

Mineral Industry Surveys

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MANGANESE IN JUNE 2003

In June, reported consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was estimated as 30,300 metric tons (t), which was a 7% decrease from that for the previous month, according to the U.S. Geological Survey. This figure increases to 32,700 t when estimates for annual respondents are added on the basis of 2002 data. Corresponding industry stocks of ore at the end of the month were 184,000 t, which includes an estimate for annual respondents on the basis of 2002 data. This was an increase of 3% from that of the previous month. (Data for the most recent 13 months are plotted in the graph on page 2.)

Foreign trade data for June will appear in a subsequent report. The data for May 2003 tabulated in this report indicate that the total exports and imports, on a manganese content basis, decreased by 40% and 9%, respectively, from those of April 2003. Significant decreases in manganese ferroalloy and metal trade led to these declines.

Update

On July 21, a bill was introduced in the U.S. House of Representatives entitled, the "Manganese Metal Safety Control Act of 2003." The bill, H.R. 2812, would direct the Administrator of the U.S. Environmental Protection Agency to conduct a study of "the potentially injurious effects to the environment and human health from imported electrolytic manganese metal that contains selenium" in Fiscal Year 2004 under an authorized budget of \$100,000 (H.R. 2812§¹). The United States became dependent on imports of manganese metal after domestic production ceased in mid-2001. Chinese producers reportedly use selenium in their processes to improve electrical current efficiency in electrolytic manganese metal

¹A reference that includes a section mark (§) is found in the Internet Reference Cited section.

production, whereas producers in other countries, like South Africa, do not (Ryan's Notes, 2003). The status of the bill can be monitored on the web page of the Library of Congress at <http://thomas.loc.gov/>.

On August 11, the U.S. International Trade Commission initiated an antidumping investigation of electrolytic manganese dioxide imports from Australia, China, Greece, Ireland, Japan, and South Africa in response to a petition filed on July 31, 2003, by Kerr-McGee Chemical, LLC. The ITC held a conference to hear oral presentations in connection with the investigation on August 21. Written testimony was to be submitted by August 26. The ITC must make a preliminary determination on whether the domestic manganese dioxide industry is materially injured or threatened with material injury by September 15 (U.S. International Trade Commission, 2003).

On August 14, the Defense National Stockpile Center announced the cash disposal of approximately 24,500 t of metallurgical-grade manganese ore in response to Solicitation for Offers DLA-MANGANESE-002 to: Advanced Alloys, Pensacola, FL; Eramet Marietta Inc., Marietta, OH; Scott G. Williams, LLC, Conyers, GA; and W.H. Britt, Gatesville, GA.

References Cited

- Ryan's Notes, 2003, Mn metal under scrutiny: Ryan's Notes, v. 9, no. 35, July 28, p. 2.
U.S. International Trade Commission, 2003, Electrolytic manganese dioxide from Australia, China, Greece, Ireland, Japan, and South Africa: Federal Register, v. 68, no. 154, August 11, p. 47607-47608.

Internet Reference Cited

- H.R. 2812, 2003 (July 21), Manganese Metal Safety Control Act of 2003 (Introduced in House), accessed August 25, 2003, at URL <http://thomas.loc.gov>.

TABLE 1
SELECTED U.S. FOREIGN TRADE IN MANGANESE¹

(Metric tons, manganese content)²

| | Imports for consumption | | | Exports | | |
|--------------|-------------------------|----------------------|---------|---------|----------------------|-------|
| | Ore and dioxide | Ferroalloy and metal | Total | Ore | Ferroalloy and metal | Total |
| 2002: | | | | | | |
| May | 1,670 | 16,800 | 18,500 | 643 | 806 | 1,450 |
| January-May | 114,000 | 143,000 | 257,000 | 3,050 | 4,480 | 7,530 |
| 2003: | | | | | | |
| January | 2,340 | 24,900 | 27,300 | 176 | 711 | 887 |
| February | 21,100 | 27,700 | 48,800 | 151 | 820 | 971 |
| March | 28,100 | 21,900 | 50,000 | 347 | 1,010 | 1,350 |
| April | 6,430 | 37,600 | 44,100 | 335 | 1,400 | 1,730 |
| May | 18,700 | 21,600 | 40,300 | 372 | 668 | 1,040 |
| Total | 76,700 | 134,000 | 211,000 | 1,380 | 4,600 | 5,980 |

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

²As reported except as estimated for imports of manganese dioxide and manganese waste and scrap and for exports from gross weights.

