# Mineral Industry Surveys

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## CHROMIUM IN SEPTEMBER 2021

Reported consumption of chromium, on a gross weight basis, in September 2021 was essentially unchanged compared with consumption of chromium in August 2021 and essentially unchanged compared with consumption in September 2020. Reported consumer stocks were essentially unchanged compared with stocks in August 2021 and increased by 10% compared with those of September 2020 (tables 1, 2).

Stainless steel production decreased by 3% in September 2021 compared with production in August 2021 and decreased by 3% compared with production in September 2020 (table 1). Year-to-date production through September 2021 increased by 16% compared with year-to-date production through September 2020. Government stockpile inventories for chromium metal were unchanged compared with those in August 2021 and decreased by 6% compared with those in September 2020. Government stockpile inventories of chromium ferroalloys were slightly less compared with those in August 2021 and decreased by 13% compared with those of September 2020 (table 3).

Imports of chromite ore, chromium ferroalloys, stainless steel, and stainless steel scrap commonly fluctuate from month to month (fig. 1, table 1). In September 2021, imports of all grades of chromium ferroalloys, including ferrochromium silicon, increased by 23% compared with imports of chromium ferroalloys in August 2021 and increased more than

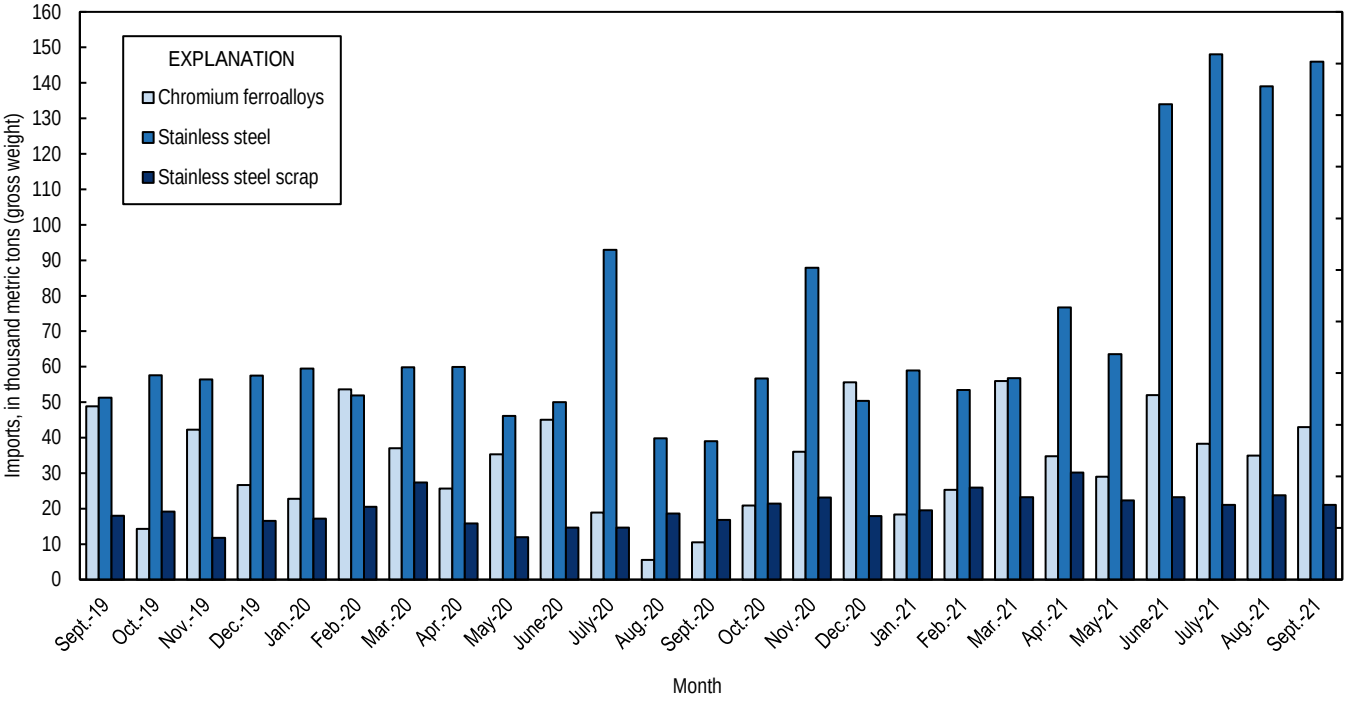


Figure 1. Chromium ferroalloys, stainless steel, and stainless steel scrap imports from September 2019 through September 2021. Source: U.S. Census Bureau.

fourfold compared with those in in September 2020.

