

Mineral Industry Surveys

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COPPER IN APRIL 2021

In April 2021, domestic mine production of recoverable copper was 92,900 metric tons (t). The average daily mine production was 3,100 t, a decrease of 6% from that in March and 8% less than that in April 2020 (fig. 1). Year-to-date recoverable mine output was 390,000 t, essentially unchanged compared with that through April 2020 (table 2).

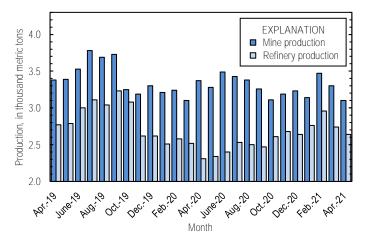


Figure 1. Average daily U.S. copper mine (recoverable) and refinery (primary and secondary) production from April 2019 through April 2021. Refinery production in November and December 2019 were withheld to avoid disclosing company proprietary data; the values shown reflect the daily average for cumulative production over this period rather than production in each month.

Owing to temporary closures of ASARCO LLC's smelter in Arizona and electrolytic refinery in Texas, smelter and electrolytic refinery production reported to the U.S. Geological Survey in April 2021 were withheld to avoid disclosing company proprietary data. Smelter and electrolytic refinery output in tables 3 and 4 are estimates based on information in quarterly company reports. The facilities shut down in October 2019 because of a worker strike, which reportedly ended in July 2020 (Wichner, 2021). As of April 2021, ASARCO had not announced when operations were expected to resume or a

reason for the continued closures. The three ASARCO mines in Arizona have continued to operate during the smelter and refinery stoppages.

Estimated U.S. smelter production was 30,000 t in April 2021. Year-to-date estimated smelter production was 135,000 t, 23% higher than that through April 2020 (table 3).

Total refinery production in the United States was 79,300 t in April 2021; data for electrolytic and electrowon output, as well as refined production from scrap, are reported in table 4. Average daily total refinery production was 2,640 t, a decrease of 4% from that in March and 15% more than that in April 2020 (fig. 1). Year-to-date refinery output was 333,000 t, an increase of 11% relative to the same period in 2020 (table 4).

Prices

In April 2021, the COMEX spot copper price rose for the twelfth consecutive month and averaged \$4.25 per pound, an increase of 4% from \$4.09 per pound in March and 84% higher than \$2.31 per pound in April 2020 (fig. 2, table 11). The average U.S. dealers buying price of number 2 copper scrap in April 2021 was \$2.89 per pound, a decrease of 3% compared with \$2.97 per pound in March and 95% greater than \$1.48 per pound in April 2020 (fig. 2, table 12).

Stocks

Refined copper stocks in the United States totaled 102,000 t at the end of April 2021, a decline of 6% from those in March and 15% lower than those in April 2020. COMEX stocks fell by 5,270 t (8%), and London Metal Exchange Ltd. stocks in U.S. warehouses decreased by 900 t (8%) compared with those at the end of April (fig. 3, table 10).

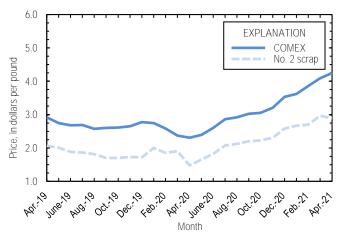


Figure 2. Monthly average COMEX copper price and no. 2 copper scrap dealers buying price from April 2019 through April 2021. As of January 2020, no. 2 prices were available only for the entire United States, whereas no. 2 prices were available only for individual domestic markets prior to January 2020. Prices shown prior to January 2020 are for New York dealers no. 2 scrap. Sources: Fastmarkets-AMM and S&P Global Platts Metals Week.

Reference Cited

Wichner, David, 2021, Tucson-based Asarco facing new charges over poststrike labor practices: Arizona Daily Star [Tucson, AZ], April 26. (Accessed May 14, 2021, at https://tucson.com/business/tucson-based-asarco-facingnew-charges-over-post-strike-labor-practices/article_ea8fb10c-a468-11eb-9063-3b0056bca30b.html.)

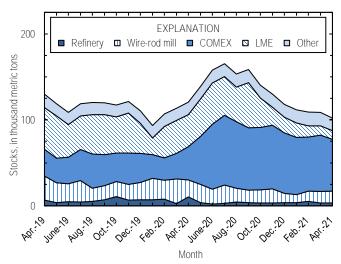


Figure 3. Domestic refined copper stocks at end of month, by type, from April 2019 through April 2021. Sources: Fastmarkets-AMM, London Metal Exchange Ltd., and U.S. Geological Survey.

