

# Mineral Industry Surveys

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## MANGANESE IN SEPTEMBER 2003

In September, reported consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was estimated as 27,000 metric tons (t), which was a 9% decrease from that for the previous month, according to the U.S. Geological Survey. This figure increases to 29,400 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 291,000 t, which includes an estimate for annual respondents on the basis of 2002 data. This was a 4% increase from that of the previous month.

Foreign trade data for September will appear in a subsequent report. The data for August 2003 tabulated in this report indicate that the total exports, on a manganese content basis, were about 5 times those of July 2003, owing to a significant increase in manganese ore exports. Total imports, on a manganese content basis, increased by about 7% from those of July based on a significant increase in manganese ore and manganese dioxide imports.

### Update

On October 1, the Defense National Stockpile Center (DNSC) announced the following manganese materials would be available under the FY 2004 Annual Materials Plan: 1) 27,216 t natural battery-grade manganese ore; 2) 2,732 t synthetic

battery-grade manganese dioxide; 3) 36,287 t chemical-grade manganese ore; 4) 45,359 t ferromanganese; 5) 1,814 t electrolytic metal; and 6) 226,796 t metallurgical-grade manganese ore. The FY 2004 Annual Materials Plan is effective through September 30, 2004.

On October 27, the International Trade Administration (ITA) of the U.S. Department of Commerce announced the preliminary results of its antidumping duty administrative review on imports of silicomanganese from Brazil covering the period of December 1, 2001, through November 30, 2002. As a result of the review, the ITA proposed to lower the antidumping duty margin from 88.87% to 2.12% for the subject imports from Companhia Vale de Rio Doce's (CVRD's) subsidiaries SIBRA Electro-Siderurgica Brasileria (SIBRA), Urucum Mineracao, and Companhia Paulista de Ferroligas. The ITA expects to publish final results of the current review within 120 days (International Trade Administration, 2003).

### Reference Cited

International Trade Administration, 2003, Silicomanganese from Brazil—Preliminary results of antidumping duty administrative review: Federal Register, v. 69, no. 207, October 27, p. 61185-61188.

TABLE 1  
SELECTED U.S. FOREIGN TRADE IN MANGANESE<sup>1</sup>

(Metric tons, manganese content)<sup>2</sup>

	Imports for consumption			Exports		
	Ore and dioxide	Ferroalloy and metal	Total	Ore	Ferroalloy and metal	Total
2002:						
August	15,000	34,900	49,900	1,380	818	2,200
January-August	188,000	228,000	416,000	6,070	7,050	13,100
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
June	52,200	11,600	63,800	628	277	905
July	3,100	45,400	48,500	653	748	1,400
August	17,800	33,900	51,700	4,920	1,600	6,520
Total	150,000	225,000	375,000	7,580	7,230	14,800

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

<sup>2</sup>As 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 AUGUST 2003<sup>1</sup>

(Metric tons, unless otherwise specified)

Source	Gross weight	Mn content	Customs value	Year to date		
				Gross weight	Mn content	Customs value
Australia	12,400	8,280	\$5,150,000	36,000	23,900	\$15,400,000
Georgia	--	--	--	6,370	5,360	3,080,000
Kazakhstan	--	--	--	5	3	2,610
Korea, Republic of	--	--	--	2,500	1,660	1,080,000
Mexico	--	--	--	4,200	2,870	2,010,000
Norway	--	--	--	11,200	6,360	7,010,000
Romania	2,530	2,530	1,140,000	10,200	7,820	4,830,000
Russia	--	--	--	2,330	1,510	1,120,000
South Africa	12,900	9,060	5,950,000	70,900	47,700	31,900,000
Total	27,800	19,900	12,200,000	144,000	97,200	66,400,000
Total, general imports	27,800	19,900	12,200,000	144,000	97,200	66,400,000

-- Zero.

<sup>1</sup>Data 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 AUGUST 2003<sup>1</sup>

(Metric tons, unless otherwise specified)

