

# Mineral Industry Surveys

## For information, contact:

Daniel M. Flanagan, Copper Commodity Specialist  
National Minerals Information Center  
Telephone: (703) 648-7726  
Email: dflanagan@usgs.gov

Sheema Merchant (Data)

Telephone: (703) 659-9944

Email: smerchant@usgs.gov

Internet: <https://www.usgs.gov/centers/national-minerals-information-center/mineral-industry-surveys>

## COPPER IN JANUARY 2022

Domestic mine production of recoverable copper was 110,000 metric tons (t) in January 2022 (table 2). The average daily mine production was 3,540 t, a slight increase from that in December 2021 and 14% higher than that in January 2021 (fig. 1).

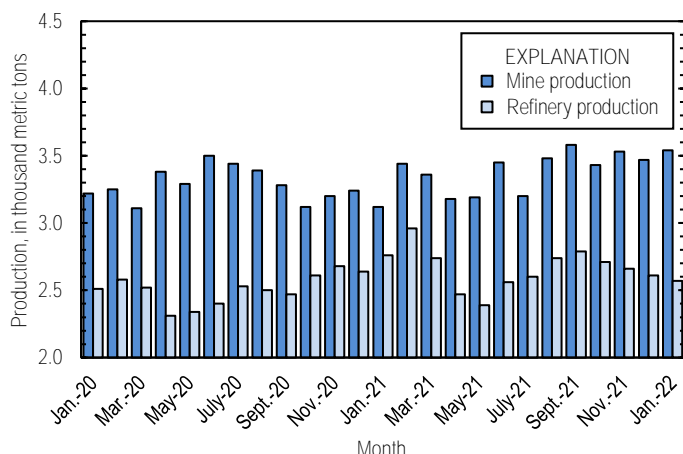


Figure 1. Average daily U.S. copper mine (recoverable) and refinery (primary and secondary) production from January 2020 through January 2022.

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 January 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 January 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).

In January 2022, estimated smelter production in the United States was 30,000 t (table 3). Total U.S. refinery production was 79,600 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 2,570 t, a slight decrease compared with that in December 2021 and 7% lower than that in January 2021 (fig. 1).

## Prices

The average Commodity Exchange Inc. (COMEX) copper price was \$4.43 per pound in January 2022, a slight increase from \$4.33 per pound in December 2021 and 22% greater than \$3.62 per pound in January 2021 (fig. 2, table 11). The average U.S. dealers buying price of number 2 copper scrap was \$3.37 per pound in January 2022, slightly higher than \$3.35 per pound in December 2021 and an increase of 26% compared with \$2.67 per pound in January 2021 (fig. 2, table 12).

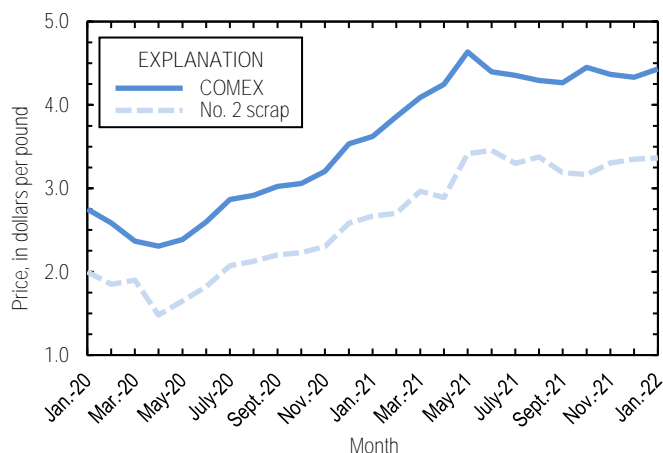


Figure 2. Monthly average COMEX copper price and no. 2 copper scrap U.S. dealers buying price from January 2020 through January 2022. Sources: Fastmarkets-AMM and S&P Global Platts Metals Week.

## Stocks

Refined copper stocks in the United States totaled 133,000 t at the end of January 2022, an increase of 13% from those in the previous month and 19% more than those in January 2021. COMEX stocks rose by 9,490 t (15%), and London Metal Exchange Ltd. stocks in U.S. warehouses increased by 7,030 t (35%) from those at the end of December 2021 (fig. 3, table 10).