Stainless steel imports in September 2021 increased by 5% compared with imports in August 2021 and more than tripled compared with imports in September 2020. Stainless steel scrap imports decreased by 11% in September 2021 compared with imports in August 2021 and increased by 25% compared with those in September 2020 (table 1).

In September 2021, the leading import sources for ferrochromium (FeCr) into the United States were, in descending order of quantity by gross weight, South Africa, Kazakhstan, and Finland (table 6), whereas the leading import sources for chromium metal were Russia, the United Kingdom, and China (table 7).

Exports of chromite ore, chromium ferroalloys, chromium metal, and stainless steel also frequently fluctuate from month to month (table 1, table 4). Exports of chromium ferroalloys decreased by 19% in September 2021 compared with exports in August 2021 and increased by 71% compared with exports in September 2020. Stainless steel exports in September 2021 increased by 8% compared with exports in August 2021 and increased by 11% compared with those of September 2020 (table 1).

The U.S. chromium metal (99% Cr) average price was $5.11 per pound in September 2021, a 3% increase from the average price in August 2021, and a 68% increase compared with the average price in September 2020. The U.S. high-carbon FeCr (62%–70% chromium) average price was 173.72 cents per pound of contained chromium in September 2021, a 5% increase from the average price in August 2021, and a 90% increase from the average price in September 2020 (fig. 2) (CRU Group, 2021).

## Industry News

Zimasco (Pvt) Ltd, a subsidiary of Sinosteel Corporation (China), invested $35 million dollars to construct new ferrochromium furnaces at its ferrochromium smelting complex in Kwekwe, Zimbabwe. The additional furnaces would increase production capacity by 40% to 252,000 metric tons per year (t/y). A new sinter plant would also be added to the complex, with a capacity of 300,000 t/y, and would allow Zimasco to use friable ores during the smelting process (Sebetlela, 2021).

The U.S. Environmental Protection Agency (EPA) fined Owens-Brockway Glass Container, Inc. $38,900 for failing to report its use of chromium chemicals at its Portland facility in 2017 and 2018 (U.S. Environmental Protection Agency, 2021). Under the Toxic Release Inventory rules of the Emergency Planning and Community Right-to-Know Act, a company must report its chemical releases and transfers with the EPA and pertinent state agency when certain toxic chemicals like chromium (VI) chemicals exceed threshold amounts.

## References Cited


CRU Group, 2021, CRU prices: CRU Group, October 1. (Accessed November 12, 2021, via http://www.crugroup.com/.)

Sebetlela, Teboho, 2021, Chromium—Zimasco to invest in new ferrochrome capacity: London, United Kingdom, Roskill Information Services Ltd., September 22. (Accessed November 16, 2021, via https://roskill.com/news/chromium-zimasco-to-invest-in-new-ferrochrome-capacity/.)

U.S. Environmental Protection Agency, 2021, EPA fines Portland, Oregon glass company $39k for violating toxic chemical reporting rules: Washington, D.C., News Releases from Region 10, U.S. Environmental Protection Agency, September 16. (Accessed November 16, 2021, https://www.epa.gov/newsreleases/epa-fines-portland-oregon-glass-company-39k-violating-toxic-chemical-reporting-rules.)