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 $\label{table 1} \textbf{TABLE 1}$ SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES 1

(Metric tons of copper content, unless otherwise specified)

| | | | | 2021 | | | | |
|--|--------------------|----------------------|---------------------|----------------------|---------------------|----------------------|--|--|
| | Source | | | | | January- | | |
| | table ² | 2020 ^p | February | March | April | April | | |
| Production: | _ | | | | | | | |
| Primary: | = | | | | | | | |
| Mine, recoverable | (2) | 1,200,000 | 97,200 | 102,000 | 92,900 | 390,000 | | |
| Smelter | (3) | 315,000 e | 35,000 e | 35,000 e | 30,000 e | 135,000 ° | | |
| Refinery: | _ | | | | | | | |
| Electrolytic, domestic and foreign | (4) | 315,000 ^e | 35,000 ^e | 35,000 ^e | 30,000 ^e | 135,000 ^e | | |
| Electrowon | (4) | 559,000 | 43,900 | 46,500 | 44,100 | 182,000 | | |
| Total | (4) | 874,000 | 78,900 | 81,500 | 74,100 | 317,000 | | |
| Secondary recoverable copper: ³ | | | | | | | | |
| Refineries | (5) | 43,200 | 4,060 | 3,460 | 5,190 | 16,000 | | |
| Ingot makers ⁴ | (5) | 57,900 | 4,820 | 4,820 | 4,820 | 19,300 | | |
| Brass and wire-rod mills | (5) | 670,000 | 55,200 | 57,000 | 55,800 | 226,000 | | |
| Foundries, etc. ⁴ | (5) | 36,700 | 3,060 | 3,060 | 3,060 | 12,200 | | |
| Consumption: | | | | | | | | |
| Apparent, primary refined and copper from old scrap | (8) | 1,660,000 | 165,000 | 191,000 ^r | 176,000 | 672,000 | | |
| Reported, refined copper | (7) | 1,710,000 | 137,000 | 159,000 | 148,000 | 578,000 | | |
| Purchased copper-base scrap (gross weight) | (9) | 938,000 | 81,800 | 85,900 ^r | 85,100 | 339,000 | | |
| Stocks at end of period: | | | | | | | | |
| Total refined | (10) | 118,000 | 109,000 | 109,000 ^r | 102,000 | 102,000 | | |
| Blister and anode | (10) | 9,380 | 23,800 | 29,200 | 27,100 | 27,100 | | |
| Price, U.S. producers cathode (cents per pound) ⁵ | (11) | 286.745 | 393.314 | 416.141 | 432.183 | 402.739 | | |
| Imports: ⁶ | _ | | | | | | | |
| Ore and concentrates | (13) | 2,170 | 2,840 | 1,610 | 415 | 4,960 | | |
| Refined | (13) | 676,000 | 73,000 | 99,700 | 85,200 | 300,000 | | |
| Exports: 6 | | | | | | | | |
| Ore and concentrates | (14) | 383,000 | 27,400 | 43,700 | 33,300 | 142,000 | | |
| Refined | (14) | 41,200 | 2,970 | 3,360 | 5,280 | 16,000 | | |

^eEstimated. ^pPreliminary. ^rRevised.

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

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

³Copper recovered from copper-base scrap only.

 $^{^4}$ Estimated based on the monthly average of 2018 annual data.

⁵Source: S&P Global Platts Metals Week.

⁶Source: U.S. Census Bureau.

 $\label{eq:table 2} \textbf{TABLE 2}$ MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES 1

| | R | ecoverable copp | er | | Contained copper | | |
|--------------------|---------|---------------------|-----------|------------|---------------------------|-----------|--|
| Period | Arizona | Others ² | Total | Electrowon | Concentrates ³ | Total | |
| 2020: ^p | | | | | | | |
| January-April | 280,000 | 110,000 | 391,000 | 175,000 | 224,000 | 399,000 | |
| April | 76,400 | 24,700 | 101,000 | 44,600 | 58,800 | 103,000 | |
| May | 75,500 | 26,200 | 102,000 | 48,200 | 55,700 | 104,000 | |
| June | 77,800 | 26,800 | 105,000 | 48,300 | 58,600 | 107,000 | |
| July | 79,500 | 26,700 | 106,000 | 49,600 | 58,900 | 109,000 | |
| August | 78,900 | 25,900 | 105,000 | 49,100 | 57,900 | 107,000 | |
| September | 72,600 | 25,300 | 97,900 | 45,700 | 54,300 | 100,000 | |
| October | 71,000 | 25,500 | 96,500 | 47,600 | 50,800 | 98,500 | |
| November | 69,900 | 25,800 | 95,700 | 47,100 | 50,600 | 97,700 | |
| December | 75,000 | 25,100 | 100,000 | 48,400 | 53,800 | 102,000 | |
| January-December | 880,000 | 318,000 | 1,200,000 | 559,000 | 665,000 | 1,220,000 | |
| 2021: | | | | | | | |
| January | 71,600 | 25,900 | 97,500 | 47,100 | 52,500 | 99,600 | |
| February | 70,500 | 26,700 | 97,200 | 43,900 | 55,400 | 99,300 | |
| March | 73,900 | 28,500 | 102,000 | 46,500 | 58,100 | 105,000 | |
| April | 63,900 | 28,900 | 92,900 | 44,100 | 59,400 | 103,000 | |
| January-April | 280,000 | 110,000 | 390,000 | 182,000 | 225,000 | 407,000 | |

^pPreliminary.

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

²Includes production from Michigan, Missouri, Montana, Nevada, New Mexico, and Utah.

³Includes copper content of precipitates and other metal concentrates.

