

Mineral Industry Surveys

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MANGANESE IN DECEMBER 2004

In December, reported consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 31,500 metric tons (t), which was an 8% increase from that of November 2004, according to the U.S. Geological Survey. This figure increases to 33,900 t when estimates for annual respondents are added on the basis of 2003 data. Corresponding industry stocks of ore at the end of the month were 146,000 t, which includes an estimate for annual respondents on the basis of 2003 data. (Data for the most recent 13 months are plotted in the graph on page 2.) Preliminary data show that domestic consumption of manganese ore during the fourth quarter of 2004 was 98,600 t, which was 3% higher than the revised third quarter 2004 figure of 95,500 t. Preliminary

data also indicate that domestic consumption during 2004 was 403,000 t, which was 8% more than that during the same period in 2003 (372,000 t).

Foreign trade data for December will appear in a subsequent report. The following comparisons of trade data were made on the basis of manganese content. The data for November 2004 tabulated in this report indicate that the total exports of 1,220 t decreased by 85% from those of the previous month, owing to a significant decrease in manganese ore exports. Manganese imports were 104,000 t, which was an increase of 10%, compared with those of October. The increase in manganese imports was based on significant increases in manganese ore and dioxide imports.

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
2003:						
November	835	22,900	23,700	309	750	1,060
January-November	201,000	330,000 ^r	531,000 ^r	8,520	10,600	19,100
2004:						
January	13,100	37,500	50,600	653	796	1,450
February	20,600	33,100	53,700	1,920	745	2,660
March	34,800	29,300 ³	64,100	12,400	559	13,000
April	3,720	57,300 ³	61,000	733	1,300	2,030
May	44,200	25,000	69,200	1,990	643	2,630
June	23,800	45,200	69,000	3,210	507	3,720
July	1,130	76,300	77,400	7,260	701	7,960
August	4,410	99,300	104,000	1,940	543	2,490
September	25,200	54,700	79,900	2,580	497	3,080
October	35,200	59,700	95,000	7,140	776	7,920
November	23,800	80,100	104,000	376	845	1,220
Total	230,000	597,000	828,000	40,200	7,910	48,200

^rRevised.

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.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