## Industry News

**Chile.**—The Corporación Nacional del Cobre de Chile (Codelco) completed a series of infrastructure improvements to increase the annual capacity of the Andina Mine to 240,000 t of copper from 184,000 t. The upgrades were expected to extend

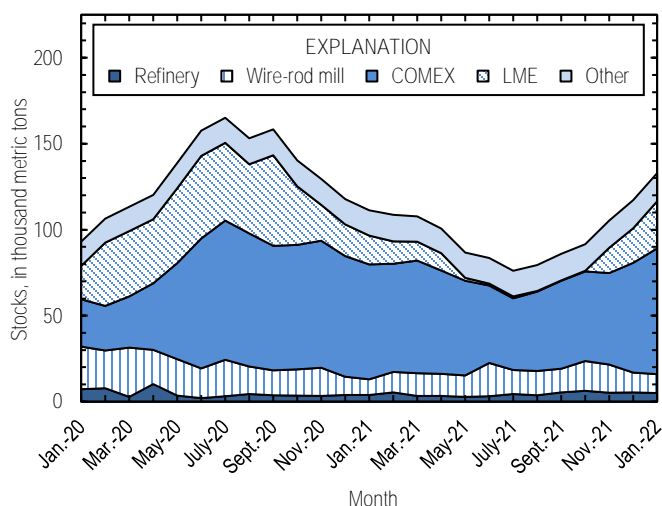


Figure 3. Domestic refined copper stocks at end of month, by type, from January 2020 through January 2022. Sources: London Metal Exchange Ltd. and U.S. Geological Survey.

the mine life by 30 years. In 2021, Andina produced 177,000 t of copper in concentrates (Corporación Nacional del Cobre de Chile, 2022, p. 28; Jamasmie, 2022).

**China.**—Commercial copper production at the Julong Mine, majority-owned by Zijin Mining Group Co. Ltd., began in late December 2021. The mine was expected to produce 120,000 to 130,000 t of copper in 2022 and 160,000 metric tons per year (tpy) at full capacity, with the potential to produce 600,000 tpy after planned future expansions (Zijin Mining Group Co. Ltd., 2021).

**Malaysia.**—New scrap import regulations took effect on January 10. Under the new rules, shipments of copper scrap into Malaysia were required to consist of at least 94.75% copper and to contain a maximum nonmetallic content, such as wire coating or other plastic components, of 0.25%. Any components that the Ministry of International Trade and Industry considered to be electronic scrap, such as fragments of printed circuit boards, were prohibited (Smalley, 2022).

In 2021, the United States shipped 152,000 t (gross weight) of unalloyed and alloyed copper scrap to Malaysia. The leading recipients of domestic copper scrap exports were China, including Hong Kong (29% of the total quantity); Malaysia (17%); and Canada (13%). Malaysia was the leading destination for U.S. alloyed copper scrap in 2021 and accounted for 23% (88,700 t) of total alloyed exports (table 16).