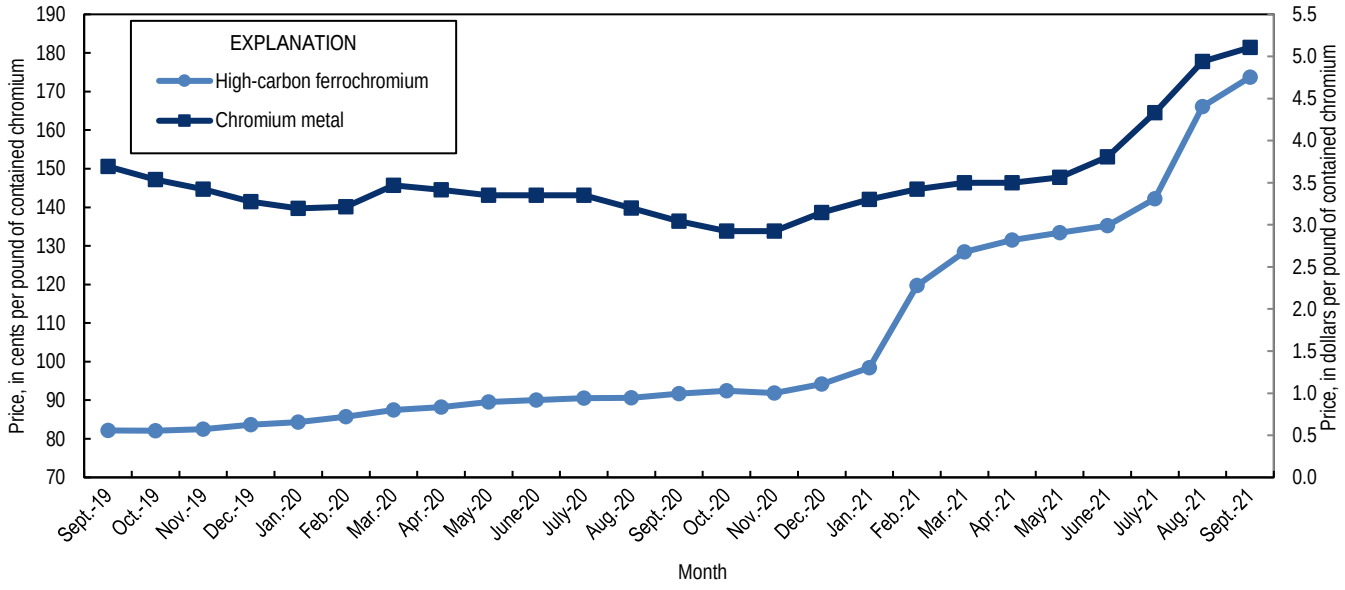


Figure 2. Average monthly prices for U.S. high-carbon ferrochromium from September 2019 through September 2021. Source: CRU Group.

TABLE 1
U.S. SALIENT CHROMIUM STATISTICS[1]

(Metric tons, gross weight)

| | 2020 | 2021 | | | |
|---|---|---|---|---|---|
| | January–December | July | August | September | January–September[2] |
| Production, stainless steel[3] | 2,140,000 | 189,000 | 184,000 | 179,000 | 1,830,000 |
| Components of U.S. supply: | | | | | |
| Stainless steel scrap receipts | 682,000 | 47,900 e | 46,700 e | 54,400 | 494,000 e |
| Stainless steel scrap consumption | 1,040,000 | 72,400 e | 70,600 e | 68,000 e | 744,000 e |
| Imports for consumption: | | | | | |
| Chromite ore | 101,000 | 3,420 | 4,600 | 5,570 | 90,400 |
| Ferrochromium: | | | | | |
| More than 4% carbon | 310,000 | 37,400 | 32,100 | 37,700 | 270,000 |
| More than 3% but not more than 4% carbon | 212 | -- | -- | 118 | 6,700 |
| More than 0.5% but not more than 3% carbon | 3,360 | -- | 166 | 189 | 1,810 |
| Not more than 0.5% carbon | 37,400 | 881 | 2,230 | 3,530 | 36,200 |
| Ferrochromium silicon | 15,800 | -- | 485 | 1,490 | 16,900 |
| Total ferroalloy imports | 367,000 | 38,300 | 35,000 | 43,000 | 332,000 |
| Chromium metal[4] | 11,600 | 1,000 | 1,450 | 689 | 8,850 |
| Stainless steel | 694,000 | 148,000 | 139,000 | 146,000 | 876,000 |
| Stainless steel scrap | 219,000 | 21,100 | 23,800 | 21,100 | 210,000 |
| Distribution of U.S. supply: | | | | | |
| Consumption, industry, chromium ferroalloys and metal | 350,000 | 26,200 | 26,200 | 26,100 | 235,000 |
| Exports: | | | | | |
| Chromite ore | 1,780 | 156 | 116 | 302 | 1,700 |
| Chromium ferroalloys: | | | | | |
| High-carbon ferrochromium | 949 | 192 | 397 | 296 | 1,170 |
| Low-carbon ferrochromium | 393 | 62 | 18 | 58 | 288 |
| Ferrochromium silicon | 238 | 20 | 20 | -- | 152 |
| Total ferroalloy exports | 1,580 | 274 | 435 | 354 | 1,610 |
| Chromium metal | 379 | 15 | 47 | 25 | 384 |
| Stainless steel | 325,000 | 28,900 | 27,900 | 30,000 | 273,000 |
| Stainless steel scrap | 314,000 | 24,400 | 53,500 | 23,700 | 231,000 |
| Stocks at end of period: | | | | | |
| Consumer, industry, chromium ferroalloys and metal | 9,320 | 7,740 | 7,740 | 7,730 | 7,730 |
| Government stockpile: | | | | | |
| Chromium ferroalloys | 59,600 | 54,700 | 53,700 | 53,000 | 53,000 |
| Chromium metal | 3,750 | 3,690 | 3,620 | 3,620 | 3,620 |