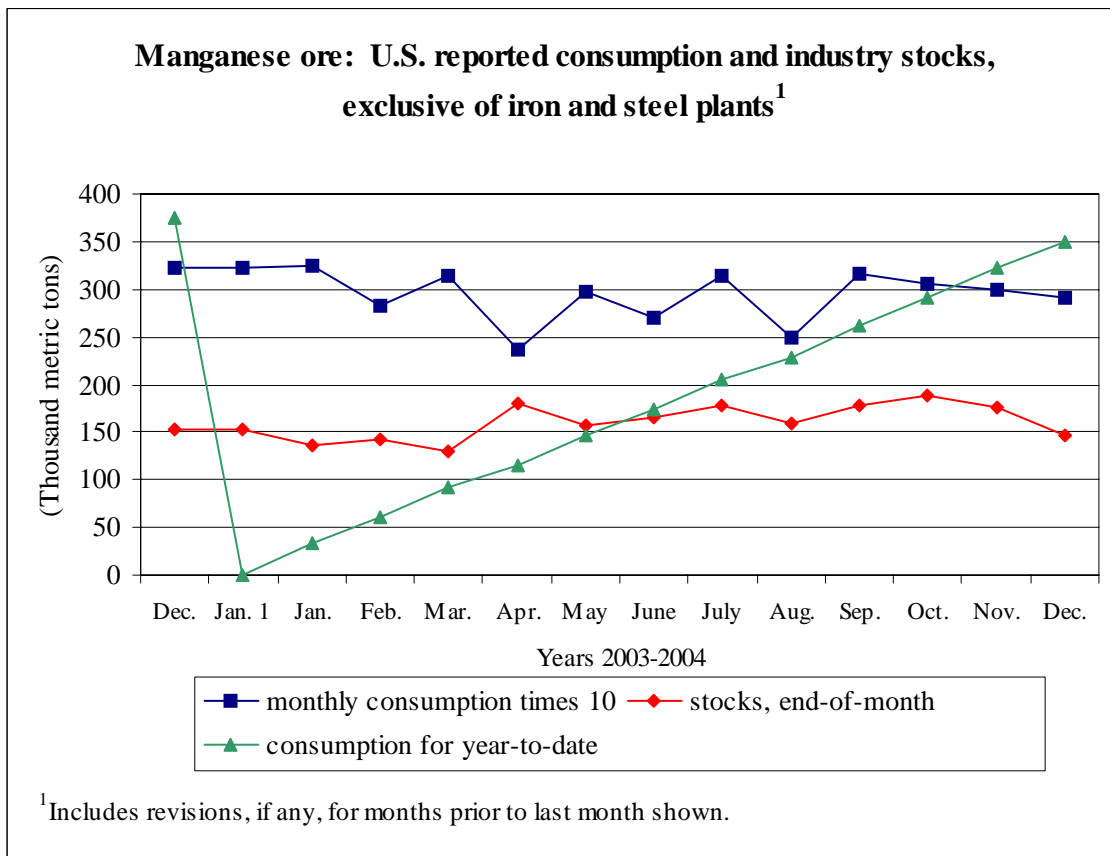


TABLE 2
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN NOVEMBER 2004¹

(Metric tons)

Source	Gross weight	Mn content	Customs value	Year to date		
				Gross weight	Mn content	Customs value
Australia	--	--	--	26,500	17,600	\$20,800,000
Brazil	54	36	\$92,000	54	36	92,000
Canada	258	195	132,000	1,230	967	613,000
China	250	158	270,000	850	537	932,000
France	--	--	--	3,010	2,030	2,980,000
Gabon	--	--	--	46	33	63,300
Georgia	--	--	--	28,300	21,800	27,800,000
Korea, Republic of	--	--	--	12,100	7,900	8,660,000
Mexico	2,400	1,570	1,670,000	11,200	7,350	7,380,000
Norway	11,400	7,110	13,500,000	70,400	36,400	51,600,000
Romania	5,350	3,470	6,120,000	70,300	50,300	75,200,000
Russia	--	--	--	28,900	11,400	15,500,000
Slovakia	--	--	--	1,520	985	803,000
South Africa	24,500	13,900	21,000,000	146,000	90,900	134,000,000
Spain	--	--	--	1,400	933	1,910,000
Ukraine	--	--	--	72	40	56,200
United Kingdom	--	--	--	17	13	11,700
Venezuela	--	--	--	1,310	1,190	1,200,000
Total	44,100	26,400	42,800,000	404,000	250,000	350,000,000
Total, general imports	44,100	26,400	42,800,000	404,000	250,000	350,000,000

-- Zero.

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

²All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN NOVEMBER 2004¹

(Metric tons)

Source	Gross weight	Mn content	Customs value	Year to date		
				Gross weight	Mn content	Customs value
Low carbon:						
China	1,530	1,290	\$2,360,000	7,990	7,070	\$11,200,000
Japan	--	--	--	1,200	965	1,230,000
Mexico	99	80	155,000	2,070	1,660	2,160,000
Norway	1,620	1,320	3,550,000	2,960	2,410	4,940,000
South Africa	120	111	198,000	1,650	1,530	2,460,000
Spain	--	--	--	18	14	19,000
Ukraine	--	--	--	40	32	47,900
Total, low carbon	3,370	2,800	6,260,000	15,900	13,700	22,100,000
Total, general imports of low carbon	3,370	2,800	6,260,000	15,900	13,700	22,100,000

See footnotes at end of table.

TABLE 3-Continued
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN NOVEMBER 2004¹

(Metric tons)

Source	Gross weight	Mn content	Customs value	Year to date		
				Gross weight	Mn content	Customs value
Medium carbon, 1%-2% C:						
Argentina	--	--	--	420	287	\$482,000
Austria	--	--	--	5	4	2,880
China	3,270	2,570	\$4,110,000	17,300	13,700	20,100,000
Italy	--	--	--	11	76	42,000
Korea, Republic of	--	--	--	8,500	7,050	8,290,000
Mexico	1,980	1,570	1,640,000	11,900	9,430	10,900,000
Netherlands	--	--	--	757	590	848,000
Norway	--	--	--	6,940	5,670	8,280,000
Romania	--	--	--	150	113	78,500
Saudi Arabia	--	--	--	8	7	3,620
South Africa	2,650	2,320	4,310,000	37,900	30,800	39,500,000
Ukraine	--	--	--	4,410	3,510	4,780,000
Venezuela	--	--	--	400	253	372,000
Total, m.c., 1%-2% C	7,890	6,450	10,100,000	88,700	71,500	93,700,000
Total, general imports of m.c., 1%-2% C	7,890	6,450	10,100,000	88,700	71,500	93,700,000
Medium carbon, 2%-4% C						
China	300	245	368,000	358	297	454,000
Georgia	--	--	--	5,990	5,640	5,530,000
Total, m.c., 2%-4% C	300	245	368,000	6,350	5,940	5,980,000
Total, general imports of m.c., 2%-4% C	300	245	368,000	6,350	5,940	5,980,000
High carbon:						
Australia	--	--	--	22,700	16,100	16,800,000
Brazil	2,000	1,580	2,780,000	12,900	9,150	7,910,000
Canada	--	--	--	126	96	74,900
China	3,780	2,880	3,950,000	41,500	28,900	25,100,000
France	--	--	--	4,010	3,170	3,850,000
India	--	--	--	11,800	9,000	13,300,000
Korea, Republic of	--	--	--	2,000	1,500	2,180,000
Norway	1,000	780	1,110,000	14,200	10,700	11,900,000
Poland	15,000	11,500	15,700,000	15,200	11,700	16,000,000
Saudi Arabia	--	--	--	11	46	21,500
South Africa	19,400	15,000	21,600,000	164,000	117,000	129,000,000
Spain	--	--	--	8,600	6,720	8,640,000
Switzerland	--	--	--	80	64	120,000
Ukraine	5,780	9,060	5,870,000	8,330	11,000	9,080,000
United Kingdom	--	--	--	60	47	86,600
Total, high carbon	46,900	40,700	51,000,000	305,000	225,000	244,000,000
Total, general imports of high carbon	46,900	40,700	51,000,000	305,000	225,000	244,000,000
Grand total	58,500	50,200	67,700,000	416,000	316,000	366,000,000
Grand total, general imports	58,500	50,200	67,700,000	416,000	316,000	366,000,000