$\label{eq:table 3} \text{COPPER PRODUCED AT SMELTERS IN}$ THE UNITED STATES $^{1,\,2}$

(Metric tons, copper content)

| | Anode |
|--------------------|----------------------------|
| Period | production ^{e, 3} |
| 2020: ^p | |
| January–April | 110,000 |
| April | 20,000 |
| May | 20,000 |
| June | 20,000 |
| July | 25,000 |
| August | 25,000 |
| September | 25,000 |
| October | 30,000 |
| November | 30,000 |
| December | 30,000 |
| January-December | 315,000 |
| 2021: | |
| January | 35,000 |
| February | 35,000 |
| March | 35,000 |
| April | 30,000 |
| January–April | 135,000 |

^eEstimated. ^pPreliminary.

 $^{^{\}rm l}{\rm Data}$ are rounded to no more than three significant digits; may not add to totals shown.

²Includes blister and copper anode from primary or secondary sources.

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

 $\label{table 4} \textbf{U.s. Production of Refined Copper, By Source and Method of Recovery}^1$

| | Pri | mary materials | | | |
|--------------------|----------------------------|----------------|---------|--------------------|---------------------|
| | Electrolytically | | | | Total |
| Period | refined ^{e, 2, 3} | Electrowon | Total | Scrap | refined |
| 2020: ^p | | | | | |
| January-April | 110,000 | 175,000 | 285,000 | 14,800 | 300,000 |
| April | 20,000 | 44,600 | 64,600 | 4,530 | 69,100 |
| May | 20,000 | 48,200 | 68,200 | 4,380 | 72,600 |
| June | 20,000 | 48,300 | 68,300 | 3,620 | 71,900 |
| July | 25,000 | 49,600 | 74,600 | 3,720 | 78,400 |
| August | 25,000 | 49,100 | 74,100 | 3,380 | 77,500 |
| September | 25,000 | 45,700 | 70,700 | 3,490 | 74,200 |
| October | 30,000 | 47,600 | 77,600 | 3,220 | 80,900 |
| November | 30,000 | 47,100 | 77,100 | 3,290 | 80,400 |
| December | 30,000 | 48,400 | 78,400 | 3,300 | 81,700 |
| January-December | 315,000 | 559,000 | 874,000 | 43,200 | 918,000 |
| 2021: | = | | | | |
| January | 35,000 | 47,100 | 82,100 | 3,350 ^r | 85,400 ^r |
| February | 35,000 | 43,900 | 78,900 | 4,060 | 82,900 |
| March | 35,000 | 46,500 | 81,500 | 3,460 ^r | 85,000 ^r |
| April | 30,000 | 44,100 | 74,100 | 5,190 | 79,300 |
| January-April | 135,000 | 182,000 | 317,000 | 16,000 | 333,000 |

^eEstimated. ^pPreliminary. ^rRevised.

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

²From domestic and foreign source materials.

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

TABLE 5 COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP IN THE UNITED STATES $^{\rm I}$

(Metric tons, copper content)

| | Refine | ries ² | Ingot m | akers ³ | Brass and wi | re-rod mills | Foundrie | es, etc. ³ | |
|--------------------|------------------------|--------------------|-----------|--------------------|--------------|--------------|-----------|-----------------------|---------------------|
| Period | New scrap ^e | Old scrap | New scrap | Old scrap | New scrap | Old scrap | New scrap | Old scrap | Total ⁴ |
| 2020: ^p | • | | | | | | | | |
| January-April | 6,710 | 8,120 | 3,070 | 16,200 | 210,000 | 13,600 | 8,580 | 3,650 | 270,000 |
| April | 1,680 | 2,850 | 768 | 4,060 | 51,800 | 2,950 | 2,150 | 913 | 67,100 |
| May | 1,680 | 2,700 | 768 | 4,060 | 51,300 | 2,600 | 2,150 | 913 | 66,200 |
| June | 1,680 | 1,940 | 768 | 4,060 | 51,700 | 3,030 | 2,150 | 913 | 66,300 |
| July | 1,680 | 2,040 | 768 | 4,060 | 53,400 | 3,290 | 2,150 | 913 | 68,300 |
| August | 1,680 | 1,700 | 768 | 4,060 | 52,200 | 3,120 | 2,150 | 913 | 66,600 |
| September | 1,680 | 1,810 | 768 | 4,060 | 50,700 | 3,300 | 2,150 | 913 | 65,400 |
| October | 1,680 | 1,540 | 768 | 4,060 | 53,600 | 3,540 | 2,150 | 913 | 68,300 |
| November | 1,680 | 1,620 | 768 | 4,060 | 52,900 | 3,000 | 2,150 | 913 | 67,100 |
| December | 1,680 | 1,620 | 768 | 4,060 | 55,800 | 2,590 | 2,150 | 913 | 69,600 |
| January-December | 20,100 | 23,100 | 9,220 | 48,700 | 631,000 | 38,100 | 25,800 | 11,000 | 807,000 |
| 2021: | | | | | | | | | |
| January | 1,680 | 1,670 ^r | 768 | 4,060 | 53,700 | 4,110 | 2,150 | 913 | 69,000 ^r |
| February | 1,680 | 2,380 | 768 | 4,060 | 51,700 | 3,500 | 2,150 | 913 | 67,100 |
| March | 1,680 | 1,780 ^r | 768 | 4,060 | 53,100 | 3,870 | 2,150 | 913 | 68,300 r |
| April | 1,680 | 3,510 | 768 | 4,060 | 51,900 | 3,870 | 2,150 | 913 | 68,900 |
| January-April | 6,710 | 9,340 | 3,070 | 16,200 | 210,000 | 15,400 | 8,580 | 3,650 | 273,000 |

^eEstimated. ^pPreliminary. ^rRevised.

