

# Mineral Industry Surveys

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## MANGANESE IN FEBRUARY 2011

Preliminary reported data (gross weight) for February 2011 indicate that consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 39,500 metric tons (t), according to the U.S. Geological Survey. This was slightly less than the revised amount (39,900 t) consumed in January 2011. The amount of manganese ore consumed in the first 2 months of 2011 was 79,500 t. This was a 4% increase from the revised amount consumed during the same period in 2010 (76,000 t). Industry stocks of ore at the end of February 2011 were 207,000 t, which was the same as that at the end of January 2011.

Data for U.S. manganese imports and exports for January 2011 are published in this issue. On a contained-weight basis, U.S. imports of manganese ore plus dioxide and manganese ferroalloys plus metal were 113% higher and slightly higher,

respectively, than those in December 2010. U.S. imports of manganese ore plus dioxide and manganese ferroalloys plus metal during January 2011 were 37 times more and 29% higher, respectively, than those during January 2010 (table 1).

On a contained-weight basis, U.S. manganese ore and manganese ferroalloys plus metal exports for January 2011 were 29% higher and 30% lower, respectively, than those in December 2010. U.S. exports of manganese ore and manganese ferroalloys plus metal during January 2011 were 29% lower and 9% higher, respectively, than those during January 2010 (table 1).

**Prices**

Prices for manganese materials in February 2011, manganese content, are listed below.

**Ferroalloys prices<sup>1</sup>**

	<u>Price Range</u>	<u>Average Price</u>
High-carbon ferromanganese <sup>2</sup>	1,285.00-1,350.00	1,324.38
Medium-carbon ferromanganese <sup>3</sup>	117.00-119.00	117.75
Silicomanganese <sup>3</sup>	57.00-67.00	59.88

**Manganese metal and ore prices<sup>4</sup>**

	<u>Price Range</u>	<u>Average Low, Mid, and High Prices</u>
Manganese metal <sup>3</sup>	177.00-190.00	181.50-183.63-185.75
36%-39% Manganese ore <sup>5</sup>	5.00-5.60	5.00-5.26-5.53
44% Manganese ore <sup>5</sup>	5.70-6.20	5.63-5.88-6.13
48% Manganese ore <sup>5</sup>	6.50-6.80	6.43-6.59-6.76

<sup>1</sup>Source: Platts Metals Week, dealer import price; average prices reported for all transactions during the month.

<sup>2</sup>Dollars per gross ton.

<sup>3</sup>Cents per pound.

<sup>4</sup>Source: Ryan's Notes, cost and freight, China; average prices reported for the price range.

<sup>5</sup>Dollars per metric ton unit, contained manganese. To determine dollars per metric ton of ore (gross weight), multiply the manganese content percentage by the price; that is, by 48 when the manganese content is 48%.

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
2010, January	782	34,600	35,400	51	992	1,040
2011, January	28,900	44,500	73,400	36	1,080	1,120

<sup>1</sup>Data 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 2011<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>2</sup>
Canada	19	7	\$8,550
Georgia	19,400	13,300	25,000,000
India	78	43	128,000
Mexico	1,000	659	1,190,000
Norway	1,100	693	2,000,000
Saudi Arabia	12,600	8,310	13,700,000
Total	34,200	23,000	42,000,000

<sup>1</sup>Data 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 2011<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>2</sup>
Low carbon:			
China	434	409	\$1,340,000
Mexico	900	732	1,920,000
Vietnam	434	408	1,310,000
Total	1,770	1,550	4,570,000
Medium carbon, 1%-2% C:			
Korea, Republic of	3,500	2,840	6,930,000
Mexico	693	552	1,450,000
South Africa	1,800	1,430	3,200,000
Total	5,990	4,820	11,600,000
Medium carbon, 2%-4% C, South Africa	18	17	48,100
High carbon:			
Bahrain	180	142	205,000
Norway	1,900	1,490	2,040,000
South Africa	12,600	9,660	14,100,000
Total	14,600	11,300	16,300,000
Grand total	22,400	17,700	32,500,000

<sup>1</sup>Data 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 2011<sup>1,2</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>3</sup>
More than 20%, but less than 47% manganese:			
Australia	16,200	6,750	\$3,110,000
Brazil	3,210	1,480	1,140,000
Total	19,400	8,230	4,250,000
47% or more manganese, Australia	38,400	18,600	11,600,000
Grand total	57,900	26,800	15,800,000

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

<sup>2</sup>Data 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 2011<sup>1</sup>

(Metric tons, gross weight)

Source	Quantity	Customs value <sup>2</sup>
Brazil	35	\$39,900
Colombia	300	577,000
Germany	19	32,200
Japan	682	1,540,000
Netherlands	101	61,500
Singapore	11	19,400
South Africa	2,200	6,600,000
Total	3,350	8,870,000

<sup>1</sup>Data 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 2011<sup>1</sup>

(Metric tons)

Source	Gross weight	Customs value <sup>2</sup>
Unwrought flake:		
China	1,540	\$3,900,000
South Africa	76	268,000
Total	1,610	4,170,000
Unwrought powder:		
China	20	68,700
Mexico	22	94,400
South Africa	278	993,000
Total	320	1,160,000
Unwrought, other:		
China	1,650	5,540,000
Germany	80	330,000
Poland	(3)	3,010
South Africa	76	258,000
Total	1,810	6,130,000
Other manganese, wrought:		
China	29	96,300
Mexico	1	3,380
Total	30	99,700
Grand total	3,770	11,600,000

<sup>1</sup>Data 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>Less than ½ unit.

Note: Imports for consumption of metallic waste and scrap totaled 102 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 2011<sup>1</sup>

(Metric tons, gross weight)

Country	Manganese ore	Ferromanganese,			Manganese metal <sup>2</sup>
		2% or less C	More than 2% C	Silicomanganese	
Belgium	18	--	--	--	--
Brazil	--	--	2	--	--
Canada	21	8	145	676	175
China	--	--	--	--	72
Colombia	--	--	--	352	--
Dominican Republic	--	--	(3)	--	--
Germany	--	--	--	--	3
Japan	--	--	--	--	3
Korea, Republic of	34	--	--	--	--
Mexico	--	--	--	1	--
Romania	--	--	4	--	--
Singapore	--	--	13	--	--
United Kingdom	--	--	--	--	10
Total	73	8	165	1,030	263

-- Zero.

<sup>1</sup>Data 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 ½ unit.

Source: U.S. Census Bureau.

TABLE 8  
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN JANUARY 2011, 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	577	\$577	South Africa 197; \$124
Manganites, manganates, and other permanganates	--	--	--
Potassium permanganate	144	443	India 144; \$425
Sodium permanganate	85	203	China 85; \$203
Sulfates, basket category, including manganese sulfate	3,410	3,220	Mexico 1,510; \$1,250
<b>Exports:</b>			
Manganese dioxide	575	640	Canada 350; \$324
Manganese oxides other than dioxide	395	810	Canada 90; \$93
Manganites, manganates, and other permanganates	7	50	Canada 5; \$14
Potassium permanganate	239	874	Belgium 181; \$680
Sodium permanganate	104	263	Singapore 42; \$117
Sulfates, basket category, including manganese sulfate	2,200	1,130	Canada 1,850; \$542

-- 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.

Source: U.S. Census Bureau.