--
Other	92	--	1,580	208	384	460	499	45	115	125	(6)	76
Total	347,000	23,100	102,000	27,500	2,020	8,680	24,400	522	1,780	47,600	2,820	11,100

-- Zero.

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

<sup>2</sup>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.

<sup>3</sup>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.

<sup>4</sup>Schedule B code 7402.00.0000.

<sup>5</sup>Schedule B codes 7403.11.0000, 7403.12.0000, 7403.13.0000, and 7403.19.0000.

<sup>6</sup>Less than ½ unit.

Source: U.S. Census Bureau.



TABLE 15  
U.S. IMPORTS FOR CONSUMPTION OF COPPER SCRAP<sup>1</sup>

(Metric tons, gross weight)

Country or locality	Unalloyed <sup>2</sup>			Alloyed <sup>3</sup>		
	2022			2022		
	2021	April	January– April	2021	April	January– April
Bahamas	--	--	--	608	56	189
Bolivia	114	--	--	442	20	57
Canada	19,900	1,220	6,520	48,200	3,360	13,500
Cayman Islands	--	--	--	219	25	78
Colombia	174	39	59	643	20	74
Costa Rica	729	101	242	1,480	97	343
Dominican Republic	1,550	252	550	2,720	235	864
Ecuador	88	--	12	277	--	42
El Salvador	--	--	--	583	114	327
Germany	210	29	79	191	--	2
Guatemala	--	--	--	484	39	118
Honduras	75	2	8	907	70	193
Jamaica	7	--	3	159	43	124
Mexico	12,600	781	3,770	43,800	3,470	14,100
Panama	1,040	98	462	496	38	142
Peru	19	--	--	439	89	185
Suriname	254	6	117	58	--	23
Uruguay	481	--	33	58	--	10
Venezuela	--	--	--	675	5	16
Vietnam	114	7	45	64	6	39
Other	301	30	89	2,060	229	955
Total	37,700	2,560	12,000	105,000	7,910	31,400

-- Zero.

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

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

<sup>3</sup>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<sup>1</sup>

(Metric tons, gross weight)

Country or locality	Unalloyed <sup>2</sup>							Alloyed <sup>3</sup>				
	2022							2022				
	No. 1		No. 2		Other			Segregated		Unsegregated		
	January–		January–		January–			January–		January–		
	April	April	April	April	April	April	April	April	April	April	April	April
Austria	1,250	--	--	253	430	--	--	193	--	--	--	--
Belgium	20,700	1,690	5,080	1,250	3,680	851	2,600	8,520	174	489	567	1,600
Canada	61,000	--	--	--	--	5,450	21,000	53,900	--	--	3,580	14,600
Chile	2,380	--	21	--	--	--	--	345	--	--	--	--
China	195,000	8,350	26,600	5,030	19,900	10,100	48,200	43,300	1,880	6,940	525	2,980
Germany	19,100	1,530	3,860	57	363	431	756	15,300	230	699	1,680	4,890
Greece	15,000	650	2,100	--	42	282	1,390	2,140	--	131	62	645
Hong Kong	23,100	304	545	1,520	4,880	1,200	3,220	7,570	--	120	205	2,490
India	12,800	755	2,870	242	672	951	2,790	39,600	1,210	5,710	2,540	9,750
Japan	19,900	332	1,090	1,820	7,320	83	960	7,490	111	511	335	1,960
Korea, Republic of	47,200	1,320	5,360	1,380	4,740	1,030	4,540	17,100	367	1,810	1,010	4,240
Malaysia	63,900	68	1,500	361	891	1,140	6,750	88,200	694	4,170	1,810	10,300
Mexico	3,590	307	984	--	--	4	49	4,640	70	616	272	1,640
Netherlands	2,950	856	2,240	20	296	121	641	569	--	20	205	1,010
Pakistan	476	60	398	80	127	--	--	24,400	--	273	2,400	7,980
Poland	11,300	295	627	98	137	564	3,050	2,280	--	39	105	336
Russia	1,410	--	--	--	39	--	77	766	--	--	--	38
Slovakia	1,850	86	458	--	--	--	--	1,760	428	985	--	120
Spain	2,960	426	1,230	--	20	381	729	7,070	61	502	714	1,570
Sweden	1,080	--	--	--	--	37	185	2,480	--	--	114	558
Taiwan	13,800	310	1,290	234	1,110	756	3,370	6,310	120	350	260	814
Thailand	9,750	154	1,040	202	284	2,020	6,960	35,900	258	819	3,040	13,000
United Arab Emirates	1,770	8	302	--	21	--	--	3,320	--	--	347	1,560
Other	6,440	537	983	39	235	36	221	5,020	57	168	140	1,130
Total	539,000	18,000	58,600	12,600	45,200	25,400	107,000	378,000	5,660	24,400	19,900	83,200

-- Zero.

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

<sup>2</sup>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).

<sup>3</sup>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.

Source: U.S. Census Bureau.