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

²Electrolytically refined and fire refined from scrap based on source of material at smelter or refinery level.

³Monthly data estimated based on the monthly average of 2018 annual data.

⁴Does not include an estimate, based on reported 2018 annual data, of 3,380 tons per month from new scrap and 2,710 tons per month from old scrap of copper recovered from scrap other than copper-base.

 ${\bf TABLE~6}$ U.S. PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD SEMIFABRICATES 1

| | Pro | duction | Shi | pments | Stocks, e | Stocks, end of period | |
|--------------------|---------------------|----------------------|---------------------|----------------------|---------------------|-----------------------|--|
| Period | Brass mills | Wire-rod mills | Brass mills | Wire-rod mills | Brass mills | Wire-rod mills | |
| 2020: ^p | | | | | | | |
| January-April | 295,000 | 421,000 | 295,000 | 419,000 | 29,000 | 26,100 | |
| April | 72,500 | 94,600 | 73,500 | 96,200 | 29,000 | 26,100 | |
| May | 73,400 | 95,300 | 73,400 | 91,400 | 29,000 | 30,000 | |
| June | 73,700 | 89,400 | 73,600 | 96,100 | 29,200 | 23,400 | |
| July | 73,500 | 108,000 | 73,300 | 104,000 | 29,300 | 27,000 | |
| August | 73,700 | 104,000 | 73,600 | 111,000 | 29,400 | 20,000 | |
| September | 73,800 | 107,000 | 73,700 | 108,000 | 29,500 | 18,600 | |
| October | 74,400 | 108,000 | 74,900 | 110,000 | 29,000 | 16,400 | |
| November | 73,600 | 106,000 | 73,600 | 106,000 | 29,000 | 16,000 | |
| December | 73,700 | 101,000 | 74,000 | 97,800 | 28,700 | 19,000 | |
| January-December | 884,000 | 1,240,000 | 885,000 | 1,240,000 | 28,700 | 19,000 | |
| 2021: | | | | | | | |
| January | 73,600 | 104,000 | 74,000 | 106,000 | 28,300 | 16,800 | |
| February | 74,100 | 96,600 | 73,800 | 97,600 | 28,600 | 15,800 | |
| March | 86,800 ^r | 125,000 ^r | 86,700 ^r | 122,000 ^r | 33,800 ^r | 17,800 ° | |
| April | 75,000 | 111,000 | 75,300 | 113,000 | 28,500 | 15,000 | |
| January–April | 310,000 | 436,000 | 310,000 | 439,000 | 28,500 | 15,000 | |

^pPreliminary. ^rRevised.

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

 $\label{eq:table 7} \textbf{U.s. Consumption of Refined Copper}^1$

| | Brass | Wire-rod | Other | |
|--------------------|---------|-----------|---------------------|-----------|
| Period | mills | mills | plants ² | Total |
| 2020: ^p | | | • | |
| January–April | 136,000 | 418,000 | 21,800 | 576,000 |
| April | 34,500 | 102,000 | 5,450 | 142,000 |
| May | 34,100 | 94,500 | 5,450 | 134,000 |
| June | 34,700 | 88,200 | 5,450 | 128,000 |
| July | 34,300 | 107,000 | 5,450 | 147,000 |
| August | 34,700 | 103,000 | 5,450 | 143,000 |
| September | 34,600 | 106,000 | 5,450 | 146,000 |
| October | 34,600 | 106,000 | 5,450 | 147,000 |
| November | 34,600 | 105,000 | 5,450 | 145,000 |
| December | 34,800 | 99,900 | 5,450 | 140,000 |
| January-December | 413,000 | 1,230,000 | 65,400 | 1,710,000 |
| 2021: | | | | |
| January | 34,700 | 93,400 | 5,450 | 134,000 |
| February | 34,900 | 96,100 | 5,450 | 137,000 |
| March | 35,300 | 119,000 | 5,450 | 159,000 |
| April | 34,300 | 109,000 | 5,450 | 148,000 |
| January–April | 139,000 | 417,000 | 21,800 | 578,000 |

^pPreliminary.

 $^{^{1}\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

²Monthly consumption data by ingot makers, chemical plants, foundries, and miscellaneous manufacturers are estimated based on the monthly average of 2018 annual data.

