

# Mineral Industry Surveys

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## MANGANESE IN MAY 2009

Reported data regarding the amount of manganese ore consumed by U.S. firms in May 2009 and industry stocks at the end of the month were not available at the time of publication. However, net imports may be used as a rough indicator of near-term manganese ore consumption. In May 2009, U.S. net exports of manganese ore were 4,630 metric tons (t), gross weight. Net imports of manganese ore in the first 5 months of 2009 were 109,000 t, which was a 50% decrease from those during the first 5 months of 2008.

Data for U.S. imports and exports for April 2009 are published in this issue. On a contained-weight basis, U.S. imports of manganese ore plus dioxide and manganese ferroalloys plus metal were 62% lower and 14% lower, respectively, than those in March 2009. U.S. imports of manganese ore plus dioxide and manganese ferroalloys plus

metal during the first 4 months of 2009 were 39% lower and 67% lower, respectively, than those during the same period in 2008 (table 1).

On a contained-weight basis, U.S. manganese ore and manganese ferroalloys plus metal exports for April 2009 were the same and 85% lower, respectively, than those in March 2009. U.S. exports of manganese ore and manganese ferroalloys plus metal during the first 4 months of 2009 were 94% less and 7% less, respectively, than those during the same period in 2008 (table 1).

### Prices

Prices for manganese materials in May 2009, manganese content, are listed below.

### Ferroalloys prices<sup>1</sup>

	<u>Price Range</u>	<u>Average Price</u>
High-carbon ferromanganese <sup>2</sup>	880.00-930.00	907.50
Medium-carbon ferromanganese <sup>3</sup>	85.00-92.00	88.50
Silicomanganese <sup>3</sup>	36.00-39.00	37.50

### 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>	125.00-135.00	127.11-129.61-132.11
36%-39% Manganese ore <sup>5</sup>	3.05-4.20	3.39-3.45-3.51
44% Manganese ore <sup>5</sup>	3.50-5.00	3.79-4.17-4.56
48% Manganese ore <sup>5</sup>	4.20-5.20	4.40-4.59-4.79

<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
2008:						
April	53,000	33,100	86,100	4,660	6,370	11,000
January-April	102,000	200,000	302,000	6,990	12,600	19,600
2009:						
January	25,600	36,600	62,100	102	2,460	2,560
February	559	13,400	14,000	188	4,270	4,460
March	26,300	8,670	35,000	80	1,730	1,810
April	9,960	7,450	17,400	80	3,190	3,270
Total	62,400	66,100	129,000	451	11,600	12,100

<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 APRIL 2009<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	--	--	--	5,070	3,360	\$5,810,000
China	--	--	--	537	321	937,000
Georgia	745	532	\$745,000	4,750	3,340	4,670,000
Korea, Republic of	--	--	--	6,230	4,110	5,580,000
Norway	--	--	--	3	2	4,600
Saudi Arabia	--	--	--	4,190	734	3,970,000
South Africa	1,850	1,290	1,480,000	20,300	13,300	27,600,000
Total	2,600	1,820	2,220,000	41,000	25,200	48,500,000

-- 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 APRIL 2009<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	733	680	\$1,710,000	1,350	1,250	\$3,440,000
Korea, Republic of	--	--	--	1,700	1,380	2,770,000
Mexico	1,040	794	2,350,000	1,040	794	2,350,000
Norway	22	18	52,400	22	18	52,400
South Africa	--	--	--	1,000	812	2,500,000
Sweden	--	--	--	5	3	27,500
<b>Total</b>	<b>1,790</b>	<b>1,490</b>	<b>4,110,000</b>	<b>5,110</b>	<b>4,260</b>	<b>11,100,000</b>
<b>Medium carbon, 1%-2% C:</b>						
China	233	199	460,000	516	426	1,180,000
France	--	--	--	19	15	103,000
Korea, Republic of	--	--	--	64	51	148,000
Mexico	1,040	851	1,920,000	1,110	904	2,110,000
South Africa	72	53	60,100	7,450	5,920	20,100,000
Turkey	--	--	--	20	16	95,800
<b>Total</b>	<b>1,340</b>	<b>1,100</b>	<b>2,440,000</b>	<b>9,180</b>	<b>7,330</b>	<b>23,700,000</b>
<b>High carbon:</b>						
Bahrain	1,000	814	1,180,000	2,000	1,630	2,350,000
China	--	--	--	300	221	630,000
India	--	--	--	136	101	132,000
Korea, Republic of	101	88	119,000	201	164	239,000
Mexico	1,300	990	1,410,000	1,300	990	1,410,000
South Africa	--	--	--	26,100	20,100	38,700,000
<b>Total</b>	<b>2,400</b>	<b>1,890</b>	<b>2,710,000</b>	<b>30,000</b>	<b>23,200</b>	<b>43,500,000</b>
<b>Grand total</b>	<b>5,540</b>	<b>4,490</b>	<b>9,260,000</b>	<b>44,300</b>	<b>34,800</b>	<b>78,300,000</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 APRIL 2009<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	--	--	--	--	--	--
<b>47% or more manganese:</b>						
China	--	--	--	3,890	1,960	\$365,000
Gabon	18,000	8,670	\$9,330,000	110,000	57,200	53,600,000
<b>Total</b>	<b>18,000</b>	<b>8,670</b>	<b>9,330,000</b>	<b>114,000</b>	<b>59,100</b>	<b>54,000,000</b>