## References Cited

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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>	2020 <sup>p</sup>	2021		January– December	2022 January
			November	December		
Production:						
Primary (from ore):						
Mine, recoverable <sup>3</sup>	(2)	1,200,000	106,000	107,000	1,230,000	110,000
Smelter <sup>c,4</sup>	(3)	315,000	30,000 <sup>r</sup>	30,000 <sup>r</sup>	360,000 <sup>r</sup>	30,000
Refinery:						
Electrolytic <sup>c</sup>	(4)	315,000	30,000 <sup>r</sup>	30,000 <sup>r</sup>	360,000 <sup>r</sup>	30,000
Electrowon	(4)	559,000	45,800	46,900	563,000	45,600
Total	(4)	874,000	75,800 <sup>r</sup>	76,900 <sup>r</sup>	923,000 <sup>r</sup>	75,600
Secondary (from copper-base scrap): <sup>5</sup>						
Refineries <sup>6</sup>	(5)	43,200	3,990	4,060	48,900	3,990
Ingot makers <sup>c,7</sup>	(5)	57,900	4,300 <sup>r</sup>	4,300 <sup>r</sup>	51,600 <sup>r</sup>	4,300
Brass and wire-rod mills	(5)	670,000	54,000	51,000	655,000	56,300
Foundries, etc. <sup>c,7</sup>	(5)	36,700	3,230 <sup>r</sup>	3,230 <sup>r</sup>	38,800 <sup>r</sup>	3,230
Consumption:						
Reported, refined copper	(7)	1,710,000	150,000	122,000	1,770,000	151,000
Apparent, primary refined and copper from old scrap <sup>8</sup>	(8)	1,660,000	133,000 <sup>r</sup>	152,000 <sup>r</sup>	1,960,000 <sup>r</sup>	213,000
Reported, purchased copper-base scrap (gross weight)	(9)	938,000	75,800 <sup>r</sup>	72,800 <sup>r</sup>	919,000 <sup>r</sup>	78,000
Stocks at end of period:						
Refined <sup>9</sup>	(10)	118,000	105,000 <sup>r</sup>	117,000	117,000	133,000
Blister and anodes	(10)	9,380	15,900	16,100	16,100	11,800
Price, U.S. producers cathode (cents per pound) <sup>10</sup>	(11)	286.745	445.074	441.820	432.264	451.613
Imports for consumption: <sup>11</sup>						
Ore and concentrates	(13)	2,170	439	--	11,000	--
Refined	(13)	676,000	60,000	77,300	919,000	140,000
Exports: <sup>11</sup>						
Ore and concentrates	(14)	383,000	29,000	27,900	348,000	25,600
Refined	(14)	41,200	2,630	3,630	47,600	2,530

<sup>c</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised. -- Zero.

<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 COMEX price and New York dealer 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.

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	71,600	25,100	96,700	47,100	51,700	98,800
February	70,600	25,700	96,400	43,900	54,700	98,500
March	76,200	27,900	104,000	46,500	59,900	106,000
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	75,700	34,100	110,000	45,600	66,700	112,000

<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>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>c, 3</sup>
2021: <sup>p</sup>	
January	35,000
February	35,000
March	35,000
April	25,000 <sup>r</sup>
May	25,000 <sup>r</sup>
June	25,000 <sup>r</sup>
July	30,000 <sup>r</sup>
August	30,000 <sup>r</sup>
September	30,000 <sup>r</sup>
October	30,000 <sup>r</sup>
November	30,000 <sup>r</sup>
December	30,000 <sup>r</sup>
January–December	360,000 <sup>r</sup>
2022, January	30,000

<sup>c</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>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		Total primary	From scrap <sup>3</sup>	Total refined
	Electrolytic <sup>e,2</sup>	Electrowon			
2021: <sup>p</sup>					
January	35,000	47,100	82,100	3,350	85,400
February	35,000	43,900	78,900	4,060	82,900
March	35,000	46,500	81,500	3,460	85,000
April	25,000 <sup>r</sup>	44,000	69,000 <sup>r</sup>	5,190	74,200 <sup>r</sup>
May	25,000 <sup>r</sup>	44,400	69,400 <sup>r</sup>	4,560	74,000 <sup>r</sup>
June	25,000 <sup>r</sup>	46,600	71,600 <sup>r</sup>	5,060	76,700 <sup>r</sup>
July	30,000 <sup>r</sup>	47,200	77,200 <sup>r</sup>	3,340	80,500 <sup>r</sup>
August	30,000 <sup>r</sup>	51,300	81,300 <sup>r</sup>	3,750	85,000 <sup>r</sup>
September	30,000 <sup>r</sup>	49,000	79,000 <sup>r</sup>	4,590	83,500 <sup>r</sup>
October	30,000 <sup>r</sup>	50,400	80,400 <sup>r</sup>	3,540	84,000 <sup>r</sup>
November	30,000 <sup>r</sup>	45,800	75,800 <sup>r</sup>	3,990	79,800 <sup>r</sup>
December	30,000 <sup>r</sup>	46,900	76,900 <sup>r</sup>	4,060	80,900 <sup>r</sup>
January–December	360,000 <sup>r</sup>	563,000	923,000 <sup>r</sup>	48,900	972,000 <sup>r</sup>
2022, January	30,000	45,600	75,600	3,990	79,600