Source: U.S. Census Bureau.

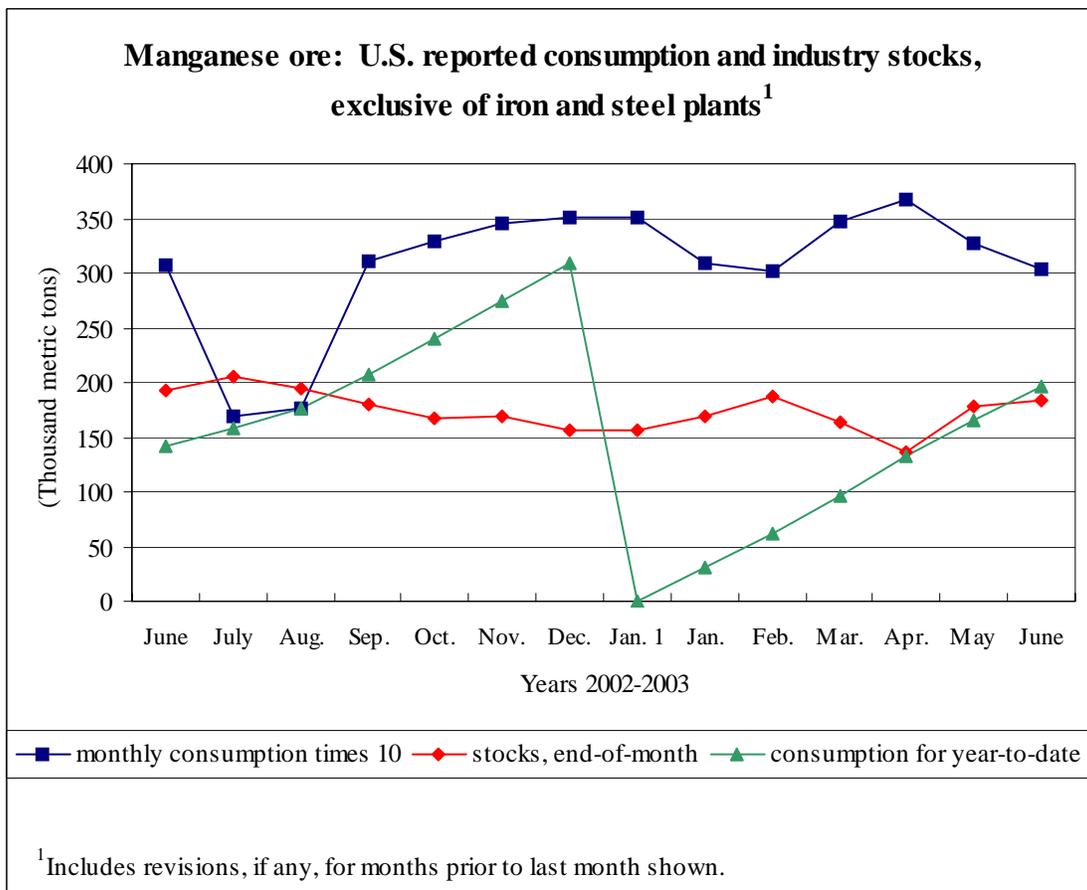


TABLE 2
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN MAY 2003¹

(Metric tons, unless otherwise specified)

| Source | Gross weight | Mn content | Customs value | Year to date | | |
|------------------------|--------------|------------|---------------|--------------|------------|---------------|
| | | | | Gross weight | Mn content | Customs value |
| Australia | 6,020 | 3,990 | \$2,520,000 | 20,800 | 13,800 | \$9,060,000 |
| Georgia | 2,870 | 1,870 | 1,460,000 | 2,870 | 1,870 | 1,460,000 |
| Kazakhstan | -- | -- | -- | 5 | 3 | 2,610 |
| Korea, Republic of | 2,500 | 1,660 | 1,080,000 | 2,500 | 1,660 | 1,080,000 |
| Mexico | -- | -- | -- | 2,800 | 1,960 | 1,330,000 |
| Norway | -- | -- | -- | 6,510 | 3,800 | 4,320,000 |
| Romania | -- | -- | -- | 7,690 | 5,300 | 3,690,000 |
| Russia | -- | -- | -- | 2,330 | 1,510 | 1,120,000 |
| South Africa | 4,450 | 2,960 | 2,020,000 | 35,300 | 23,400 | 16,000,000 |
| Total | 15,800 | 10,500 | 7,080,000 | 80,800 | 53,300 | 38,000,000 |
| Total, general imports | 15,800 | 10,500 | 7,080,000 | 80,800 | 53,300 | 38,000,000 |

