

# Mineral Industry Surveys

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## MANGANESE IN FEBRUARY 2005

On a gross-weight basis, reported consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 32,000 metric tons (t) in February 2005, which was a 2% decrease from that of January 2005, according to the U.S. Geological Survey. This figure increases to 34,400 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 138,000 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.)

Foreign trade data for February will appear in a subsequent report. The following comparisons of trade data were made on the basis of manganese content. The data for January 2005 tabulated in this report indicate that the total exports of 1,120 t decreased by 95% from those of the prior month, owing to significant decreases in manganese ore, ferromanganese, and metal exports. Manganese imports were 52,600 t, which was a decrease of 35% compared with those of December. The decrease in manganese imports was based on significant decreases in manganese ore and ferroalloy imports.

### Ferroalloy Prices, manganese content

	High-carbon ferromanganese <sup>1</sup> (dollars per gross ton)	Medium-carbon ferromanganese <sup>1</sup> (cents per pound)	Silicomanganese <sup>1</sup> (cents per pound)	Manganese metal <sup>2</sup> (cents per pound)
February 3	880.00-820.00	75.00-79.00	36.00-37.00	95.00-100.00
February 10	760.00-810.00	75.00-79.00	36.00-37.00	95.00-100.00
February 17	760.00-810.00	75.00-79.00	36.00-37.00	95.00-100.00
February 24	710.00-760.00	72.00-75.00	36.00-37.00	95.00-100.00

### Ore Prices, dollar per metric ton unit, manganese content<sup>3</sup>

	<u>44% Manganese Ore<sup>2</sup></u>	<u>48% Manganese Ore<sup>2</sup></u>
February 3	3.00-3.50	4.00-4.50
February 10	3.00-3.50	4.00-4.50
February 17	3.00-3.50	4.00-4.50
February 24	3.20-3.60	4.10-4.50

<sup>1</sup>Source: Platts Metals Week, dealer import price.

<sup>2</sup>Source: Ryan's Notes, North American transaction price.

<sup>3</sup>To determine dollars per metric ton multiply the manganese content percentage by the price.

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
2004, January	13,100	37,500	50,600	653	796	1,450
2005, January	7,650 <sup>3</sup>	45,000 <sup>3</sup>	52,600	162	955	1,120

<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.

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

Source: U.S. Census Bureau.

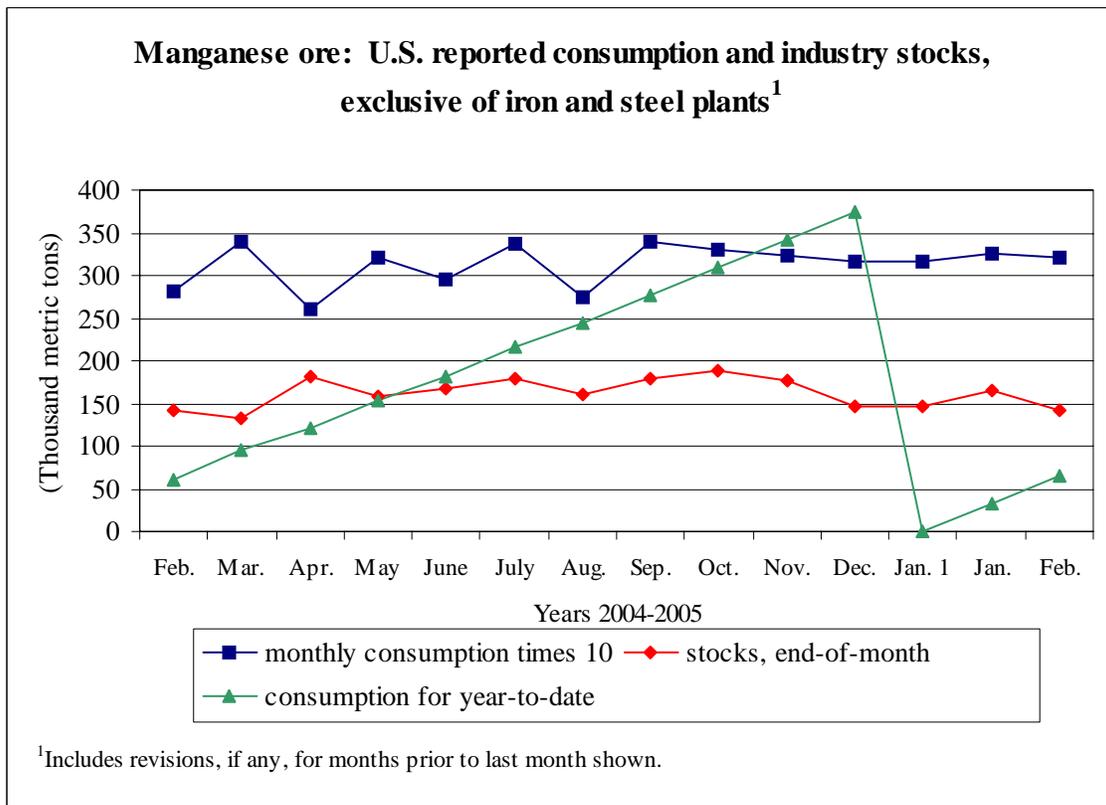


TABLE 2  
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE  
IN JANUARY 2005<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>2</sup>
Australia	3,010	2,010	\$3,020,000
Korea, Republic of	216	156 <sup>3</sup>	305,000
Mexico	1,300	849	930,000
Norway	3,000	1,800	3,670,000
Russia	9,840	6,710	8,130,000
South Africa	11,600	7,700	9,880,000
Total	28,900	19,200	25,900,000
Total, general imports	28,900	19,200	25,900,000

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

<sup>2</sup> Customs 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 material into the United States.