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 4
U.S. IMPORTS OF MANGANESE ORE (20% OR MORE Mn) IN NOVEMBER 2004^{1,2}

(Metric tons)

Source	20% - 47% Mn		47% or more Mn		Total	
	Gross weight	Mn content	Gross weight	Mn content	Gross weight	Mn content
Australia	--	--	14,300	7,540	14,300	7,540
Brazil	--	--	20	17	20	17
China	--	--	18	9	18	9
Gabon	--	--	30,600	15,600	30,600	15,600
Total	--	--	44,900	23,200	44,900	23,200
Year to date:						
Australia	--	--	52,400	27,700	52,400	27,700
Belgium	--	--	163	115	163	115
Brazil	--	--	26	23	26	23
China	18	8	3,960	2,110	3,980	2,110
Gabon	1,540	706	333,000	171,000	335,000	172,000
Georgia	--	--	21	16	21	16
India	--	--	41	37	41	37
Mexico	4,400	1,640	--	--	4,400	1,640
Poland	--	--	109	86	109	86
South Africa	--	--	26,900	13,200	26,900	13,200
Total	5,950	2,360	417,000	214,000	423,000	217,000

-- 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.

Source: U.S. Census Bureau.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE IN NOVEMBER 2004¹

(Metric tons, gross weight)

Source	Manganese dioxide			
	Quantity	Customs value	Year to date	
			Quantity	Customs value
Australia	--	--	5,500	\$6,690,000
Austria	--	--	--	--
Belgium	28	46,300	609	1,250,000
Brazil	--	--	595	403,000
China	675	680,000	9,820	9,880,000
France	--	--	--	--
Germany	19	103,000	114	380,000
Greece	--	--	2,340	2,960,000
India	--	--	--	--
Japan	161	188,000	2,390	3,050,000
Netherlands	--	--	--	--
Poland	--	--	--	--
South Africa	204	280,000	981	1,380,000
Spain	--	--	20	24,500
United Kingdom	--	--	1	9,250
Total	1,090	1,300,000	22,400	26,000,000
Total, general imports	1,090	1,300,000	22,400	26,000,000

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL
IN NOVEMBER 2004¹

(Metric tons)

Source	Gross weight	Customs value	Year to date	
			Gross weight	Customs value
Unwrought flake:				
China	563	\$860	8,370	\$13,100
Netherlands	--	--	260	364
South Africa	646	914	7,340	10,300
Total	1,210	1,770	16,000	23,700
Unwrought powder:				
China	880	1,380	5,310	7,210
Germany	--	--	55	125
South Africa	281	449	3,900	5,980
Total	1,160	1,830	9,270	13,300
Unwrought, other:				
China	--	--	59	111,000
Germany	166	196	269	437,000
Poland	--	--	112	159,000
South Africa	200	290	2,690	3,910,000
Spain	151	284	995	1,810,000
Total	517	770	4,120	6,420,000
Other manganese, wrought:				
Austria	--	--	(2)	10,700
China	30	58,300	329	518,000
France	8	84,400	19	191,000
Germany	6	67,600	20	267,000
Japan	--	--	4	14,400
India	--	--	8	12,000
Netherlands	--	--	9	20,900
Poland	--	--	40	26,300
South Africa	--	--	4	2,160
Spain	--	--	169	410,000
United Kingdom	(2)	2,890	(2)	7,990
Total	44	213,000	602	1,480,000
Grand total	2,930	217,000	30,000	7,940,000

-- Zero.