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN MAY 2003¹

(Metric tons, unless otherwise specified)

| Source | Gross weight | Mn content | Customs value | Year to date | | |
|---|--------------|------------|---------------|--------------|------------|---------------|
| | | | | Gross weight | Mn content | Customs value |
| Low carbon: | | | | | | |
| Canada | -- | -- | -- | 20 | 16 | \$18,200 |
| China | 655 | 637 | \$645,000 | 2,070 | 1,950 | 1,960,000 |
| Italy | -- | -- | -- | 356 | 276 | 168,000 |
| Japan | 36 | 33 | 37,300 | 1,770 | 1,430 | 1,220,000 |
| Korea, Republic of | -- | -- | -- | 40 | 38 | 40,200 |
| Mexico | 779 | 612 | 722,000 | 1,340 | 1,050 | 1,230,000 |
| Norway | -- | -- | -- | 2,130 | 1,730 | 1,300,000 |
| South Africa | 360 | 334 | 413,000 | 1,940 | 1,800 | 2,380,000 |
| Spain | -- | -- | -- | 72 | 58 | 58,900 |
| Total, low carbon | 1,830 | 1,620 | 1,820,000 | 9,730 | 8,350 | 8,370,000 |
| Total, general imports of low carbon | 1,830 | 1,620 | 1,820,000 | 9,730 | 8,350 | 8,370,000 |
| Medium carbon, 1%-2% C: | | | | | | |
| China | 1,300 | 1,170 | 861,000 | 6,390 | 5,150 | 4,070,000 |
| Korea, Republic of | 2,500 | 2,030 | 1,530,000 | 2,500 | 2,030 | 1,530,000 |
| Mexico | 1,860 | 1,480 | 1,420,000 | 6,960 | 5,600 | 4,920,000 |
| Norway | -- | -- | -- | 1,800 | 1,470 | 991,000 |
| South Africa | 1,310 | 1,080 | 971,000 | 10,600 | 8,590 | 7,370,000 |
| Total, m.c., 1%-2% C | 6,970 | 5,760 | 4,780,000 | 28,200 | 22,800 | 18,900,000 |
| Total, general imports of m.c., 1%-2% C | 6,970 | 5,760 | 4,780,000 | 28,200 | 22,800 | 18,900,000 |
| Medium carbon, 2%-4% C: | | | | | | |
| Mexico | -- | -- | -- | 22 | 21 | 11,400 |
| High carbon: | | | | | | |
| Australia | 512 | 393 | 202,000 | 3,870 | 3,030 | 1,710,000 |
| Brazil | -- | -- | -- | 2,610 | 2,060 | 1,020,000 |
| Canada | -- | -- | -- | 86 | 65 | 56,400 |
| France | -- | -- | -- | 14,800 | 11,600 | 5,810,000 |
| Mexico | -- | -- | -- | 22 | 22 | 10,300 |
| South Africa | 4,020 | 3,040 | 1,280,000 | 40,000 | 31,000 | 15,800,000 |
| Total, high carbon | 4,530 | 3,430 | 1,490,000 | 61,300 | 47,700 | 24,400,000 |
| Total, general imports of high carbon | 4,530 | 3,430 | 1,490,000 | 61,300 | 47,700 | 24,400,000 |
| Grand total | 13,300 | 10,800 | 8,080,000 | 99,300 | 78,900 | 51,600,000 |
| Grand total, general imports | 13,300 | 10,800 | 8,080,000 | 99,300 | 78,900 | 51,600,000 |

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 4
U.S. IMPORTS OF MANGANESE ORE (20% OR MORE Mn) IN MAY 2003^{1,2,3}