[e]Estimated. -- Zero.

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

[2]May include revised data that are not broken out by specific month(s).

[3]Data on stainless steel production reported by American Iron and Steel Institute; monthly, quarterly, and year–to–date production of stainless and heat-resisting raw steel.

[4]Includes waste and scrap and other.

TABLE 2
U.S. CONSUMPTION AND STOCKS OF CHROMIUM PRODUCTS[1]

(Metric tons, gross weight unless otherwise noted)

| | 2021 | | |
|---|---|---|---|
| | August | September | January–September[2] |
| Consumption by end use: | | | |
| Steel: | | | |
| Carbon steel | W | W | W |
| High-strength low-alloy steel | 136 | 136 | 1,220 |
| Stainless and heat-resisting steel | 22,100 | 22,100 | 199,000 |
| Unspecified steel[3] | 3,350 | 3,350 | 30,200 |
| Superalloys | 204 | 209 | 1,840 |
| Other alloys and uses[4] | W | W | W |
| Total | 26,200 | 26,100 | 235,000 |
| Total, chromium content | 15,100 | 15,100 | 136,000 |
| Consumption by material: | | | |
| Low-carbon ferrochromium | 1,690 | 1,650 | 15,100 |
| High-carbon ferrochromium | 23,000 | 23,000 | 207,000 |
| Ferrochromium silicon | W | W | W |
| Chromium metal | 144 | 144 | 1,300 |
| Chromite ore | 141 | 144 | 1,270 |
| Chromium-aluminum alloy | W | W | W |
| Other chromium materials | W | W | W |
| Total | 26,200 | 26,100 | 235,000 |
| Total, chromium content | 15,100 | 15,100 | 136,000 |
| Consumer stocks: | | | |
| Low-carbon ferrochromium | 1,060 | 1,060 | 1,060 |
| High-carbon ferrochromium | 2,220 | 2,220 | 2,220 |
| Ferrochromium silicon | W | W | W |
| Chromium metal | 21 | 21 | 21 |
| Chromium-aluminum alloy | W | W | W |
| Other chromium materials | W | W | W |
| Total | 7,740 | 7,730 | 7,730 |
| Total, chromium content | 4,810 | 4,800 | 4,800 |

W Withheld to avoid disclosing company proprietary data; included in "Total."

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

[2]May include revised data that are not broken out by specific month(s).

[3]Includes electrical, full alloy, tool, and unspecified steel end uses.

[4]Includes cast irons, welding and alloy hard-facing rods and materials, wear- and corrosion-resistant alloys, and aluminum, copper, magnetic, nickel, and other alloys.

TABLE 3
U.S. GOVERNMENT STOCKPILE INVENTORY OF
CHROMIUM MATERIALS[1]

(metric tons)

| | Chromium ferroalloys | | |
|---|---|---|---|
| | High-carbon ferro-chromium | Low-carbon ferro-chromium | Chromium metal |
| 2020: | | | |
| September | 33,900 | 26,800 | 3,830 |
| October | 33,900 | 26,800 | 3,830 |
| November | 33,900 | 26,800 | 3,790 |
| December | 33,000 | 26,600 | 3,750 |
| 2021: | | | |
| January | 33,000 | 26,600 | 3,750 |
| February | 32,400 | 26,500 | 3,690 |
| March | 28,800 | 27,500 | 3,690 |
| April | 27,700 | 27,500 | 3,690 |
| May | 27,700 | 27,500 | 3,690 |
| June | 27,500 | 27,500 | 3,690 |
| July | 27,300 | 27,500 | 3,690 |
| August | 26,200 | 27,500 | 3,620 |
| September | 25,600 | 27,400 | 3,620 |

[1]Data are rounded to no more than three significant digits.

