

# Mineral Industry Surveys

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## MANGANESE IN MARCH 2011

Preliminary reported data (gross weight) for March 2011 indicate that consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 39,300 metric tons (t), according to the U.S. Geological Survey. This was slightly less than the amount consumed in February 2011. The amount of manganese ore consumed in the first 3 months of 2011 was 119,000 t, which was a 5% increase from the revised amount consumed during the same period in 2010 (113,000 t). It was about the same as that consumed during the last quarter in 2010. Industry stocks of ore at the end of March 2011 were 208,000 t, which was about the same that at the end of February 2011.

Data for U.S. manganese imports and exports for February 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 68% lower and 32% lower,

respectively, than those in January 2011. U.S. imports of manganese ore plus dioxide and manganese ferroalloys plus metal during the first 2 months of 2011 were 50% lower and 3% higher, respectively, than those during the same period of 2010 (table 1).

On a contained-weight basis, U.S. manganese ore and manganese ferroalloys plus metal exports for February 2011 were 28% higher and 15% higher, respectively, than those in January 2011. U.S. exports of manganese ore and manganese ferroalloys plus metal during the first 2 months of 2011 were 60% lower and 3% lower, respectively, than those during the same period in 2010 (table 1).

**Prices**

Prices for manganese materials in March 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>	1,290.00-1,350.00	1,322.00
Medium-carbon ferromanganese <sup>3</sup>	111.00-118.00	115.50
Silicomanganese <sup>3</sup>	59.00-67.00	62.70

**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>	178.00-200.00	189.00-192.28-195.56
36%-39% Manganese ore <sup>5</sup>	4.90-5.40	4.96-5.18-5.40
44% Manganese ore <sup>5</sup>	5.40-6.00	5.46-5.73-6.00
48% Manganese ore <sup>5</sup>	6.30-6.70	6.30-6.50-6.70

<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:						
February	75,800	37,800	114,000	159	1,400	1,560
January-February	76,600	72,500	149,000	210	2,390	2,600
2011:						
January	28,900	44,500	73,400	36	1,080	1,120
February	9,160	30,400	39,600	46	1,240	1,290
Total	38,000	75,000	113,000	83	2,320	2,410

<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 FEBRUARY 2011<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>2</sup>	Year to date		
				Gross weight	Mn content	Customs value <sup>2</sup>
Australia	2,110	1,410	\$1,990,000	2,110	1,410	\$1,990,000
Canada	--	--	--	19	7	8,550
Georgia	12,200	8,160	15,400,000	31,600	21,500	40,400,000
India	78	43	127,000	156	87	255,000
Mexico	1,000	656	1,090,000	2,000	1,320	2,280,000
Norway	3,700	2,250	6,530,000	4,800	2,940	8,540,000
South Africa	2,720	1,810	2,890,000	15,300	10,100	16,600,000
Spain	1,610	990	3,240,000	1,610	990	3,240,000
Total	23,400	15,300	31,300,000	57,600	38,300	73,300,000

-- Zero.

<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 FEBRUARY 2011<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>2</sup>	Year to date		
				Gross weight	Mn content	Customs value <sup>2</sup>
<b>Low carbon:</b>						
China	2,220	2,010	\$6,050,000	2,660	2,420	\$7,390,000
Mexico	819	672	1,600,000	1,720	1,400	3,520,000
Norway	327	264	691,000	327	264	691,000
Vietnam	--	--	--	434	408	1,310,000
<b>Total</b>	<b>3,370</b>	<b>2,950</b>	<b>8,340,000</b>	<b>5,140</b>	<b>4,500</b>	<b>12,900,000</b>
<b>Medium carbon, 1%-2% C:</b>						
Korea, Republic of	--	--	--	3,500	2,840	6,930,000
Mexico	866	694	1,660,000	1,560	1,250	3,110,000
Norway	920	722	1,680,000	920	722	1,680,000
South Africa	707	557	1,160,000	2,510	1,990	4,360,000
<b>Total</b>	<b>2,490</b>	<b>1,970</b>	<b>4,500,000</b>	<b>8,490</b>	<b>6,790</b>	<b>16,100,000</b>
Medium carbon, 2%-4% C, South Africa	--	--	--	18	17	48,100
<b>High carbon:</b>						
Bahrain	--	--	--	180	142	205,000
Norway	1,020	800	1,140,000	2,920	2,290	3,170,000
South Africa	9,200	7,050	10,000,000	21,800	16,700	24,100,000
Ukraine	261	210	522,000	261	210	522,000
<b>Total</b>	<b>10,500</b>	<b>8,060</b>	<b>11,700,000</b>	<b>25,100</b>	<b>19,400</b>	<b>28,000,000</b>
<b>Grand total</b>	<b>16,300</b>	<b>13,000</b>	<b>24,500,000</b>	<b>38,800</b>	<b>30,700</b>	<b>57,100,000</b>

-- Zero.

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

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>3</sup>	Year to date		
				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
Gabon	9,010	4,010	\$1,650,000	9,010	4,010	1,650,000
Total	9,010	4,010	1,650,000	28,500	12,200	5,910,000
47% or more manganese:						
Australia	--	--	--	38,400	18,600	11,600,000
Gabon	8,500	4,460	2,940,000	8,500	4,460	2,940,000
Total	8,500	4,460	2,940,000	46,900	23,100	14,500,000
Grand total	17,500	8,470	4,600,000	75,400	35,300	20,400,000

-- Zero.