<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>c, 4</sup>		Brass and wire-rod mills		Foundries, etc. <sup>c, 4</sup>		Total <sup>5</sup>
	New scrap <sup>c</sup>	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2021: <sup>p</sup>									
January	1,680	1,670	394 <sup>r</sup>	3,910 <sup>r</sup>	53,600	4,080	763 <sup>r</sup>	2,470 <sup>r</sup>	68,600 <sup>r</sup>
February	1,680	2,380	394 <sup>r</sup>	3,910 <sup>r</sup>	51,600	3,470	763 <sup>r</sup>	2,470 <sup>r</sup>	66,700 <sup>r</sup>
March	1,680	1,780	394 <sup>r</sup>	3,910 <sup>r</sup>	53,000	3,790	763 <sup>r</sup>	2,470 <sup>r</sup>	67,800 <sup>r</sup>
April	1,680	3,510	394 <sup>r</sup>	3,910 <sup>r</sup>	51,700	3,740	763 <sup>r</sup>	2,470 <sup>r</sup>	68,200 <sup>r</sup>
May	1,680	2,890	394 <sup>r</sup>	3,910 <sup>r</sup>	50,600	3,600	763 <sup>r</sup>	2,470 <sup>r</sup>	66,300 <sup>r</sup>
June	1,680	3,390	394 <sup>r</sup>	3,910 <sup>r</sup>	50,100	3,430	763 <sup>r</sup>	2,470 <sup>r</sup>	66,100 <sup>r</sup>
July	1,680	1,660	394 <sup>r</sup>	3,910 <sup>r</sup>	50,400	3,330	763 <sup>r</sup>	2,470 <sup>r</sup>	64,600 <sup>r</sup>
August	1,680	2,080	394 <sup>r</sup>	3,910 <sup>r</sup>	50,500	3,540	763 <sup>r</sup>	2,470 <sup>r</sup>	65,400 <sup>r</sup>
September	1,680	2,910	394 <sup>r</sup>	3,910 <sup>r</sup>	51,300	3,130	763 <sup>r</sup>	2,470 <sup>r</sup>	66,500 <sup>r</sup>
October	1,680	1,860	394 <sup>r</sup>	3,910 <sup>r</sup>	51,900	3,490	763 <sup>r</sup>	2,470 <sup>r</sup>	66,400 <sup>r</sup>
November	1,680	2,320	394 <sup>r</sup>	3,910 <sup>r</sup>	50,900	3,080	763 <sup>r</sup>	2,470 <sup>r</sup>	65,500 <sup>r</sup>
December	1,680	2,380	394 <sup>r</sup>	3,910 <sup>r</sup>	48,500	2,480	763 <sup>r</sup>	2,470 <sup>r</sup>	62,600 <sup>r</sup>
January–December	20,100	28,800	4,730 <sup>r</sup>	46,900 <sup>r</sup>	614,000	41,100	9,160 <sup>r</sup>	29,600 <sup>r</sup>	795,000 <sup>r</sup>
2022, January	1,680	2,310	394	3,910	51,800	4,470	763	2,470	67,800

<sup>c</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	73,900	113,000	74,300	115,000	28,300	16,800
February	74,100	102,000	73,800	103,000	28,600	15,800
March	74,700	125,000	74,500	123,000	28,800	17,800
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

<sup>P</sup>Preliminary.

<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	34,700	103,000	5,180 <sup>r</sup>	143,000
February	34,900	96,100	5,180 <sup>r</sup>	136,000 <sup>r</sup>
March	35,300	119,000	5,180 <sup>r</sup>	159,000
April	34,300	108,000	5,180 <sup>r</sup>	147,000 <sup>r</sup>
May	34,100	119,000	5,180 <sup>r</sup>	158,000 <sup>r</sup>
June	34,200	112,000	5,180 <sup>r</sup>	151,000 <sup>r</sup>
July	34,400	108,000	5,180 <sup>r</sup>	147,000
August	34,500	113,000	5,180 <sup>r</sup>	153,000
September	34,700	112,000	5,180 <sup>r</sup>	152,000
October	34,700	109,000	5,180 <sup>r</sup>	148,000 <sup>r</sup>
November	34,300	110,000	5,180 <sup>r</sup>	150,000
December	34,700	81,800	5,180 <sup>r</sup>	122,000
January–December	415,000	1,290,000	62,100 <sup>r</sup>	1,770,000
2022, January	34,900	111,000	5,180	151,000