Source: Defense Logistics Agency, DLA Strategic Materials.

TABLE 4
U.S. EXPORTS OF CHROMITE ORE, CHROMIUM FERROALLOYS, AND METAL[1]

| | Chromite ore | | Chromium ferroalloys[2] | | | Chromium metal[3] | |
|---|---|---|---|---|---|---|---|
| | Gross weight (metric tons) | Value (thousands) | Gross weight (metric tons) | Chromium content (metric tons) | Value (thousands) | Gross weight (metric tons) | Value (thousands) |
| 2020: | | | | | | | |
| September | 19 | $8 | 208 | 115 | $324 | 33 | $727 |
| October | 139 | 120 | 260 | 157 | 316 | 23 | 942 |
| November | 59 | 45 | 83 | 51 | 141 | 22 | 580 |
| December | 222 | 136 | 252 | 133 | 306 | 16 | 531 |
| January–December[4] | 1,780 | 1,040 | 1,580 | 893 | 2,280 | 379 | 9,970 |
| 2021: | | | | | | | |
| January | 70 | 55 | 24 | 15 | 43 | 44 | 1,050 |
| February | 420 | 264 | 111 | 58 | 169 | 30 | 650 |
| March | 208 | 147 | 209 | 100 | 401 | 47 | 783 |
| April | 157 | 128 | 28 | 17 | 54 | 25 | 659 |
| May | 115 | 106 | 94 | 59 | 155 | 66 | 1,200 |
| June | 155 | 86 | 82 | 43 | 142 | 86 | 1,200 |
| July | 156 | 104 | 274 | 147 | 529 | 15 | 406 |
| August | 116 | 81 | 435 | 212 | 600 | 47 | 1,000 |
| September | 302 | 191 | 354 | 167 | 484 | 25 | 773 |
| January–September[4] | 1,700 | 1,160 | 1,610 | 818 | 2,580 | 384 | 7,730 |

[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes low- and high-carbon ferrochromium and ferrochromium silicon.
[3]Includes chromium metal, waste and scrap, and unwrought powders.
[4]May include revised data that are not broken out by specific month(s).

Source: U.S. Census Bureau.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF CHROMITE ORE, FERROCHROMIUM, AND CHROMIUM METAL[1]

(Metric tons)

| | 2020 | 2021 | | |
|---|---|---|---|---|
| | January–December | August | September | January–September[2] |
| Chromite ore: | | | | |
| Not more than 40% chromic oxide: | | | | |
| Gross weight | 3,600 | 2,770 | 2,170 | 13,800 |
| Chromic oxide content | 909 | 638 | 499 | 3,030 |
| More than 40% but less than 46% chromic oxide: | | | | |
| Gross weight | 11,000 | 1,540 | 1,360 | 11,500 |
| Chromic oxide content | 4,780 | 678 | 586 | 5,010 |
| 46% or more chromic oxide: | | | | |
| Gross weight | 86,300 | 289 | 2,040 | 65,100 |
| Chromic oxide content | 77,500 | 170 | 982 | 54,700 |
| Total, all grades: | | | | |
| Gross weight | 101,000 | 4,600 | 5,570 | 90,400 |
| Chromic oxide content | 83,200 | 1,490 | 2,070 | 62,700 |
| Ferrochromium: | | | | |
| Low-carbon:[3] | | | | |
| Not more than 0.5% carbon: | | | | |
| Gross weight | 37,400 | 2,230 | 3,530 | 36,200 |
| Chromium content | 25,200 | 1,630 | 2,560 | 25,600 |
| More than 0.5% but not more than 3% carbon: | | | | |
| Gross weight | 3,360 | 166 | 189 | 1,810 |
| Chromium content | 2,260 | 117 | 134 | 1,250 |
| Total, low-carbon: | | | | |
| Gross weight | 40,800 | 2,390 | 3,720 | 38,100 |
| Chromium content | 27,400 | 1,740 | 2,690 | 26,900 |
| Medium-carbon:[4] | | | | |
| Gross weight | 212 | -- | 118 | 6,700 |
| Chromium content | 116 | -- | 64 | 3,420 |
| High-carbon:[5] | | | | |
| Gross weight | 310,000 | 32,100 | 37,700 | 270,000 |
| Chromium content | 169,000 | 18,900 | 20,600 | 150,000 |
| Total, all grades: | | | | |
| Gross weight | 351,000 | 34,500 | 41,500 | 315,000 |
| Chromium content | 196,000 | 20,700 | 23,400 | 180,000 |
| Chromium metal: | | | | |
| Unwrought powders | 9,730 | 1,090 | 529 | 7,400 |
| Waste and scrap | 168 | 9 | 6 | 69 |
| Other than waste and scrap and unwrought powders | 1,740 | 349 | 154 | 1,390 |
| Total, all grades | 11,600 | 1,450 | 689 | 8,850 |

