

Mineral Industry Surveys

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MANGANESE IN DECEMBER 2009

Preliminary reported data (gross weight) for December 2009 indicate that consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 37,100 metric tons (t), according to the U.S. Geological Survey. This was a 4% decrease from that consumed in November 2009. Estimated manganese ore consumption in 2009 was 458,000 t, which was a 19% increase from the revised amount consumed during 2008. This increase was the result of sustained production by a major manganese ferroalloy producer. Industry stocks of ore at the end of December 2009 were 112,000 t, which was slightly more than that at the end of November 2009.

Data for U.S. manganese imports and exports for November 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 25 times greater than and 330%

higher, respectively, than those in October 2009. U.S. imports of manganese ore plus dioxide and manganese ferroalloys plus metal during the first 11 months of 2009 were 36% lower and 69% 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 November 2009 were 218% higher and 13% higher, respectively, than those in October 2009. U.S. exports of manganese ore and manganese ferroalloys plus metal during the first 11 months of 2009 were 69% less and 26% greater, respectively, than those during the same period in 2008 (table 1).

Prices

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

Ferroalloys prices¹

	<u>Price Range</u>	<u>Average Price</u>
High-carbon ferromanganese ²	1,310.00-1,375.00	1,345.00
Medium-carbon ferromanganese ³	100.00-110.00	104.50
Silicomanganese ³	58.00-65.00	60.60

Manganese metal and ore prices⁴

	<u>Price Range</u>	<u>Average Low, Mid, and High Prices</u>
Manganese metal ³	142.00-155.00	146.00-148.13-150.25
36%-39% Manganese ore ⁵	5.50-6.00	5.67-5.79-5.91
44% Manganese ore ⁵	5.90-6.50	6.13-6.25-6.38
48% Manganese ore ⁵	6.50-7.10	6.71-6.82-6.94

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

²Dollars per gross ton.

³Cents per pound.

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

⁵Dollars 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 MANGANESE¹

(Metric tons, manganese content)²

	Imports for consumption			Exports		
	Ore and dioxide	Ferroalloy and metal	Total	Ore	Ferroalloy and metal	Total
2008:						
November	25,600	52,800	78,400	8,130	1,630	9,760
January-November	256,000	601,000	856,000	24,100	25,900	50,000
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
May	946	12,400	13,400	2,310	2,900	5,210
June	61,300	8,970	70,300	526	5,360	5,890
July	1,220	16,000	17,200	1,400	4,050	5,440
August	11,300	11,500	22,900	1,110	2,930	4,040
September	592	21,900	22,500	1,390	1,880	3,270
October	955	9,830	10,800	76	1,830	1,910
November	24,000	42,300	66,300	242	2,060	2,310
Total	163,000	189,000	352,000	7,510	32,700	40,200

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

²As 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 NOVEMBER 2009¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ²	Year to date		
				Gross weight	Mn content	Customs value ²
Australia	1,440	978	\$1,720,000	14,500	9,640	\$13,500,000
Canada	39	14	17,400	39	14	17,400
China	--	--	--	537	321	937,000
Georgia	185	131	146,000	19,800	13,100	15,200,000
Germany	195	137	146,000	195	137	146,000
India	--	--	--	38	17	51,000
Korea, Republic of	--	--	--	7,090	4,620	6,380,000
Mexico	1,000	652	1,000,000	1,000	652	1,000,000
Norway	5,290	3,300	8,420,000	14,500	8,990	21,200,000
Russia	--	--	--	1,500	986	1,250,000
Saudi Arabia	1,460	955	1,610,000	7,790	2,870	6,470,000
South Africa	9,080	6,110	11,200,000	48,300	32,100	51,800,000
Total	18,700	12,300	24,200,000	115,000	73,400	118,000,000

-- Zero.