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

²Less than 1/2 unit.

Note: Imports for consumption of metallic manganese waste and scrap totaled 1,070 tons, all of which was from Canada, to give a year-to-date total of 2,370 tons.

Source: U.S. Census Bureau.

TABLE 7
U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE,
SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN 2004¹

(Metric tons, gross weight)

	Manganese ore		Ferromanganese, 2% or less C		Silicomanganese		Manganese metal ²	
	November	Year to date	November	Year to date	November	Year to date	November	Year to date
Australia	2	243	--	--	--	3	--	--
Belgium	--	--	--	--	--	--	70	282
Brazil	57	1,090	--	--	4	30	26	32
Canada	193	4,010	462	3,760	--	46	59	813
Chile	--	22	--	--	--	--	--	--
China	63	48,000	--	23	--	--	--	(3)
Colombia	--	--	--	--	--	--	--	1
Costa Rica	--	--	--	--	--	--	--	2
Croatia	--	--	--	19	--	--	--	--
Dominican Republic	--	--	--	--	--	--	--	14
Estonia	--	--	--	54	--	--	--	--
France	--	242	--	--	--	24	--	4
Germany	242	10,600	--	--	--	--	20	222
Hong Kong	--	23	--	--	--	--	(3)	(3)
India	--	41	--	--	--	--	--	--
Indonesia	--	46	--	10	--	18	--	--
Israel	--	118	--	--	--	--	--	--
Italy	--	74	--	--	--	--	20	52
Japan	--	37	--	--	--	--	72	654
Korea, Republic of	51	295	--	--	--	--	--	64
Kuwait	--	434	--	--	--	--	--	--
Malaysia	--	--	--	--	--	--	--	2
Mexico	2	2	10	141	11	269	2	193
Netherlands	--	6,240	--	--	2	16	--	--
New Zealand	--	38	--	--	--	--	--	--
Norway	38	1,790	--	--	--	--	--	--
Peru	--	--	--	--	17	17	--	4
Philippines	--	464	--	--	--	--	--	--
Poland	19	687	--	--	--	--	--	--
Russia	--	21	--	--	--	--	--	--
Singapore	--	--	--	8	--	--	--	--
Spain	--	--	--	--	--	16	--	--
Sweden	--	1,660	--	--	--	--	27	186
Switzerland	25	60	--	--	--	--	--	--
Taiwan	60	229	--	--	--	--	--	2
Thailand	--	--	--	--	--	--	--	(3)
Trinidad and Tobago	--	--	--	--	--	38	--	--
Turkey	--	--	--	9	--	--	--	--
United Kingdom	--	4,010	--	--	--	--	--	4
Venezuela	--	34	--	390	--	--	--	--
Total	752	80,500	472	4,420	34	477	297	2,530

-- 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 193 tons, of which 170 tons went to Canada and 23 tons went to Mexico, to give a year-to-date total of 1,990 tons.

Source: U.S. Census Bureau.

TABLE 8
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN NOVEMBER 2004, BY CLASS¹

Class	Gross weight (metric tons)	Value ² (thousands)	Principal sources and destinations: gross weight (metric tons); value ² (thousands)	Year to date		Principal sources and destinations: gross weight (metric tons); value ² (thousands)
				Gross weight (metric tons)	Value ² (thousands)	
Imports for consumption:						
Manganese oxides other than dioxide	290	\$216	Mexico 227; \$95	3,080	\$2,480	Mexico 1,360; \$567
Sulfates, basket category, including manganese sulfate	3,180	1,580	China 2,090; \$833	34,300	19,100	China 16,400; \$7,480
Potassium permanganate	92	182	Czech Republic 56; \$110	1,040	2,070	Czech Republic 709; \$1,370
Manganites, manganates, and other permanganates	65	89	China 65; \$89	950	1,520	China 931; \$1,450
Exports:						
Manganese dioxide	423	359	Canada 221; \$87	3,550	3,290	Canada 1,670; \$756
Manganese oxides other than dioxide	726	342	Canada 685; \$243	5,520	4,090	Canada 3,920; \$1,460
Sulfates, basket category, including manganese sulfate	1,450	1,120	Canada 1,220; \$522	17,400	11,900	Canada 14,600; \$6,350
Potassium permanganate	207	271	Spain 126; \$133	2,860	4,300	Spain 1,830; \$2,770
Manganites, manganates, and other permanganates	91	169	Spain 73; \$88	674	2,160	Japan 270; \$1,090

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

²For imports, Customs value; for exports, free alongside ship value.

Source: U.S. Census Bureau.