-- Zero.

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

[2]May include revised data that are not broken out by specific month(s).

[3]Ferrochromium containing not more than 3% carbon.

[4]Ferrochromium containing more than 3% carbon but not more than 4% carbon.

[5]Ferrochromium containing more than 4% carbon.

Source: U.S. Census Bureau.

TABLE 6

U.S. IMPORTS FOR CONSUMPTION OF FERROCHROMIUM IN 2021, BY GRADE AND COUNTRY OR LOCALITY[1]

| Grade and country or locality | September | | | January–September[2] | | |
|---|---|---|---|---|---|---|
| | Gross weight (metric tons) | Chromium content (metric tons) | Value[3] (thousands) | Gross weight (metric tons) | Chromium content (metric tons) | Value[3] (thousands) |
| High-carbon ferrochromium:[4] | | | | | | |
| Albania | 131 | 95 | $203 | 3,600 | 2,540 | $4,810 |
| Brazil | 540 | 305 | 598 | 790 | 448 | 860 |
| Finland | 5,000 | 2,640 | 5,570 | 24,500 | 13,000 | 24,700 |
| Germany | -- | -- | -- | 9 | 6 | 18 |
| India | -- | -- | -- | 1,320 | 811 | 1,160 |
| Kazakhstan | 9,120 | 6,280 | 21,600 | 49,500 | 34,200 | 88,400 |
| Russia | 291 | 196 | 420 | 11,600 | 7,950 | 17,700 |
| South Africa | 22,100 | 10,800 | 27,000 | 153,000 | 74,600 | 161,000 |
| Sweden | -- | -- | -- | 11,100 | 7,400 | 16,200 |
| Turkey | 491 | 325 | 729 | 4,300 | 2,830 | 6,250 |
| Zimbabwe | -- | -- | -- | 10,500 | 5,870 | 8,310 |
| Total | 37,700 | 20,600 | 56,100 | 270,000 | 150,000 | 330,000 |
| Medium-carbon ferrochromium:[5] | | | | | | |
| China | -- | -- | -- | 5 | 3 | 2 |
| Russia | 118 | 64 | 81 | 195 | 105 | 144 |
| South Africa | -- | -- | -- | 6,500 | 3,310 | 5,340 |
| Total | 118 | 64 | 81 | 6,700 | 3,420 | 5,490 |
| Low-carbon ferrochromium:[6] | | | | | | |
| More than 0.5% but not more than 3% carbon | | | | | | |
| Brazil | -- | -- | -- | 318 | 197 | 436 |
| Kazakhstan | 189 | 134 | 761 | 1,490 | 1,060 | 4,700 |
| Total | 189 | 134 | 761 | 1,810 | 1,250 | 5,140 |
| Not more than 0.5% carbon: | | | | | | |
| Belgium | -- | -- | -- | 368 | 287 | 1,160 |
| Brazil | -- | -- | -- | 897 | 562 | 1,360 |
| China | 5 | 3 | 20 | 30 | 18 | 98 |
| Germany | 1,120 | 830 | 3,400 | 6,240 | 4,780 | 19,800 |
| Japan | 200 | 140 | 698 | 1,100 | 772 | 3,900 |
| Kazakhstan | 1,700 | 1,240 | 7,010 | 11,700 | 8,460 | 39,100 |
| Russia | 454 | 312 | 1,630 | 14,700 | 9,910 | 40,500 |
| Turkey | 50 | 35 | 177 | 1,240 | 856 | 2,860 |
| United Kingdom | -- | -- | -- | 2 | 1 | 16 |
| Total | 3,530 | 2,560 | 12,900 | 36,200 | 25,600 | 109,000 |
| All grades: | | | | | | |
| Albania | 131 | 95 | 203 | 3,600 | 2,540 | 4,810 |
| Belgium | -- | -- | -- | 368 | 287 | 1,160 |
| Brazil | 540 | 305 | 598 | 2,000 | 1,210 | 2,660 |
| China | 5 | 3 | 20 | 35 | 21 | 101 |
| Finland | 5,000 | 2,640 | 5,570 | 24,500 | 13,000 | 24,700 |
| Germany | 1,120 | 830 | 3,400 | 6,250 | 4,790 | 19,800 |
| India | -- | -- | -- | 1,320 | 811 | 1,160 |
| Japan | 200 | 140 | 698 | 1,100 | 772 | 3,900 |
| Kazakhstan | 11,000 | 7,660 | 29,400 | 62,700 | 43,800 | 132,000 |
| Russia | 863 | 572 | 2,130 | 26,400 | 18,000 | 58,400 |
| South Africa | 22,100 | 10,800 | 27,000 | 159,000 | 77,900 | 167,000 |
| Sweden | -- | -- | -- | 11,100 | 7,400 | 16,200 |
| Turkey | 541 | 360 | 906 | 5,540 | 3,690 | 9,110 |
| United Kingdom | -- | -- | -- | 2 | 1 | 16 |
| Zimbabwe | -- | -- | -- | 10,500 | 5,870 | 8,310 |
| Total | 41,500 | 23,400 | 69,900 | 315,000 | 180,000 | 449,000 |