 $\label{eq:table 8} \textbf{U.S.} \ \textbf{APPARENT CONSUMPTION OF COPPER}^1$

| | Primary refined | Copper in | Refined imports | Refined | Stock change | Apparent |
|--------------------|-------------------|------------------------|------------------------------|----------------------|---------------|----------------------|
| Period | copper production | old scrap ² | for consumption ³ | exports ³ | during period | consumption |
| 2020: ^p | | | | | | |
| January–April | 285,000 | 52,500 | 241,000 | 11,900 | 9,760 | 557,000 |
| April | 64,600 | 13,500 | 74,900 | 1,550 | 6,790 | 145,000 |
| May | 68,200 | 13,000 | 66,200 | 540 | 18,600 | 128,000 |
| June | 68,300 | 12,700 | 63,300 | 1,220 | 18,900 | 124,000 |
| July | 74,600 | 13,000 | 37,300 | 5,300 | 7,430 | 112,000 |
| August | 74,100 | 12,500 | 59,800 | 6,470 | -12,100 | 152,000 |
| September | 70,700 | 12,800 | 39,900 | 4,570 | 5,410 | 113,000 |
| October | 77,600 | 12,800 | 57,300 | 2,930 | -18,100 | 163,000 |
| November | 77,100 | 12,300 | 53,300 | 3,090 | -10,800 | 150,000 |
| December | 78,400 | 11,900 | 57,400 | 5,150 | -11,700 | 154,000 |
| January-December | 874,000 | 153,000 | 676,000 | 41,200 | 7,370 | 1,660,000 |
| 2021: | | | | | | |
| January | 82,100 | 13,500 ^r | 42,400 | 4,350 | -6,490 | 140,000 |
| February | 78,900 | 13,600 | 73,000 | 2,970 | -2,600 | 165,000 |
| March | 81,500 | 13,300 ^r | 99,700 | 3,360 | -178 | 191,000 ^r |
| April | 74,100 | 15,100 | 85,200 | 5,280 | -6,590 | 176,000 |
| January–April | 317,000 | 55,400 | 300,000 | 16,000 | -15,900 | 672,000 |

^pPreliminary. ^rRevised.

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

²Copper recovered from old scrap and converted to refined metal and alloys. Includes reported monthly production of copper from old scrap of copper-base, an estimate for annual reporters, and a monthly average of copper from non-copper-base materials based on 2018 annual data.

³Source: U.S. Census Bureau.

 $\label{eq:table 9} \text{U.s. Consumption of purchased copper-base SCRAP}^1$

| | Smelt | ers | | | Brass | and | | | |
|--------------------|------------------------|--------------------|-----------|--------------------|-----------|----------------------|-----------|-----------------------|---------------------|
| | and refin | neries | Ingot m | akers ² | wire-roo | l mills ³ | Foundri | es, etc. ² | Total scrap |
| Period | New scrap ^e | Old scrap | New scrap | Old scrap | New scrap | Old scrap | New scrap | Old scrap | used |
| 2020: ^p | | | | | | | | | |
| January-April | 6,920 | 8,370 | 8,210 | 19,200 | 242,000 | 14,500 | 10,300 | 4,030 | 314,000 |
| April | 1,730 | 2,940 | 2,050 | 4,790 | 59,900 | 3,150 | 2,570 | 1,010 | 78,100 |
| May | 1,730 | 2,790 | 2,050 | 4,790 | 59,500 | 2,760 | 2,570 | 1,010 | 77,200 |
| June | 1,730 | 2,000 | 2,050 | 4,790 | 59,800 | 3,160 | 2,570 | 1,010 | 77,100 |
| July | 1,730 | 2,100 | 2,050 | 4,790 | 61,400 | 3,340 | 2,570 | 1,010 | 79,000 |
| August | 1,730 | 1,750 | 2,050 | 4,790 | 60,200 | 3,200 | 2,570 | 1,010 | 77,300 |
| September | 1,730 | 1,870 | 2,050 | 4,790 | 58,700 | 3,410 | 2,570 | 1,010 | 76,100 |
| October | 1,730 | 1,590 | 2,050 | 4,790 | 61,700 | 3,710 | 2,570 | 1,010 | 79,200 |
| November | 1,730 | 1,670 | 2,050 | 4,790 | 60,900 | 3,130 | 2,570 | 1,010 | 77,900 |
| December | 1,730 | 1,670 | 2,050 | 4,790 | 64,000 | 2,750 | 2,570 | 1,010 | 80,500 |
| January-December | 20,700 | 23,800 | 24,600 | 57,500 | 729,000 | 39,900 | 30,800 | 12,100 | 938,000 |
| 2021: | | | | | | | | | |
| January | 1,730 | 1,720 ^r | 2,050 | 4,790 | 68,000 | 4,190 | 2,570 | 1,010 | 86,000 ^r |
| February | 1,730 | 2,460 | 2,050 | 4,790 | 63,600 | 3,580 | 2,570 | 1,010 | 81,800 |
| March | 1,730 | 1,830 ^r | 2,050 | 4,790 | 68,000 | 3,970 | 2,570 | 1,010 | 85,900 ^r |
| April | 1,730 | 3,620 | 2,050 | 4,790 | 65,300 | 4,010 | 2,570 | 1,010 | 85,100 |
| January-April | 6,920 | 9,630 | 8,210 | 19,200 | 265,000 | 15,700 | 10,300 | 4,030 | 339,000 |

^eEstimated. ^pPreliminary. ^rRevised.

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

²Monthly data estimated based on the monthly average of 2018 annual data.

³Consumption at brass and wire-rod mills assumed equal to receipts.