(Metric tons)

| Source | 20% - 47% Mn | | 47% or more Mn | | Total | |
|----------------------------|--------------|------------|----------------|------------|--------------|------------|
| | Gross weight | Mn content | Gross weight | Mn content | Gross weight | Mn content |
| Belgium | -- | -- | 36 | 25 | 36 | 25 |
| China | 18 | 8 | -- | -- | 18 | 8 |
| Gabon | -- | -- | 29,400 | 14,500 | 29,400 | 14,500 |
| Total | 18 | 8 | 29,400 | 14,500 | 29,400 | 14,500 |
| Year to date: ⁴ | | | | | | |
| Belgium | -- | -- | 91 | 64 | 91 | 64 |
| China | 36 | 16 | -- | -- | 36 | 16 |
| Gabon | -- | -- | 88,900 | 47,000 | 88,900 | 47,000 |
| Mexico | 2,540 | 967 | -- | -- | 2,540 | 967 |
| South Africa | 2,500 | 1,150 | 29,700 | 14,300 | 32,200 | 15,400 |
| Total | 5,080 | 2,140 | 119,000 | 61,400 | 124,000 | 63,500 |

-- Zero.

¹Quantities for general imports and imports for consumption are identical.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Includes concentrates.

⁴May include revisions to previous months' data.

Source: U.S. Census Bureau.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE AND MANGANESE METAL IN MAY 2003¹

(Metric tons, gross weight, unless otherwise specified)

| Source | Manganese dioxide | | | | Manganese metal | | | |
|------------------------|-------------------|---------------|--------------|---------------|-----------------|--------------|----------|--------------|
| | Quantity | Customs value | Year to date | | Unwrought | | Other | |
| | | | Quantity | Customs value | Quantity | Year to date | Quantity | Year to date |
| Australia | 4,920 | \$6,040,000 | 13,300 | \$16,700,000 | -- | -- | -- | -- |
| Belgium | 18 | 26,700 | 177 | 307,000 | -- | -- | -- | 1 |
| Canada | -- | -- | -- | -- | -- | -- | -- | 1 |
| China | 15 | 20,500 | 141 | 139,000 | -- | 699 | 148 | 592 |
| France | -- | -- | -- | -- | -- | -- | 3 | 10 |
| Germany | -- | -- | 52 | 242,000 | -- | 67 | -- | -- |
| Ireland | 390 | 461,000 | 390 | 461,000 | -- | -- | -- | -- |
| Japan | 654 | 824,000 | 3,330 | 4,210,000 | -- | -- | 6 | 17 |
| Korea, Republic of | 345 | 409,000 | 1,110 | 1,350,000 | -- | -- | -- | 20 |
| Mexico | -- | -- | -- | -- | -- | -- | -- | 13 |
| Netherlands | -- | -- | -- | -- | -- | -- | -- | 10 |
| Norway | -- | -- | -- | -- | -- | 25 | -- | -- |
| South Africa | 612 | 777,000 | 3,440 | 4,460,000 | -- | 904 | -- | -- |
| Spain | -- | -- | -- | -- | -- | -- | 87 | 190 |
| United Kingdom | 1 | 4,100 | 101 | 129,000 | -- | -- | -- | -- |
| Total | 6,955 | 8,560,000 | 22,000 | 28,000,000 | -- | 1,700 | 244 | 854 |
| Total, general imports | 6,955 | 8,560,000 | 22,000 | 28,000,000 | -- | 1,700 | 244 | 854 |

-- Zero.

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

Note: Imports for consumption of metallic manganese waste and scrap totaled 173 tons, of which 155 tons was from Canada and 18 tons from France, to give a year-to-date total of 574 tons.

Source: U.S. Census Bureau.

TABLE 6
U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE,
SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN 2003¹