-- Zero.

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

[2]May include revised data that are not broken out by specific month(s).

[3]Customs import value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the merchandise into the United States.

[4]Ferrochromium containing more than 4% carbon.

[5]Ferrochromium containing more than 3% carbon but not more than 4% carbon.

[6]Ferrochromium containing not more than 3% carbon.

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF CHROMIUM METAL IN 2021,
BY GRADE AND BY COUNTRY OR LOCALITY[1]

| Grade and country or locality | September | | January–September[2] | |
|---|---|---|---|---|
| | Gross weight (metric tons) | Value[3] (thousands) | Gross weight (metric tons) | Value[3] (thousands) |
| Unwrought powders: | | | | |
| Belgium | -- | -- | 3 | $88 |
| China | 71 | $893 | 826 | 7,030 |
| France | 38 | 348 | 1,580 | 12,500 |
| Germany | 48 | 396 | 560 | 3,290 |
| India | 20 | 180 | 117 | 1,030 |
| Japan | -- | -- | 1 | 42 |
| Korea, Republic of | -- | -- | 1 | 22 |
| Netherlands | -- | -- | 48 | 346 |
| Russia | 243 | 3,620 | 2,850 | 20,600 |
| Spain | -- | -- | 60 | 288 |
| United Kingdom | 109 | 1,430 | 1,350 | 13,100 |
| Total | 529 | 6,860 | 7,400 | 58,300 |
| Waste and scrap: | | | | |
| Canada | -- | -- | 18 | 67 |
| Dominican Republic | -- | -- | 1 | 5 |
| Germany | -- | -- | 1 | 10 |
| Japan | -- | -- | 5 | 35 |
| Liechtenstein | -- | -- | 1 | 6 |
| Taiwan | -- | -- | 1 | 15 |
| United Kingdom | 6 | 12 | 42 | 224 |
| Total | 6 | 12 | 69 | 362 |
| Other than waste and scrap and unwrought powders: | | | | |
| Canada | -- | -- | (4) | 7 |
| China | 1 | 55 | 14 | 558 |
| Estonia | -- | -- | 2 | 71 |
| Germany | 1 | 100 | 14 | 782 |
| Italy | -- | -- | 2 | 40 |
| Japan | -- | -- | 4 | 197 |
| Liechtenstein | -- | -- | (4) | 21 |
| Malaysia | -- | -- | (4) | 23 |
| Netherlands | -- | -- | (4) | 7 |
| Russia | 86 | 652 | 1,110 | 7,330 |
| South Africa | 27 | 249 | 54 | 466 |
| Spain | 23 | 111 | 116 | 557 |
| Taiwan | (4) | 41 | (4) | 90 |
| United Kingdom | 16 | 227 | 66 | 856 |
| Total | 154 | 1,430 | 1,390 | 11,000 |
| All grades: | | | | |
| Belgium | -- | -- | 3 | 88 |
| Canada | -- | -- | 18 | 74 |
| China | 72 | 947 | 840 | 7,580 |
| Dominican Republic | -- | -- | 1 | 5 |
| Estonia | -- | -- | 2 | 71 |
| France | 38 | 348 | 1,580 | 12,500 |
| Germany | 49 | 497 | 575 | 4,080 |
| India | 20 | 180 | 117 | 1,030 |
| Italy | -- | -- | 2 | 40 |
| Japan | -- | -- | 10 | 274 |
| Korea, Republic of | -- | -- | 1 | 22 |
| Liechtenstein | -- | -- | 2 | 27 |
| Malaysia | -- | -- | (4) | 23 |
| Netherlands | -- | -- | 48 | 353 |
| Russia | 329 | 4,270 | 3,970 | 27,900 |
| South Africa | 27 | 249 | 54 | 466 |
| Spain | 23 | 111 | 176 | 845 |
| Taiwan | (4) | 41 | 1 | 105 |
| United Kingdom | 131 | 1,670 | 1,460 | 14,200 |
| Total | 689 | 8,310 | 8,850 | 69,700 |