Source	Gross weight	Mn content	Customs value	Year to date		
				Gross weight	Mn content	Customs value
<b>Low carbon:</b>						
Canada	--	--	--	20	16	\$18,200
China	1,000	852	\$867,000	3,500	3,210	3,240,000
Italy	--	--	--	356	276	168,000
Japan	--	--	--	3,840	3,110	2,700,000
Korea, Republic of	--	--	--	40	38	40,200
Mexico	--	--	--	4,140	3,260	3,560,000
Norway	--	--	--	2,130	1,730	1,300,000
South Africa	260	241	291,000	2,940	2,720	3,520,000
Spain	--	--	--	72	58	58,900
Total, low carbon	1,260	1,090	1,160,000	17,000	14,400	14,600,000
Total, general imports of low carbon	1,260	1,090	1,160,000	17,000	14,400	14,600,000
<b>Medium carbon, 1%-2% C:</b>						
China	--	--	--	7,410	5,970	4,850,000
Korea, Republic of	--	--	--	2,500	2,030	1,530,000
Mexico	38	30	36,000	8,940	7,180	6,400,000
Norway	128	103	69,000	1,930	1,580	1,060,000
South Africa	1,290	1,050	890,000	15,700	12,800	10,900,000
Total, m.c., 1%-2% C	1,460	1,180	995,000	36,500	29,500	24,700,000
Total, general imports of m.c., 1%-2% C	1,460	1,180	995,000	36,500	29,500	24,700,000
<b>Medium carbon, 2%-4% C:</b>						
Mexico	--	--	--	22	21	11,400
South Africa	--	--	--	19	15	8,050
Total, m.c., 2%-4% C	--	--	--	41	36	19,400
Total, general imports of m.c., 2%-4% C	--	--	--	41	36	19,400
<b>High carbon:</b>						
Australia	1,760	1,350	502,000	5,880	4,570	2,310,000
Brazil	3,900	3,060	1,380,000	11,700	9,210	4,320,000
Canada	--	--	--	98	74	65,300
France	--	--	--	24,600	19,300	9,550,000
Mexico	--	--	--	22	22	10,300
Saudi Arabia	--	--	--	39	30	16,200
South Africa	9,330	7,160	3,410,000	62,600	48,500	24,300,000
Total, high carbon	15,000	11,600	5,290,000	105,000	81,700	40,600,000
Total, general imports of high carbon	15,000	11,600	5,290,000	105,000	81,700	40,600,000
Grand total	17,700	13,800	7,450,000	159,000	126,000	79,900,000
Grand total, general imports	17,700	13,800	7,450,000	159,000	126,000	79,900,000

-- Zero.

<sup>1</sup>Data 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 AUGUST 2003<sup>1,2,3</sup>

(Metric tons)

Source	20% - 47% Mn		47% or more Mn		Total	
	Gross weight	Mn content	Gross weight	Mn content	Gross weight	Mn content
Belgium	--	--	18	13	18	13
Gabon	--	--	31,100	16,700	31,100	16,700
Mexico	--	--	39	29	39	29
Total	--	--	31,200	16,700	31,200	16,700
Year to date: <sup>4</sup>						
Australia	--	--	15,500	8,110	15,500	8,110
Belgium	--	--	127	89	127	89
China	181	82	--	--	181	82
Gabon	--	--	158,000	83,000	158,000	83,000
Mexico	2,540	967	39	29	2,580	997
Morocco <sup>5</sup>	--	--	20	11	20	11
South Africa	13,200	5,410	65,700	31,500	78,900	36,900
Total	15,900	6,460	240,000	123,000	256,000	129,000

-- Zero.

<sup>1</sup>Quantities for general imports and imports for consumption are identical.

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

<sup>3</sup>Includes concentrates.

<sup>4</sup>May include revisions to previous months' data.

<sup>5</sup>Includes U.S. Geological Survey's conversion of part of the reported data from MnO<sub>2</sub> content to Mn content.

Source: U.S. Census Bureau.

TABLE 5  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE AND MANGANESE METAL IN AUGUST 2003<sup>1</sup>

(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	734	\$902,000	20,400	\$25,400,000	--	--	--	--
Belgium	--	--	305	536,000	--	--	--	1
Brazil	--	--	--	--	--	--	3	3
Canada	--	--	(2)	3,300	--	--	--	1
China	--	--	146	143,000	--	699	28	640
France	--	--	--	--	--	--	3	24
Germany	2	10,500	56	269,000	--	67	4	9
Greece	--	--	857	1,020,000	--	--	--	--
India	--	--	4	6,980	--	--	--	--
Ireland	747	909,000	5,410	6,720,000	--	--	--	--
Japan	34	42,500	1,530	1,890,000	--	--	--	17
Korea, Republic of	--	--	27	32,100	--	--	--	20
Mexico	--	--	--	--	--	--	--	13
Netherlands	--	--	--	--	--	--	--	10
Norway	--	--	--	--	--	25	--	--
South Africa	204	269,000	5,420	6,980,000	--	904	--	--
Spain	--	--	--	--	--	--	102	344
United Kingdom	--	--	102	137,000	--	--	--	--
Total	1,720	2,130,000	34,300	43,200,000	--	1,700	140	1,080
Total, general imports	1,720	2,130,000	34,300	43,200,000	--	1,700	140	1,080

-- Zero.