 $\label{eq:table 10} \text{COPPER STOCKS IN THE UNITED STATES AT END OF PERIOD}^1$

| | | | | I | Refined copper | | | |
|--------------------|---------------------|------------|----------|--------------------|--------------------|--------|---------|----------------------|
| | Blister and | | Wire-rod | | | | | Total |
| Period | anode ² | Refineries | mills | Brass mills | Other ³ | Comex | LME^4 | refined |
| 2020: ^p | | | | | | | | |
| April | 7,430 | 10,300 | 19,900 | 7,210 | 7,070 | 38,700 | 37,200 | 120,000 |
| May | 11,900 | 3,550 | 21,200 | 7,730 | 7,070 | 55,900 | 43,500 | 139,000 |
| June | 11,000 | 2,070 | 17,200 | 7,900 | 7,070 | 75,600 | 48,000 | 158,000 |
| July | 11,300 | 3,090 | 21,200 | 7,770 | 7,070 | 81,000 | 45,200 | 165,000 |
| August | 15,700 | 4,490 | 15,900 | 8,210 | 7,070 | 77,400 | 40,200 | 153,000 |
| September | 13,500 | 3,730 | 14,500 | 8,200 | 7,070 | 72,400 | 52,700 | 159,000 |
| October | 15,200 | 3,460 | 15,300 | 8,170 | 7,070 | 72,500 | 34,000 | 140,000 |
| November | 12,500 | 3,420 | 16,200 | 8,100 | 7,070 | 74,000 | 20,900 | 130,000 |
| December | 9,380 | 3,850 | 10,700 | 7,850 | 7,070 | 70,200 | 18,300 | 118,000 |
| 2021: | | | | | | | | |
| January | 17,400 ^r | 3,810 | 9,190 | 7,970 | 7,070 | 66,800 | 16,700 | 111,000 |
| February | 23,800 | 5,310 | 11,900 | 8,610 | 7,070 | 62,900 | 13,100 | 109,000 |
| March | 29,200 | 3,470 | 13,200 | 8,570 ^r | 7,070 | 65,500 | 10,900 | 109,000 ^r |
| April | 27,100 | 3,360 | 13,900 | 7,550 | 7,070 | 60,200 | 9,950 | 102,000 |

^pPreliminary. ^rRevised.

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

²Copper content.

³Monthly estimates based on 2018 annual data, comprising stocks at ingot makers, chemical plants, foundries, and miscellaneous manufacturers.

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

TABLE 11 AVERAGE PRICE OF COPPER IN THE UNITED STATES AND ON THE LONDON METAL EXCHANGE

(Cents per pound)

| | | Comex | LME |
|---------------|----------------|-----------------------|------------|
| | U.S. producers | first | cash price |
| Period | cathode1 | position ² | Grade A |
| 2020: | | | |
| April | 236.881 | 230.631 | 228.985 |
| May | 245.090 | 238.715 | 237.402 |
| June | 266.305 | 259.805 | 260.470 |
| July | 293.300 | 286.600 | 288.202 |
| August | 298.377 | 291.752 | 294.685 |
| September | 309.052 | 302.302 | 304.470 |
| October | 312.495 | 305.695 | 304.033 |
| November | 327.338 | 320.338 | 320.392 |
| December | 360.470 | 353.470 | 351.772 |
| Year | 286.745 | 279.948 | 279.797 |
| 2021: | | | |
| January | 369.318 | 362.318 | 361.536 |
| February | 393.314 | 386.126 | 383.750 |
| March | 416.141 | 408.828 | 408.459 |
| April | 432.183 | 424.783 | 423.453 |
| January–April | 402.739 | 395.514 | 394.300 |

¹Sum of "Comex high grade first position" and "NY dealer premium cathode."

Source: S&P Global Platts Metals Week.

²Listed as "Comex high grade first position."

 ${\it TABLE~12}$ AVERAGE BUYING PRICES FOR COPPER SCRAP IN THE UNITED STATES

(Cents per pound)

| | | | Dealers (U | United States) |
|---------------|-------------|-------------|------------|----------------|
| | | | | Red brass |
| | Brass mills | Refiners | No. 2 | turnings and |
| Period | No. 1 scrap | No. 2 scrap | scrap | borings |
| 2020: | | | | |
| April | 219.33 | 196.05 | 148.00 | 125.00 |
| May | 230.18 | 208.95 | 165.00 | 111.00 |
| June | 253.82 | 232.41 | 182.09 | 120.55 |
| July | 279.55 | 258.32 | 207.09 | 130.00 |
| August | 282.05 | 258.79 | 212.52 | 124.76 |
| September | 291.05 | 262.19 | 220.00 | 128.86 |
| October | 291.93 | 261.84 | 222.73 | 130.00 |
| November | 306.26 | 277.53 | 230.00 | 139.47 |
| December | 339.98 | 314.75 | 258.18 | 165.45 |
| Year | 268.76 | 243.47 | 201.72 | 130.67 |
| 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 |
| January-April | 379.80 | 344.13 | 280.50 | 178.50 |

Source: Fastmarkets-AMM.