-- Zero.

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

[2]May include revised data that are not broken out by specific month(s).

[3]Customs import value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the merchandise into the United States.

[4]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 8
U.S. STAINLESS STEEL TRADE, BY PRODUCT, IN 2021[1]

| Stainless steel product | September | | January–September[2] | |
|---|---|---|---|---|
| | Gross weight (metric tons) | Value[3] (thousands) | Gross weight (metric tons) | Value[3] (thousands) |
| Exports: | | | | |
| Ingot | 1,090 | $6,670 | 12,600 | $67,200 |
| Flat-rolled (width > 600 mm) | 17,700 | 63,600 | 161,000 | 518,000 |
| Flat-rolled (width < 600 mm) | 4,900 | 34,800 | 43,700 | 262,000 |
| Bars and rods in irregular coils | 213 | 1,090 | 1,660 | 8,470 |
| Other bars and rods | 2,260 | 27,300 | 19,200 | 204,000 |
| Wire | 596 | 12,100 | 6,690 | 95,700 |
| Tubes, pipes, hollow profiles | 3,210 | 30,800 | 28,300 | 263,000 |
| Total | 30,000 | 176,000 | 273,000 | 1,420,000 |
| Stainless steel scrap | 23,700 | 34,700 | 231,000 | 238,000 |
| Grand total | 53,700 | 211,000 | 504,000 | 1,660,000 |
| Imports: | | | | |
| Ingot | 79,400 | 54,300 | 370,000 | 484,000 |
| Flat-rolled (width > 600 mm) | 32,000 | 93,500 | 230,000 | 621,000 |
| Flat-rolled (width < 600 mm) | 4,800 | 17,900 | 43,300 | 150,000 |
| Bars and rods in irregular coils | 3,600 | 12,600 | 28,300 | 101,000 |
| Other bars and rods | 8,660 | 37,900 | 89,500 | 364,000 |
| Wire | 4,120 | 18,600 | 32,100 | 137,000 |
| Tubes, pipes, hollow profiles | 13,000 | 73,800 | 82,200 | 487,000 |
| Total | 146,000 | 308,000 | 876,000 | 2,340,000 |
| Stainless steel scrap | 21,100 | 31,300 | 210,000 | 282,000 |
| Grand total | 167,000 | 340,000 | 1,090,000 | 2,620,000 |

[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]May include revised data that are not broken out by specific month(s).
[3]Export value is free alongside ship. Import value is Customs import value, which generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other incurred in bringing the merchandise into the United States.

Source: U.S. Census Bureau.