<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	82,100	14,000 <sup>r</sup>	42,400	4,350	-6,490	141,000 <sup>r</sup>
February	78,900	14,100 <sup>r</sup>	73,000	2,970	-2,570	166,000 <sup>r</sup>
March	81,500	13,800 <sup>r</sup>	99,700	3,360	-935	193,000 <sup>r</sup>
April	69,000 <sup>r</sup>	15,500 <sup>r</sup>	85,200	5,280	-7,000	171,000 <sup>r</sup>
May	69,400 <sup>r</sup>	14,700 <sup>r</sup>	66,600	5,580	-14,100	159,000 <sup>r</sup>
June	71,600 <sup>r</sup>	15,100 <sup>r</sup>	69,600	6,880	-3,100	152,000 <sup>r</sup>
July	77,200 <sup>r</sup>	13,200 <sup>r</sup>	57,100	5,270	-7,320	150,000 <sup>r</sup>
August	81,300 <sup>r</sup>	13,900 <sup>r</sup>	105,000	1,830	3,260	195,000 <sup>r</sup>
September	79,000 <sup>r</sup>	14,300 <sup>r</sup>	90,700	2,300	6,480	175,000 <sup>r</sup>
October	80,400 <sup>r</sup>	13,600 <sup>r</sup>	92,300	3,490	5,550	177,000 <sup>r</sup>
November	75,800 <sup>r</sup>	13,600 <sup>r</sup>	60,000	2,630	13,900	133,000 <sup>r</sup>
December	76,900 <sup>r</sup>	13,100 <sup>r</sup>	77,300	3,630	11,900	152,000 <sup>r</sup>
January–December	923,000 <sup>r</sup>	169,000 <sup>r</sup>	919,000	47,600	-513	1,960,000 <sup>r</sup>
2022, January	75,600	15,000	140,000	2,530	15,500	213,000

<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.

<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>c</sup>	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2021: <sup>p</sup>									
January	1,730	1,720	1,050 <sup>r</sup>	4,600 <sup>r</sup>	61,700	4,190	897 <sup>r</sup>	2,900 <sup>r</sup>	78,800 <sup>r</sup>
February	1,730	2,460	1,050 <sup>r</sup>	4,600 <sup>r</sup>	59,600	3,580	897 <sup>r</sup>	2,900 <sup>r</sup>	76,800 <sup>r</sup>
March	1,730	1,830	1,050 <sup>r</sup>	4,600 <sup>r</sup>	61,100	3,970	897 <sup>r</sup>	2,900 <sup>r</sup>	78,100 <sup>r</sup>
April	1,730	3,620	1,050 <sup>r</sup>	4,600 <sup>r</sup>	60,000	4,010	897 <sup>r</sup>	2,900 <sup>r</sup>	78,800 <sup>r</sup>
May	1,730	2,980	1,050 <sup>r</sup>	4,600 <sup>r</sup>	58,800	3,820	897 <sup>r</sup>	2,900 <sup>r</sup>	76,700 <sup>r</sup>
June	1,730	3,490	1,050 <sup>r</sup>	4,600 <sup>r</sup>	58,200	3,680	897 <sup>r</sup>	2,900 <sup>r</sup>	76,600 <sup>r</sup>
July	1,730	1,710	1,050 <sup>r</sup>	4,600 <sup>r</sup>	58,500	3,520	897 <sup>r</sup>	2,900 <sup>r</sup>	74,900 <sup>r</sup>
August	1,730	2,140	1,050 <sup>r</sup>	4,600 <sup>r</sup>	58,700	3,750	897 <sup>r</sup>	2,900 <sup>r</sup>	75,800 <sup>r</sup>
September	1,730	3,000	1,050 <sup>r</sup>	4,600 <sup>r</sup>	59,300	3,260	897 <sup>r</sup>	2,900 <sup>r</sup>	76,800 <sup>r</sup>
October	1,730	1,920	1,050 <sup>r</sup>	4,600 <sup>r</sup>	59,900	3,630	897 <sup>r</sup>	2,900 <sup>r</sup>	76,700 <sup>r</sup>
November	1,730	2,390	1,050 <sup>r</sup>	4,600 <sup>r</sup>	59,000	3,240	897 <sup>r</sup>	2,900 <sup>r</sup>	75,800 <sup>r</sup>
December	1,730	2,450	1,050 <sup>r</sup>	4,600 <sup>r</sup>	56,500	2,610	897 <sup>r</sup>	2,900 <sup>r</sup>	72,800 <sup>r</sup>
January–December	20,700	29,700	12,600 <sup>r</sup>	55,200 <sup>r</sup>	711,000	43,200	10,800 <sup>r</sup>	34,800 <sup>r</sup>	919,000 <sup>r</sup>
2022, January	1,730	2,380	1,050	4,600	59,800	4,610	897	2,900	78,000