<sup>3</sup> All 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 JANUARY 2005<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>2</sup>
<b>Low carbon:</b>			
China	2,520	2,200	\$4,290,000
Mexico	220	177	236,000
South Africa	120	111	198,000
Total, low carbon	2,860	2,490	4,720,000
Total, general imports of low carbon	2,860	2,490	4,720,000
<b>Medium carbon, 1%-2% C:</b>			
China	1,850	1,450	2,600,000
Mexico	1,240	986	1,210,000
South Africa	3,860	3,120	5,420,000
Total, m.c., 1%-2% C	6,950	5,560	9,230,000
Total, general imports of medium carbon	6,950	5,560	9,230,000
<b>High carbon:</b>			
Australia	1,000	774	897,000
China	1,500	1,150	1,620,000
France	2	2 <sup>3</sup>	3,980
Hong Kong	300	228	213,000
Mexico	250	196	234,000
South Africa	16,100	12,400	13,800,000
Total, high carbon	19,100	14,800	16,700,000
Total, general imports of high carbon	19,100	14,800	16,700,000
Grand total	28,900	22,800	30,700,000
Grand total, general imports	28,900	22,800	30,700,000

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

<sup>2</sup> Customs 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 material into the United States.

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

Source: U.S. Census Bureau.

TABLE 4  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE  
(20% OR MORE Mn) IN JANUARY 2005<sup>1,2</sup>

(Metric tons, unless otherwise specified)

Source	Gross weight	Mn content	Customs value <sup>3</sup>
More than 20%, but less than 47% manganese, Mexico	2,910	2,150	\$320,000
47% or more manganese:			
Australia	8,180	4,310	1,130,000
France	60	56 <sup>4</sup>	6,670
Total	8,240	4,370	1,140,000
Grand total	11,200	6,510	1,460,000

<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>Customs 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 material into the United States.

<sup>4</sup>All or part of these data have been referred to the U.S. Census Bureau for verification. Reported content is likely that of MnO<sub>2</sub> rather than Mn.

Source: U.S. Census Bureau.

TABLE 5  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE  
IN JANUARY 2005<sup>1</sup>

(Metric tons, gross weight)

Source	Manganese dioxide	
	Quantity	Customs value <sup>2</sup>
Australia	310	\$403,000
Belgium	18	27,300
Brazil	18	29,900
China	1,520	1,550,000
Germany	6	31,500
Japan	18	30,200
Total	1,890	2,070,000
Total, general imports	1,890	2,070,000

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

<sup>2</sup>Customs 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 material into the United States.

Source: U.S. Census Bureau.

TABLE 6  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL  
IN JANUARY 2005<sup>1</sup>

(Metric tons)

Source	Gross weight	Customs value <sup>3</sup>
Unwrought flake:		
China	902	\$1,430,000
South Africa	689	1,070,000
Total	1,590	2,500,000
Unwrought powder, South Africa	396	670,000
Unwrought, other:		
China	20	40,200
Germany	178	384,000
South Africa	277	474,000
Spain	374	820,000
Total	849	1,720,000
Other manganese, wrought:		
China	20	29,600
France	3	24,200
Germany	4	42,300
Spain	37	77,600
United Kingdom	(2)	7,070
Total	64	181,000
Grand total	2,900	5,070,000

<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.

<sup>3</sup>Customs 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 material into the United States.

Note: Imports for consumption of metallic manganese waste and scrap totaled 76 tons, all of which was from Canada.

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 JANUARY 2005<sup>1</sup>

(Metric tons, gross weight)

	Manganese ore	Ferromanganese, 2% or less C	Silicomanganese	Manganese metal <sup>2</sup>
Australia	--	--	--	2
Belgium	--	--	--	48
Canada	210	614	19	41
China	76	--	--	--
France	--	--	60	--
Germany	19	--	--	17
Hong Kong	--	--	--	(3)
Japan	--	--	--	24
Mexico	--	235	8	56
Netherlands	--	--	20	--
Sweden	19	--	--	--
Total	324	849	107	186

-- 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 32 tons, all of which went to Canada.

Source: U.S. Census Bureau.

TABLE 8  
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN JANUARY 2005, 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)
<b>Imports for consumption:</b>			
Manganese oxides other than dioxide	646	178	Mexico 226; \$91
Manganites, manganates, and other permanganates	--	--	--
Potassium permanganate	100	198	India 54; \$107
Sodium permanganate <sup>3</sup>	--	--	--
Sulfates, basket category, including manganese sulfate	6,450	3,400	Mexico 3,640; \$1,750
<b>Exports:</b>			
Manganese dioxide	342	280	Canada 223; \$101
Manganese oxides other than dioxide	657	407	Canada 425; \$184
Manganites, manganates, and other permanganates	16	40	Japan 15; \$37
Potassium permanganate	284	453	Spain 193; \$325
Sodium permanganate <sup>3</sup>	--	--	--
Sulfates, basket category, including manganese sulfate	1,650	1,250	Canada 1,390; \$615

-- Zero.

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

<sup>2</sup>For imports, Customs value; for exports, free alongside ship value.

<sup>3</sup>In December 2004, the U.S. Harmonized Tariff Schedule was changed for manganites, manganates, and permanganates to implement the United States-Australia Free Trade Agreement. Starting in 2005, sodium permanganate is tracked separately from the "manganites, manganates, and other permanganates" trade category.

Source: U.S. Census Bureau.