U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY CLASS¹

(Metric tons, copper content)

| Country or | Ore and concentrates ² | | | Matte, ash, and precipitates ³ | | | Blis | ster and anode | ·s ⁴ | Refined ⁵ | | |
|--------------------|-----------------------------------|------------------|-------|---|------------------|-------|------|------------------|-----------------|----------------------|--------|----------|
| | - | 2021 January– | | | 2021 January– | | | 2021 January– | | | 2021 | |
| | | | | | | | | | | | | January- |
| locality | 2020 | April | April | 2020 | April | April | 2020 | April | April | 2020 | April | April |
| Bahrain | - | | | | | | | | | 76 | | |
| Belgium | | | | 354 | | | | | | | | |
| Bolivia | | | | | | | | | | 1,030 | 192 | 384 |
| Canada | 2,170 | 406 | 4,950 | 459 | 71 | 193 | (6) | | (6) | 149,000 | 11,400 | 51,300 |
| Chile | | | | | | | | | | 410,000 | 62,500 | 208,000 |
| China | | | | (6) | | | | | | 426 | 61 | 262 |
| Congo (Kinshasa) | | | | | | | | | | 148 | 2,130 | 2,130 |
| Finland | | | | | | | 275 | 48 | 109 | | 17 | 35 |
| Germany | | | | | | 102 | (6) | | (6) | 1,910 | 68 | 512 |
| Japan | | | (6) | 176 | | 48 | (6) | (6) | (6) | 2,060 | 88 | 432 |
| Korea, Republic of | | | | | | | (6) | | (6) | 72 | 2 | 21 |
| Mexico | | | | (6) | (6) | 7 | (6) | | | 95,200 | 6,070 | 26,500 |
| Peru | | | | | | | | | | 14,500 | 847 | 6,010 |
| Spain | | | | 49 | | | | | | 654 | | |
| Other | | 10 | 10 | 22 | 3 | 24 | 5 | 1 | 6 | 50 | 1,780 | 4,970 |
| Total | 2,170 | 415 | 4,960 | 1,060 | 73 | 374 | 281 | 48 | 116 | 676,000 | 85,200 | 300,000 |
| 7 | | | | | | | | | | | | |

⁻⁻ Zero.

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

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

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

⁴HTS code 7402.00.0000.

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

⁶Less than ½ unit.

 $\label{eq:table 14} \textbf{U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS}^1$

(Metric tons, copper content)

| | Ore and concentrates ² | | | Matte, ash, and precipitates ³ | | | Blister and anodes ⁴ | | | Refined ⁵ | | |
|--------------------|-----------------------------------|------------------|---------|---|------------------|-------|---------------------------------|------------------|-------|----------------------|-------|----------|
| | · | 2021 January– | | | 2021 January– | | | 2021 January– | | | 2021 | |
| Country or | | | | • | | | | | | | | January- |
| locality | 2020 | April | April | 2020 | April | April | 2020 | April | April | 2020 | April | April |
| Belgium | 230 | 35 | 93 | 6,110 | 370 | 1,450 | 190 | 312 | 689 | 64 | | |
| Bulgaria | 4,350 | | | (6) | | | | | | | | |
| Canada | 36,100 | 2,960 | 12,800 | 13,100 | 821 | 5,990 | 1,690 | 4,050 | 4,490 | 12,600 | 4,270 | 8,230 |
| China | 49,300 | 4,110 | 18,300 | 62 | 50 | 92 | 148 | 41 | 41 | 233 | 13 | 991 |
| Germany | | 783 | 784 | 288 | 46 | 179 | 128 | 26 | 68 | 22 | | 20 |
| Hong Kong | 9 | | 2 | _ | | | 86 | 2 | 35 | 18 | | |
| India | 20 | | | 37 | | 29 | 247 | 20 | 93 | | | |
| Italy | | | | | | | 197 | 1 | 27 | 86 | | 2 |
| Japan | 14,600 | | | 251 | 20 | 251 | 24 | 15 | 16 | 4 | 1 | 6 |
| Korea, Republic of | 8,140 | | 2,340 | 1 | | 81 | 1,390 | 76 | 524 | 1,160 | 4 | 17 |
| Malaysia | | | | 3 | 41 | 41 | 218 | 20 | 60 | | | |
| Mexico | 250,000 | 24,600 | 106,000 | 2,720 | 5 | 29 | 848 | 9 | 39 | 26,800 | 910 | 6,420 |
| Philippines | 6,250 | | | _ | | (6) | 10 | | 10 | | | |
| Singapore | | | | 256 | 25 | 25 | 36 | 10 | 20 | 13 | | 7 |
| Slovakia | | | | 1,050 | 137 | 412 | | | | | | |
| Spain | 8,990 | | | 1,820 | 156 | 510 | 35 | 20 | 20 | | | |
| Sweden | | | | _ | | | 135 | | 72 | | | |
| Thailand | | | | 2 | | | 256 | | 11 | (6) | | |
| Other | 4,630 | 802 | 1,700 | 172 | 20 | 149 | 565 | 202 | 361 | 164 | 81 | 269 |
| Total | 383,000 | 33,300 | 142,000 | 25,900 | 1,690 | 9,240 | 6,210 | 4,800 | 6,580 | 41,200 | 5,280 | 16,000 |

⁻⁻ Zero.

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

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

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

⁴Schedule B code 7402.00.0000.

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

⁶Less than ½ unit.