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

²Customs 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 NOVEMBER 2009¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ²	Year to date		
				Gross weight	Mn content	Customs value ²
Low carbon:						
Canada	--	--	--	22	18	\$30,600
China	1,890	1,790	\$5,010,000	6,960	6,490	17,800,000
Korea, Republic of	--	--	--	3,400	2,760	5,270,000
Mexico	1,500	1,210	2,550,000	3,540	2,810	6,600,000
Norway	141	115	261,000	1,860	1,510	3,240,000
South Africa	--	--	--	1,020	827	2,560,000
Sweden	--	--	--	5	3	27,500
Total	3,540	3,110	7,830,000	16,800	14,400	35,600,000
Medium carbon, 1%-2% C:						
China	--	--	--	740	600	1,610,000
France	--	--	--	19	15	103,000
Korea, Republic of	--	--	--	4,630	3,770	9,460,000
Mexico	120	91	264,000	1,440	1,150	2,900,000
Norway	616	507	1,020,000	3,390	2,790	5,210,000
South Africa	2,040	1,610	3,030,000	10,300	8,160	24,300,000
Turkey	--	--	--	20	16	95,800
Total	2,780	2,210	4,310,000	20,500	16,500	43,700,000
Medium carbon, 2%-4% C:						
Brazil	--	--	--	405	304	460,000
Norway	--	--	--	16	13	25,200
South Africa	--	--	--	162	131	368,000
Total	--	--	--	583	448	853,000
High carbon:						
Australia	11,000	8,460	11,600,000	11,000	8,460	11,600,000
Bahrain	243	196	312,000	2,240	1,820	2,660,000
Brazil	405	304	460,000	405	304	460,000
Canada	--	--	--	149	86	132,000
China	--	--	--	816	614	1,140,000
India	--	--	--	5,910	4,510	5,930,000
Korea, Republic of	--	--	--	201	164	239,000
Mexico	--	--	--	1,300	990	1,410,000
Norway	57	46	92,600	57	46	92,600
South Africa	18,100	14,000	18,400,000	60,000	46,300	70,600,000
Spain	--	--	--	1,660	1,260	1,840,000
Total	29,800	23,000	30,800,000	83,700	64,500	96,000,000
Grand total	36,100	28,300	43,000,000	122,000	95,900	176,000,000

-- Zero.

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

²Customs 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 NOVEMBER 2009^{1,2}

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	Year to date		
				Gross weight	Mn content	Customs value ³
More than 20%, but less than 47% manganese, Australia	--	--	--	25,600	10,500	\$10,200,000
47% or more manganese:						
Australia	10,100	4,970	\$2,070,000	10,100	4,970	2,070,000
Belgium	1,140	569	68,300	1,180	609	136,000
Brazil	--	--	--	2,960	1,540	930,000
China	94	58	85,000	4,170	2,150	618,000
Gabon	32,500	17,600	4,550,000	186,000	96,500	65,000,000
Ghana	--	--	--	37,500	37,100	3,400,000
Morocco	--	--	--	16	9	11,500
Total	43,800	23,200	6,780,000	242,000	143,000	72,100,000
Grand total	43,800	23,200	6,780,000	267,000	153,000	82,300,000

-- Zero.

¹Quantities for general imports and imports for consumption are identical.

²Data rounded to no more than three significant digits; may not add to totals shown.

³Customs 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 NOVEMBER 2009¹

(Metric tons, gross weight)

Source	Quantity	Customs value ²	Year to date	
			Quantity	Customs value ²
Belgium	9	\$20,000	83	\$246,000
Brazil	--	--	56	95,600
Colombia	65	133,000	116	237,000
France	7	11,900	25	42,900
Germany	9	15,700	37	62,900
India	(3)	4,380	1	16,300
Japan	323	718,000	4,180	10,600,000
Korea, Republic of	--	--	(3)	7,690
Mexico	--	--	10	16,300
Netherlands	--	--	29	49,500
Singapore	11	18,200	114	194,000
South Africa	893	2,320,000	10,900	26,000,000
Spain	--	--	136	309,000
Total	1,320	3,240,000	15,700	37,800,000

-- Zero.

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

²Customs 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.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN NOVEMBER 2009¹

(Metric tons)

Source	Gross weight	Customs value ²	Year to date	
			Gross weight	Customs value ²
Unwrought flake:				
China	278	\$815,000	5,680	\$14,200,000
Hong Kong	--	--	20	45,700
Japan	--	--	46	121,000
South Africa	305	805,000	2,400	5,850,000
Vietnam	--	--	20	51,200
Total	583	1,620,000	8,160	20,300,000
Unwrought powder:				
China	294	872,000	918	2,880,000
South Africa	160	537,000	1,600	5,050,000
Total	454	1,410,000	2,520	7,940,000
Unwrought, other:				
Brazil	--	--	15	43,500
China	487	1,200,000	6,730	15,700,000
Germany	--	--	506	1,530,000
Hong Kong	--	--	183	394,000
Malaysia	--	--	(3)	3,650
Poland	--	--	14	22,400
South Africa	57	179,000	610	2,000,000
United Kingdom	17	57,500	102	320,000
Total	561	1,440,000	8,160	20,000,000
Other manganese, wrought:				
Belgium	--	--	6	31,200
Canada	--	--	22	54,600
China	--	--	263	708,000
France	--	--	8	34,100
Japan	--	--	(3)	4,580
Mexico	--	--	299	1,530,000
Poland	--	--	(3)	3,190
South Africa	--	--	12	54,300
United Kingdom	--	--	(3)	3,220
Total	--	--	610	2,420,000
Grand total	1,600	4,470,000	19,400	50,600,000

-- Zero.

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

²Customs 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.

³Less than ½ unit.