-- 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 APRIL 2009<sup>1</sup>

(Metric tons, gross weight)

Source	Quantity	Customs value <sup>2</sup>	Year to date	
			Quantity	Customs value <sup>2</sup>
Belgium	--	--	40	\$134,000
Brazil	--	--	56	95,600
Colombia	5	\$8,640	5	8,640
France	18	31,000	18	31,000
India	(3)	2,960	(3)	7,700
Japan	600	1,560,000	1,410	3,820,000
Singapore	11	18,600	40	68,800
South Africa	1,380	3,030,000	3,770	7,610,000
Spain	136	309,000	136	309,000
Total	2,150	4,950,000	5,480	12,100,000

-- 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 APRIL 2009<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	342	\$750,000	1,960	\$4,540,000
South Africa	247	497,000	606	1,220,000
Total	589	1,250,000	2,570	5,760,000
<b>Unwrought powder:</b>				
China	--	--	280	994,000
South Africa	136	493,000	415	1,120,000
Total	136	493,000	695	2,120,000
<b>Unwrought, other:</b>				
Brazil	--	--	7	23,800
China	281	665,000	1,990	4,160,000
Germany	49	134,000	256	822,000
Hong Kong	6	15,200	6	15,200
Malaysia	--	--	(3)	3,650
United Kingdom	--	--	6	20,400
South Africa	57	206,000	152	455,000
Total	394	1,020,000	2,420	5,500,000
<b>Other manganese, wrought:</b>				
Belgium	4	20,600	6	31,200
Canada	--	--	22	54,600
China	--	--	249	684,000
Mexico	24	108,000	155	808,000
Total	28	129,000	432	1,580,000
Grand total	1,150	2,890,000	6,110	15,000,000

-- 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 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 April; the year-to-date total remained at 53 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 APRIL 2009<sup>1</sup>

(Metric tons, gross weight)

Country	Manganese ore		Ferromanganese,				Silicomanganese		Manganese metal <sup>2</sup>	
	April	Year to date	2% or less C		More than 2% C		April	Year to date	April	Year to date
			April	Year to date	April	Year to date				
Argentina	--	--	--	--	--	--	--	--	--	1
Australia	--	--	--	--	--	160	--	--	--	--
Belgium	--	--	--	--	--	--	--	--	--	50
Brazil	--	1	--	--	--	200	--	--	--	--
Canada	68	486	65	2,280	508	2,970	759	1,300	7	19
Chile	--	--	103	103	220	300	--	--	--	--
China	--	--	--	--	--	--	--	--	168	181
Colombia	--	--	--	--	20	40	--	--	--	--
Finland	--	--	--	--	--	--	--	--	--	21
France	--	--	--	--	--	--	--	--	5	5
Germany	59	190	--	--	--	--	--	--	--	36
Guyana	--	--	--	--	--	--	--	--	--	1
Hong Kong	--	--	--	--	--	--	--	--	50	281
India	--	--	--	--	--	9	--	--	51	71
Ireland	--	--	--	--	--	8	--	--	--	--
Japan	--	--	--	--	--	1,000	--	--	--	271
Korea, Republic of	34	203	--	--	--	--	--	--	--	--
Malaysia	--	--	--	--	--	1,080	--	--	1	1
Mexico	--	--	26	1,080	98	292	--	528	--	23
Netherlands	--	3	--	--	2,000	2,000	--	--	--	--
Norway	--	--	--	--	3	6	--	--	--	--
Sweden	--	19	--	--	--	--	--	--	--	--
Taiwan	--	--	--	--	--	--	--	--	--	53
Saudi Arabia	--	--	--	--	--	--	--	--	2	2
United Kingdom	--	--	--	--	--	402	--	--	1	1
Vietnam	--	--	--	--	--	--	--	--	--	4
Total	161	901	194	3,450	2,850	8,470	759	1,830	284	1,020

-- 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.

Source: U.S. Census Bureau.

TABLE 8  
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN APRIL 2009, 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	399	\$334	Brazil 260; \$176	1,970	\$1,700	Brazil 1,120; \$720
Manganites, manganates, and other permanganates	--	--	--	--	--	--
Potassium permanganate	50	175	Germany 18; \$62	277	934	Czech Republic 169; \$586
Sodium permanganate	--	--	--	--	--	--
Sulfates, basket category, including manganese sulfate	2,190	2,460	Mexico 1,140; \$1,460	12,000	14,200	Mexico 5,580; \$7,950
<b>Exports:</b>						
Manganese dioxide	748	1,230	Canada 400; \$454	2,420	3,070	Canada 1,570; \$1,500
Manganese oxides other than dioxide	323	441	Canada 131; \$77	1,970	2,030	Canada 1,130; \$501
Manganites, manganates, and other permanganates	7	28	Canada 7; \$16	52	132	Canada 50; \$105
Potassium permanganate	259	804	Belgium 190; \$585	658	2,020	Belgium 392; \$1,200
Sodium permanganate	36	70	Singapore 19; \$47	208	532	Belgium 127; \$323
Sulfates, basket category, including manganese sulfate	1,520	1,190	Canada 1,170; \$649	5,810	4,790	Canada 4,680; \$2,780

-- 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.