 $\label{eq:table 15} \text{U.s. IMPORTS FOR CONSUMPTION OF COPPER SCRAP}^1$

| | | Unalloyed ² | Alloyed ³ | | | | |
|---------------------|--------------|------------------------|----------------------|--------|-------|----------|--|
| | | 202 | 1 | | 2021 | | |
| Country or | · | | January- | - | | January- | |
| locality | 2020 | April | April | 2020 | April | April | |
| Antigua and Barbuda | - | | | 151 | 21 | 49 | |
| Bahamas | | | | 681 | 48 | 236 | |
| Brazil | - | | | 164 | 14 | 51 | |
| Canada | 14,500 | 1,860 | 5,690 | 41,300 | 4,150 | 16,000 | |
| Cayman Islands | 4 | | | 262 | 11 | 84 | |
| Colombia | 60 | 40 | 40 | 808 | 61 | 234 | |
| Costa Rica | 619 | 38 | 246 | 934 | 93 | 570 | |
| Dominican Republic | 876 | 122 | 425 | 1,150 | 196 | 716 | |
| Ecuador | | 16 | 16 | 154 | 43 | 82 | |
| El Salvador | - | | | 294 | 29 | 222 | |
| Germany | 179 | 12 | 60 | 108 | 40 | 93 | |
| Guatemala | - | | | 289 | 19 | 181 | |
| Honduras | 54 | 7 | 36 | 844 | 79 | 343 | |
| Jamaica | | | 4 | 258 | | 54 | |
| Mexico | 9,450 | 955 | 3,600 | 37,100 | 3,700 | 14,600 | |
| Nicaragua | 114 | | | | | | |
| Panama | 714 | 113 | 302 | 335 | 44 | 141 | |
| Peru | 495 | | | 251 | 20 | 119 | |
| Vietnam | 121 | 15 | 50 | 22 | 8 | 13 | |
| Other | 362 | 169 | 250 | 1,400 | 136 | 712 | |
| Total | 27,600 | 3,350 | 10,700 | 86,500 | 8,710 | 34,500 | |

⁻⁻ Zero.

¹Data 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.

TABLE 16
U.S. EXPORTS OF COPPER SCRAP¹

| | | | | Unalloyed ² | Alloyed ³ | | | | | | | |
|--------------------|---------|--------|----------|------------------------|----------------------|--------|----------|---------|------------|--------|--------------|----------|
| | | 2021 | | | | | | | 2021 | | | |
| | - - | No. 1 | | No. 2 | | Other | | | Segregated | | Unsegregated | |
| Country or | | | January- | | January- | | January- | | January– | | | January- |
| locality | 2020 | April | April | April | April | April | April | 2020 | April | April | April | April |
| Austria | 3,970 | _ | | 39 | 602 | | | 1,010 | | | | |
| Belgium | 20,900 | 807 | 2,110 | 673 | 2,340 | 222 | 1,290 | 11,100 | 94 | 485 | 650 | 2,210 |
| Canada | 51,800 | | | | | 5,080 | 19,100 | 32,200 | | | 3,970 | 15,700 |
| China | 81,200 | 3,070 | 10,800 | 3,870 | 13,000 | 6,850 | 26,900 | 35,400 | 1,550 | 5,030 | 2,670 | 8,250 |
| Germany | 22,400 | 1,350 | 4,510 | 153 | 1,140 | 482 | 1,310 | 16,000 | 136 | 377 | 1,120 | 3,940 |
| Greece | 13,000 | 674 | 2,700 | 234 | 865 | 432 | 1,610 | 1,450 | | 58 | 188 | 506 |
| Hong Kong | 7,810 | 354 | 1,000 | 1,090 | 2,480 | 997 | 2,540 | 7,750 | 141 | 769 | 356 | 1,360 |
| India | 9,570 | 238 | 852 | 119 | 382 | 253 | 941 | 34,800 | 1,000 | 4,110 | 1,420 | 5,620 |
| Japan | 16,400 | 195 | 915 | 853 | 3,460 | 235 | 603 | 13,800 | 140 | 435 | 283 | 1,960 |
| Korea, Republic of | 45,700 | 1,590 | 7,150 | 955 | 4,860 | 1,990 | 5,620 | 18,500 | 327 | 1,470 | 773 | 3,580 |
| Malaysia | 54,400 | 493 | 2,210 | 1,000 | 5,320 | 4,550 | 18,000 | 122,000 | 1,660 | 8,620 | 5,480 | 25,400 |
| Pakistan | 697 | | 3 | | 37 | | | 14,500 | 20 | 20 | 1,220 | 5,660 |
| Poland | 5,000 | 235 | 293 | 176 | 606 | 123 | 1,690 | 6,570 | | 59 | 380 | 1,780 |
| Russia | 7,310 | | 113 | | 100 | 512 | 819 | 830 | | | 10 | 491 |
| Spain | 4,070 | 3 | 51 | 20 | 45 | 279 | 705 | 7,610 | 237 | 730 | 227 | 1,200 |
| Taiwan | 17,000 | 391 | 1,860 | 300 | 918 | 243 | 1,370 | 16,400 | 102 | 752 | 363 | 1,150 |
| Thailand | 4,800 | 187 | 395 | 2 | 156 | 349 | 1,550 | 20,900 | 68 | 583 | 4,200 | 10,700 |
| Vietnam | 7,480 | 98 | 192 | | 99 | | 196 | 2,340 | | 37 | | 62 |
| Other | 22,900 | 725 | 3,390 | 148 | 1,100 | 956 | 2,830 | 16,600 | 317 | 1,650 | 777 | 3,990 |
| Total | 396,000 | 10,400 | 38,600 | 9,640 | 37,500 | 23,500 | 87,000 | 380,000 | 5,790 | 25,200 | 24,100 | 93,600 |

⁻⁻ Zero.

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

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

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