Note: Imports for consumption of metallic waste and scrap totaled 198 metric tons, all of which was from Canada, to give a year-to-date total of 732 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 NOVEMBER 2009¹

(Metric tons, gross weight)

Country	Manganese ore		Ferromanganese,				Silicomanganese		Manganese metal ²	
	November	Year to date	2% or less C		More than 2% C		November	Year to date	November	Year to date
			November	Year to date	November	Year to date				
Argentina	--	--	--	--	--	--	--	--	--	5
Australia	--	--	--	--	--	160	--	--	62	121
Austria	--	--	--	--	--	--	--	1,130	--	--
Belgium	--	--	--	--	--	--	--	--	--	50
Brazil	--	2	--	--	--	380	7	30	--	--
Canada	402	13,900	72	2,440	963	7,590	385	5,350	2	33
Chile	--	--	--	200	--	340	--	--	--	--
China	--	--	--	--	--	--	--	--	90	879
Colombia	--	--	--	--	--	40	--	--	--	--
Finland	--	--	--	--	--	--	--	--	--	159
France	--	--	--	--	--	--	--	--	--	6
Germany	--	508	--	--	--	--	--	--	--	64
Guyana	--	--	--	--	--	--	--	--	--	1
Hong Kong	--	--	--	1	--	--	--	--	50	757
India	--	--	--	--	--	12	--	--	--	189
Indonesia	--	--	--	4	--	--	--	--	--	--
Ireland	--	18	--	--	9	17	--	--	--	--
Italy	--	--	--	--	--	--	--	2,540	--	--
Japan	--	--	--	--	--	1,000	--	--	43	462
Korea, Republic of	71	459	--	--	--	--	--	--	--	--
Latvia	--	38	--	--	--	--	--	--	--	--
Malaysia	--	40	--	--	--	1,080	--	--	--	4
Mexico	--	--	87	3,210	--	3,680	593	6,200	--	35
Netherlands	--	4	--	--	257	2,260	--	1,490	--	--
Norway	--	--	--	--	--	36	3	3	--	--
Peru	--	--	--	--	--	--	--	300	--	--
Portugal	--	--	--	--	--	--	76	96	--	--
Russia	11	14	--	--	--	--	--	--	--	--
Saint Lucia	--	--	--	--	--	--	--	--	--	10
Singapore	--	--	--	--	--	11	--	--	--	--
Slovenia	--	19	--	--	--	--	--	--	--	--
Sweden	--	19	--	--	--	--	--	--	--	--
Taiwan	--	--	--	--	--	--	--	299	--	76
Trinidad and Tobago	--	--	--	--	--	--	--	--	--	1
Turkey	--	--	--	--	--	--	20	60	--	--
United Arab Emirates	--	--	--	--	--	--	--	--	--	15
United Kingdom	--	--	--	--	--	459	--	--	--	36
Vietnam	--	--	--	--	--	--	--	--	4	82
Total	484	15,000	159	5,860	1,230	17,100	1,090	17,500	251	2,990

-- Zero.

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

²Includes manganese-aluminum, other alloys, and waste and scrap.

Source: U.S. Census Bureau.

TABLE 8
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN NOVEMBER 2009, BY CLASS¹

Class	Gross weight (metric tons)	Value ² (thousands)	Principal sources and destinations: gross weight (metric tons); value ² (thousands)	Year to date		Principal sources and destinations: gross weight (metric tons); value ² (thousands)
				Gross weight (metric tons)	Value ² (thousands)	
Imports for consumption:						
Manganese oxides other than dioxide	1,620	\$857	South Africa 745; \$278	9,310	\$6,470	Brazil 3,430; \$2,360
Manganites, manganates, and other permanganates	--	--	--	17	62	Germany 17; \$62
Potassium permanganate	133	433	India 90; \$297	1,020	3,420	Czech Republic 537; \$1,790
Sodium permanganate	16	23	China 16; \$23	181	373	China 180; \$366
Sulfates, basket category, including manganese sulfate	3,300	2,970	Mexico 1,740; \$1,340	30,700	31,400	Mexico 12,500; \$13,800
Exports:						
Manganese dioxide	856	1,720	Belgium 364; \$939	7,740	12,400	Canada 3,830; \$3,660
Manganese oxides other than dioxide	577	1,230	Canada 185; \$128	6,030	8,200	Canada 2,090; \$1,240
Manganites, manganates, and other permanganates	3	7	Canada 3; \$7	109	268	Canada 107; \$241
Potassium permanganate	211	662	Belgium 129; \$353	2,000	6,250	Belgium 1,110; \$3,250
Sodium permanganate	33	49	Korea, Republic of 16; \$25	810	1,800	Belgium 306; \$744
Sulfates, basket category, including manganese sulfate	1,800	1,060	Canada 1,520; \$763	17,600	13,500	Canada 14,800; \$8,590

-- Zero.

¹Data are rounded to no more than three significant digits.

²For imports, Customs value; for exports, free alongside ship value.

Source: U.S. Census Bureau.