<sup>c</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>c, 2</sup>	COMEX <sup>3</sup>	LME <sup>4</sup>	
2021: <sup>p</sup>								
January	17,500	3,810	9,190	7,970	6,850 <sup>r</sup>	66,800	16,700	111,000
February	23,800	5,340	11,900	8,610	6,850 <sup>r</sup>	62,900	13,100	109,000
March	15,300	3,410	13,200	7,900	6,850 <sup>r</sup>	65,500	10,900	108,000
April	12,400	3,330	12,800	7,550	6,850 <sup>r</sup>	60,200	9,950	101,000
May	13,100	2,860	12,400	7,850	6,850 <sup>r</sup>	55,100	1,630	86,600 <sup>r</sup>
June	10,300	3,230	19,300	7,950	6,850 <sup>r</sup>	45,000	1,180	83,500 <sup>r</sup>
July	12,300	4,410	14,000	8,190	6,850 <sup>r</sup>	41,600	1,180	76,200 <sup>r</sup>
August	12,000	3,620	14,200	8,330	6,850 <sup>r</sup>	46,100	400	79,500 <sup>r</sup>
September	10,200	5,400	13,700	8,670	6,850 <sup>r</sup>	51,200	125	86,000 <sup>r</sup>
October	15,700	6,400	17,200	8,640	6,850 <sup>r</sup>	52,100	325	91,500 <sup>r</sup>
November	15,900	5,250	16,300	9,080	6,850 <sup>r</sup>	53,200	14,700	105,000 <sup>r</sup>
December	16,100	5,440	11,500	9,500	6,850 <sup>r</sup>	63,800	20,200	117,000
2022, January	11,800	5,000	10,900	9,530	6,850	73,300	27,200	133,000

<sup>c</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
2021:			
January	362.318	369.318	361.536
February	386.126	393.314	383.750
March	408.828	416.141	408.459
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

<sup>1</sup>Listed as "COMEX high grade first position."

<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. producers.

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:				
January	349.74	320.61	266.50	167.00
February	370.89	338.87	270.00	175.00
March	392.04	351.52	296.50	185.50
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

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	January	2021	January	2021	January	2021	January
Belgium	--	--	236	97	--	--	29	2
Bolivia	--	--	--	--	--	--	763	--
Brazil	--	--	--	--	--	--	5,720	--
Canada	11,000	--	651	11	(6)	--	141,000	9,890
Chile	--	--	--	--	--	--	613,000	119,000
China	--	--	--	--	--	--	671	4
Congo (Kinshasa)	--	--	--	--	--	--	22,200	372
Finland	--	--	--	--	371	29	35	(6)
Germany	--	--	155	94	(6)	--	2,150	117
Japan	1	--	483	--	1	--	1,440	179
Mexico	--	--	8	--	(6)	--	87,400	7,660
Peru	--	--	--	--	--	--	28,500	3,020
Russia	--	--	--	--	--	--	3,900	--
South Africa	--	--	--	--	--	--	277	--
Zambia	--	--	--	--	--	--	11,400	--
Other	10	--	49	(6)	12	(6)	153	11
Total	11,000	--	1,580	201	384	29	919,000	140,000