(Metric tons, gross weight)

| | Manganese ore | | Ferromanganese, 2% or less C | | Silicomanganese | | Manganese metal ² | |
|---------------------|---------------|--------------|---------------------------------|--------------|-----------------|--------------|------------------------------|--------------|
| | May | Year to date | May | Year to date | May | Year to date | May | Year to date |
| Australia | -- | 31 | -- | -- | 2 | 8 | -- | -- |
| Belgium | -- | -- | -- | -- | -- | -- | 18 | 91 |
| Brazil | 15 | 69 | -- | -- | 7 | 7 | -- | 20 |
| Canada | 178 | 803 | 588 | 4,180 | -- | 175 | 24 | 245 |
| China | -- | -- | -- | -- | -- | -- | 1 | 2 |
| France | -- | -- | -- | -- | -- | -- | -- | 4 |
| Germany | 39 | 370 | -- | -- | -- | -- | -- | 22 |
| Guatemala | 99 | 99 | -- | -- | -- | -- | -- | -- |
| Hong Kong | -- | 169 | -- | -- | -- | -- | -- | (3) |
| Hungary | -- | 19 | -- | -- | -- | -- | -- | -- |
| Indonesia | 22 | 22 | -- | -- | 7 | 7 | -- | -- |
| Italy | 87 | 181 | -- | -- | -- | -- | -- | 20 |
| Jamaica | 7 | 7 | -- | -- | -- | -- | -- | -- |
| Japan | -- | -- | -- | 19 | -- | -- | 83 | 328 |
| Korea, Republic of | -- | -- | -- | -- | -- | -- | -- | 2 |
| Mexico | -- | -- | -- | 19 | 67 | 87 | 9 | 63 |
| Netherlands | -- | 173 | -- | -- | -- | -- | -- | -- |
| Norway | -- | 139 | -- | -- | -- | -- | -- | -- |
| Poland | 169 | 288 | -- | -- | -- | -- | -- | -- |
| Portugal | -- | -- | -- | -- | -- | -- | -- | 3 |
| Sweden | -- | 149 | -- | -- | -- | -- | -- | 99 |
| Switzerland | 17 | 37 | -- | -- | -- | -- | -- | -- |
| Taiwan | -- | 7 | -- | -- | -- | -- | -- | -- |
| Trinidad and Tobago | -- | -- | -- | -- | -- | 82 | -- | -- |
| Turkey | 109 | 109 | -- | -- | -- | -- | -- | -- |
| United Kingdom | -- | 89 | -- | -- | -- | -- | -- | -- |
| Total | 742 | 2,760 | 588 | 4,220 | 83 | 366 | 135 | 899 |

-- Zero.

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

²Includes manganese-aluminum, some other alloys, and waste and scrap.

³Less than 1/2 unit.

Note: Exports of ferromanganese with more than 2% carbon totaled 18 tons, all of which went to Canada, to give a year-to-date total of 160 tons.

Source: U.S. Census Bureau.

TABLE 7
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN MAY 2003, BY CLASS¹

| Class | Gross weight (metric tons) | Value ² (thousands) | Principal sources and destinations: gross weight (metric tons); value ² (thousands) | Year to date | | |
|---|-------------------------------|-----------------------------------|---|-------------------------------|-----------------------------------|---|
| | | | | Gross weight (metric tons) | Value ² (thousands) | Principal sources and destinations: gross weight (metric tons); value ² (thousands) |
| Imports for consumption: | | | | | | |
| Manganese oxides other than dioxide | 126 | \$200 | South Africa 53; \$126 | 822 | \$831 | Mexico 363; \$120 |
| Sulfates, basket category, including manganese sulfate | 3,920 | 1,710 | China 2,830; \$758 | 15,700 | 7,900 | Mexico 7,240; \$3,610 |
| Potassium permanganate | 115 | 221 | Czech Republic 61; \$118 | 622 | 1,240 | Czech Republic 368; \$719 |
| Manganites, manganates, and other permanganates | 20 | 35 | China 18; \$31 | 35 | 67 | China 33; \$57 |
| Exports: | | | | | | |
| Manganese dioxide | 310 | 299 | Canada 150; \$56 | 1,520 | 1,460 | Canada 889; \$319 |
| Manganese oxides other than dioxide | 499 | 403 | Canada 404; \$170 | 2,030 | 2,060 | Canada 1,290; \$499 |
| Sulfates, basket category, including manganese sulfate | 1,760 | 1,090 | Canada 1,300; \$417 | 9,540 | 4,850 | Canada 7,680; \$2,260 |
| Potassium permanganate | 303 | 451 | Spain 129; \$219 | 917 | 1,420 | Spain 502; \$882 |
| Manganites, manganates, and other permanganates | 21 | 101 | Japan 15; \$70 | 187 | 910 | Japan 107; \$516 |

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

²For imports, Customs value; for exports, f.a.s. value.

Source: U.S. Census Bureau.