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

<sup>2</sup>Less than 1/2 unit.

Note: Imports for consumption of metallic manganese waste and scrap totaled 96 tons, all of which was from Canada, to give a year-to-date total of 964 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 2003<sup>1</sup>

(Metric tons, gross weight)

	Manganese ore		Ferromanganese, 2% or less C		Silicomanganese		Manganese metal <sup>2</sup>	
	August	Year to date	August	Year to date	August	Year to date	August	Year to date
Australia	15	155	--	--	3	10	--	--
Belgium	--	--	--	--	--	--	49	200
Brazil	--	69	--	--	--	11	--	20
Canada	153	1,460	465	5,370	36	229	2	325
China	--	--	--	--	--	--	--	2
Colombia	--	--	--	3	--	--	--	--
France	8,890	8,890	--	--	--	--	2	7
Germany	90	1,060	--	--	--	--	18	41
Guatemala	--	99	--	--	--	--	--	--
Hong Kong	--	169	--	--	--	--	--	(3)
Hungary	--	19	--	--	--	--	--	--
India	--	40	--	--	--	--	--	--
Indonesia	--	22	--	--	--	7	--	--
Italy	182	933	--	--	--	--	--	20
Jamaica	--	7	--	--	--	--	--	--
Japan	--	--	--	19	--	--	60	570
Korea, Republic of	--	--	--	--	--	--	--	3
Mexico	--	--	--	19	47	184	29	116
Netherlands	--	173	--	--	4	4	--	--
Norway	--	417	--	--	--	--	--	--
Peru	--	--	--	--	--	--	2	2
Poland	24	602	--	--	--	--	--	--
Portugal	--	77	--	--	--	--	--	3
Sweden	19	188	--	--	--	--	--	99
Switzerland	17	54	--	--	--	--	--	--
Taiwan	--	7	--	--	--	--	--	--
Thailand	--	--	--	--	--	--	--	5
Trinidad and Tobago	--	--	--	--	--	82	--	--
Turkey	--	109	--	--	--	--	--	--
United Kingdom	440	609	--	--	--	--	(3)	(3)
Venezuela	--	--	1,260	1,260	--	--	--	--
Total	9,830	15,200	1,730	6,670	90	527	162	1,410

-- Zero.

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

<sup>2</sup>Includes manganese-aluminum, some other alloys, and waste and scrap.

<sup>3</sup>Less than 1/2 unit.

Note: Exports of ferromanganese with more than 2% carbon totaled 29 tons, all of which went to Canada, to give a year-to-date total of 230 tons.

Source: U.S. Census Bureau.

TABLE 7  
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN JULY 2003, BY CLASS<sup>1</sup>

Class	Gross weight (metric tons)	Value <sup>2</sup> (thousands)	Principal sources and destinations: gross weight (metric tons); value <sup>2</sup> (thousands)	Year to date		
				Gross weight (metric tons)	Value <sup>2</sup> (thousands)	Principal sources and destinations: gross weight (metric tons); value <sup>2</sup> (thousands)
<b>Imports for consumption:</b>						
Manganese oxides other than dioxide	116	\$124	Mexico 71; \$21	1,420	\$1,380	Mexico 642; \$245
Sulfates, basket category, including manganese sulfate	5,330	1,810	China 4,700; \$1,190	30,000	13,600	China 15,400; \$4,650
Potassium permanganate	117	224	India 72; \$138	974	1,920	Czech Republic 576; \$1,120
Manganites, manganates, and other permanganates	19	34	China 18; \$31	143	303	China 123; \$212
<b>Exports:</b>						
Manganese dioxide	337	606	Canada 119; \$48	2,700	3,100	Canada 1,300; \$491
Manganese oxides other than dioxide	374	395	Canada 246; \$105	2,950	3,160	Canada 1,840; \$723
Sulfates, basket category, including manganese sulfate	1,440	636	Canada 1,220; \$364	13,400	6,860	Canada 10,600; \$3,100
Potassium permanganate	237	348	Spain 82; \$138	1,310	2,020	Spain 648; \$1,130
Manganites, manganates, and other permanganates	16	78	Japan 10; \$48	226	1,100	Japan 128; \$611

<sup>1</sup>Data are rounded to no more than three significant digits.

<sup>2</sup>For imports, Customs value; for exports, f.a.s. value.

Source: U.S. Census Bureau.