-- 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	2021	January	2021	January	2021	January
Belgium	246	--	6,120	494	1,490	7	--	--
Canada	39,500	3,470	16,200	1,080	19,400	91	24,700	1,110
China	65,600	2,200	548	--	171	--	3,190	670
Dominican Republic	202	12	--	--	--	--	10	--
Finland	783	--	--	--	--	--	--	--
Germany	784	--	430	19	190	20	20	(6)
Hong Kong	2	--	44	--	310	--	9	--
India	--	--	30	--	433	32	--	--
Italy	--	--	--	--	113	21	22	3
Japan	6,350	--	760	19	17	--	11	(6)
Korea, Republic of	2,370	--	171	--	1,320	133	30	--
Malaysia	5	--	47	48	188	20	13	1
Mexico	229,000	19,900	33	--	258	1	19,100	717
Philippines	2,350	--	1	--	39	--	--	--
Singapore	--	--	300	--	92	39	22	2
Slovakia	--	--	1,450	118	--	--	--	--
Spain	--	--	1,130	95	20	--	(6)	--
Taiwan	1,490	--	19	--	291	--	282	20
Trinidad and Tobago	--	--	--	--	157	--	--	--
Other	92	--	208	8	499	39	127	3
Total	348,000	25,600	27,500	1,890	25,000	403	47,600	2,530

-- 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>	
	2021	2022 January	2021	2022 January
Bahamas	--	--	608	32
Bolivia	114	--	442	--
Canada	19,900	1,280	48,200	3,110
Cayman Islands	--	--	219	16
Colombia	174	20	643	20
Costa Rica	729	33	1,480	100
Dominican Republic	1,550	75	2,720	314
Ecuador	88	--	277	20
El Salvador	--	--	583	58
Germany	210	19	191	--
Guatemala	--	--	484	5
Honduras	75	--	907	22
Jamaica	7	--	159	36
Mexico	12,600	992	43,900	3,400
Panama	1,050	92	497	41
Peru	19	--	439	46
Suriname	254	45	58	20
Uruguay	481	--	58	--
Venezuela	--	--	675	3
Vietnam	114	7	64	11
Other	300	29	2,060	234
Total	37,700	2,590	105,000	7,490

-- 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		
	2021	No. 1 January	No. 2 January	Other January	2021	Segregated January	Unsegregated January
Austria	1,250	--	99	--	193	--	--
Belgium	20,700	854	691	853	8,660	39	287
Canada	61,100	--	--	4,870	53,900	--	3,710
Chile	2,380	--	--	--	345	--	--
China	196,000	6,310	4,010	13,400	43,900	1,330	788
Germany	19,000	899	59	3	15,300	116	771
Greece	14,800	467	--	419	2,140	19	264
Hong Kong	23,200	111	948	668	7,510	--	624
India	12,600	672	164	570	39,700	1,500	2,130
Japan	20,100	270	1,500	329	7,490	52	459
Korea, Republic of	47,100	1,660	1,060	1,200	17,100	281	485
Malaysia	63,600	773	166	2,030	88,700	1,510	3,470
Mexico	3,590	130	--	--	4,640	138	172
Netherlands	2,950	417	155	82	608	20	101
Pakistan	476	--	--	--	24,400	101	1,600
Poland	11,400	156	--	786	2,280	--	--
Russia	1,390	--	39	19	629	--	20
Slovakia	1,830	124	--	--	1,760	57	120
Spain	2,960	39	--	105	7,070	201	235
Sweden	1,080	--	--	74	2,480	--	153
Taiwan	13,800	224	204	934	6,500	149	146
Thailand	9,770	230	--	1,320	35,800	163	3,120
United Arab Emirates	1,780	15	--	--	3,270	--	183
Other	6,510	231	(4)	54	5,000	40	187
Total	539,000	13,600	9,110	27,700	379,000	5,710	19,000

-- 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.

<sup>4</sup>Less than ½ unit.

Source: U.S. Census Bureau.