

# Mineral Industry Surveys

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## MANGANESE IN FEBRUARY 2006

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 18,300 metric tons (t) in February 2006, which was a 44% decrease compared with that in January 2006, according to the U.S. Geological Survey. This figure increases to 20,700 t when estimates for annual respondents are added on the basis of 2005 data. Corresponding industry stocks of ore at the end of the month were 302,000 t, which includes an estimate for annual respondents on the basis of 2005 data. This was a 5% decrease from that of January 2006.

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 (table 1). The data for January 2006 tabulated in this report indicate that the total exports of 1,760 t were 46% lower than those of the prior month, owing to a decrease in exports of manganese ore. Manganese imports were 45,900 t, which was a decrease of 39% compared with those of December 2005. The decrease in manganese imports was primarily attributable to decreases in manganese ore, metal, and silicomanganese 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 2	720.00-750.00	51.00-54.00	37.00-38.50	68.00-70.00
February 9	720.00-750.00	51.00-54.00	36.00-39.00	68.00-70.00
February 16	720.00-750.00	57.00-59.00	36.00-39.00	68.00-70.00
February 23	720.00-750.00	58.00-62.00	37.00-39.00	68.00-70.00

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

	44% Manganese Ore <sup>2</sup>	48% Manganese Ore <sup>2</sup>
February 2	1.85-1.95	2.30-2.40
February 9	1.85-1.95	2.30-2.40
February 16	1.85-1.95	2.30-2.40
February 23	1.85-1.95	2.30-2.40

<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
2005, January	7,650	45,000	52,600	162	955	1,120
2006, January	20,300	25,600	45,900	46	1,710	1,760

<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  
JANUARY 2006<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>2</sup>
Mexico	530	345	\$311,000
Norway	7,000	4,410	6,590,000
South Africa	9,520	6,140	5,900,000
Total	17,000	10,900	12,800,000

<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 3  
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN JANUARY  
2006<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>2</sup>
<b>Low carbon:</b>			
China	662	597	\$977,000
Korea, Republic of	4,860	3,970	4,390,000
Mexico	720	568	728,000
South Africa	158	131	262,000
Total, low carbon	6,400	5,260	6,360,000
<b>Medium carbon, 1%-2% C:</b>			
Mexico	854	673	837,000
South Africa	667	540	418,000
Total, m.c., 1%-2% C	1,520	1,210	1,260,000
<b>High carbon:</b>			
Australia	1,000	769	576,000
South Africa	7,180	5,600	3,450,000
Total, high carbon	8,180	6,370	4,030,000
Grand total	16,100	12,800	11,600,000

<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 4  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn)  
IN JANUARY 2006<sup>1,2</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>3</sup>
<b>More than 20%, but less than 47% manganese:</b>			
China	926	301	\$54,100
<b>47% or more manganese:</b>			
Australia	11,100	5,650	1,580,000
Belgium	19	13	15,000
Gabon	26,600	12,900	1,740,000
Morocco	20	17	6,000
Total	37,700	18,600	3,330,000
Grand total	38,600	18,900	3,390,000

<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.

Source: U.S. Census Bureau.

TABLE 5  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE  
DIOXIDE IN JANUARY 2006<sup>1</sup>

(Metric tons, gross weight)

Source	Manganese dioxide	
	Quantity	Customs value <sup>2</sup>
Australia	258	\$335,000
Belgium	118	340,000
Brazil	40	20,200
China	1,220	1,240,000
Germany	8	31,300
Japan	471	613,000
Mexico	150	183,000
Total	2,260	2,760,000

<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 2006<sup>1</sup>

(Metric tons)

Source	Gross weight	Customs value <sup>2</sup>
<b>Unwrought flake:</b>		
China	540	\$737,000
South Africa	348	650,000
Total	888	1,390,000
<b>Unwrought powder:</b>		
China	60	78,700
South Africa	39	73,800
Total	99	152,000
<b>Unwrought, other:</b>		
Germany	216	404,000
South Africa	140	252,000
Spain	75	122,000
Total	431	778,000
<b>Other manganese, wrought:</b>		
Brazil	294	210,000
China	116	149,000
France	4	37,700
Total	414	397,000
Grand total	1,830	2,710,000

<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.

Note: Imports for consumption of metallic manganese waste and scrap totaled 138 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 2006<sup>1</sup>

(Metric tons, gross weight)

Country	Manganese ore	Ferromanganese, 2% or less C	Silicomanganese	Manganese metal <sup>2</sup>
Australia	--	--	3	--
Belgium	--	--	--	160
Canada	63	1,150	--	40
Colombia	--	--	--	1
Dominican Republic	9	--	--	--
Indonesia	20	--	--	--
Japan	--	--	--	51
Malaysia	--	--	--	3
Mexico	--	--	11	1
Trinidad and Tobago	--	--	--	1
Total	92	1,150	14	257

-- 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.

Note: Exports of ferromanganese with more than 2% carbon totaled 675 tons, of which 569 tons went to Mexico, 84 tons went to Canada, 20 tons went to Argentina, and 2 tons went to Chile.

Source: U.S. Census Bureau.

TABLE 8  
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN JANUARY 2006, 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	676	\$609	China 340; \$427
Potassium permanganate	106	223	Czech Republic 56; \$120
Sulfates, basket category, including manganese sulfate	4,750	2,110	China 2,940; \$1,080
<b>Exports:</b>			
Manganese dioxide	505	393	Canada 334; \$182
Manganese oxides other than dioxide	1,700	918	Canada 1,540; \$585
Manganites, manganates, and other permanganates	4	9	Canada 4; \$9
Potassium permanganate	413	1,030	Spain 282; \$619
Sodium permanganate	40	92	Japan 15; \$37
Sulfates, basket category, including manganese sulfate	1,570	1,330	Canada 1,170; \$543

<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.

Source: U.S. Census Bureau.