<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 FEBRUARY 2011<sup>1</sup>

(Metric tons, gross weight)

Source	Quantity	Customs value <sup>2</sup>	Year to date	
			Quantity	Customs value <sup>2</sup>
Belgium	102	\$65,100	102	\$65,100
Brazil	--	--	35	39,900
Colombia	150	289,000	450	866,000
Germany	--	--	19	32,200
India	( <sup>3</sup> )	6,030	( <sup>3</sup> )	6,030
Japan	852	1,920,000	1,530	3,460,000
Netherlands	--	--	101	61,500
Singapore	38	38,800	49	58,100
South Africa	--	--	2,200	6,600,000
Total	1,140	2,320,000	4,490	11,200,000

-- Zero.

<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.

Source: U.S. Census Bureau.

TABLE 6  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN FEBRUARY 2011<sup>1</sup>

(Metric tons)

Source	Gross weight	Customs value <sup>2</sup>	Year to date	
			Gross weight	Customs value <sup>2</sup>
<b>Unwrought flake:</b>				
China	640	\$2,020,000	2,180	\$5,920,000
Japan	20	27,400	20	27,400
Mexico	29	112,000	29	112,000
South Africa	19	70,600	95	339,000
<b>Total</b>	<b>707</b>	<b>2,240,000</b>	<b>2,320</b>	<b>6,400,000</b>
<b>Unwrought powder:</b>				
China	20	65,700	40	134,000
Mexico	--	--	22	94,400
South Africa	278	1,080,000	556	2,070,000
United Kingdom	1	2,210	1	2,210
<b>Total</b>	<b>298</b>	<b>1,150,000</b>	<b>618</b>	<b>2,300,000</b>
<b>Unwrought, other:</b>				
China	942	2,920,000	2,590	8,460,000
Germany	70	234,000	150	565,000
Poland	--	--	(3)	3,010
South Africa	95	335,000	171	593,000
<b>Total</b>	<b>1,110</b>	<b>3,490,000</b>	<b>2,910</b>	<b>9,620,000</b>
<b>Other manganese, wrought:</b>				
China	--	--	29	96,300
Mexico	25	103,000	26	106,000
<b>Total</b>	<b>25</b>	<b>103,000</b>	<b>55</b>	<b>203,000</b>
<b>Grand total</b>	<b>2,140</b>	<b>6,980,000</b>	<b>5,900</b>	<b>18,500,000</b>

-- Zero.

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

<sup>2</sup>Customs value generally represent 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: There were no imports for consumption of metallic waste and scrap in February; the year-to-date total remained at 102 metric 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 FEBRUARY 2011<sup>1</sup>

(Metric tons, gross weight)

Country	Ferromanganese,											
	Manganese ore		2% or less C				More than 2% C		Silicomanganese		Manganese metal <sup>2</sup>	
	February	Year to date	February	Year to date	February	Year to date	February	Year to date	February	Year to date		
Bahamas, The	--	--	--	--	--	--	--	--	--	1	1	
Belgium	--	18 *	--	--	--	--	--	--	--	--	--	
Brazil	--	-- *	--	--	8	11	--	--	--	--	--	
Canada	39	60	--	8	114	258	455	1,130	1	176		
China	20	20	--	--	--	--	--	--	101	173		
Colombia	--	--	--	--	--	--	--	352	--	--		
Dominican Republic	--	--	--	--	--	(3)	--	--	--	--		
France	--	--	--	--	--	--	--	--	1	1		
Germany	--	--	--	--	--	--	--	--	1	4		
Hong Kong	--	--	--	--	--	--	--	--	3	3		
Japan	--	--	--	--	--	--	--	--	45	48		
Korea, Republic of	34	68	--	--	--	--	--	--	--	--		
Mexico	--	--	816	816	--	--	--	1	2	2		
Romania	--	--	--	--	--	4	--	--	--	--		
Saint Lucia	--	--	--	--	--	--	--	--	15	15		
Singapore	--	--	--	--	--	13	--	--	--	--		
Taiwan	--	--	--	--	--	--	--	--	31	31		
United Kingdom	--	--	--	--	--	--	--	--	--	10		
Total	93	166	816	824	122	286	455	1,490	202	464		

-- 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, other alloys, and waste and scrap.

<sup>3</sup>Less than ½ unit.

\* Correction posted on June 22, 2011.

Source: U.S. Census Bureau.

TABLE 8  
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN FEBRUARY 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)	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	243	\$245	Mexico 201; \$189	820	\$822	Mexico 321; \$297
Manganites, manganates, and other permanganates	--	--	--	--	--	--
Potassium permanganate	68	196	India 54; \$156	212	640	India 198; \$581
Sodium permanganate	20	48	China 20; \$48	105	251	China 105; \$251
Sulfates, basket category, including manganese sulfate	3,680	3,650	China 2,020; \$1,560	7,090	6,870	China 3,360; \$2,790
<b>Exports:</b>						
Manganese dioxide	596	946	Canada 343; \$377	1,170	1,590	Canada 693; \$701
Manganese oxides other than dioxide	611	1,190	Canada 262; \$286	1,010	2,000	Canada 352; \$379
Manganites, manganates, and other permanganates	4	13	Canada 3; \$8	11	64	Canada 8; \$22
Potassium permanganate	180	476	Belgium 132; \$332	420	1,350	Belgium 313; \$1,010
Sodium permanganate	56	151	Singapore 19; \$50	160	414	Singapore 61; \$167
Sulfates, basket category, including manganese sulfate	1,190	1,150	Canada 949; \$564	3,390	2,280	Canada 2,800; \$1,110

-- 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.