

Mineral Industry Surveys

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MANGANESE IN SEPTEMBER 2010

Preliminary reported data (gross weight) for September 2010 indicate that consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 38,900 metric tons (t), according to the U.S. Geological Survey. This was slightly more than the revised amount consumed in August 2010 (38,600 t). The amount of manganese ore consumed in the third quarter of 2010 increased by 5% to 117,000 t from the revised amount consumed during the second quarter of 2010 (111,000 t). Manganese ore consumption during the first 9 months of 2010 was 341,000 t. This was a 7% increase from the revised amount consumed during the same period in 2009 (318,000 t). Industry stocks of ore at the end of September 2010 were 203,000 t, which was the same as the revised amount at the end of August 2010.

Data for U.S. manganese imports and exports for August 2010 are published in this issue. On a contained-weight basis, U.S. imports of manganese ore plus dioxide and manganese

ferroalloys plus metal were 90% lower and 12% lower, respectively, than those in July 2010. U.S. imports of manganese ore plus dioxide and manganese ferroalloys plus metal during the first 8 months of 2010 were 32% higher and 198% higher, respectively, than those during the same period in 2009 (table 1).

On a contained-weight basis, U.S. manganese ore and manganese ferroalloys plus metal exports for August 2010 were 98% lower and 427% higher, respectively, than those in July 2010. U.S. exports of manganese ore and manganese ferroalloys plus metal during the first 8 months of 2010 were 13% higher and 59% lower, respectively, than those during the same period in 2009 (table 1).

Prices

Prices for manganese materials in September 2010, manganese content, are listed below.

Ferroalloys prices¹

	<u>Price Range</u>	<u>Average Price</u>
High-carbon ferromanganese ²	1,335.00-1,375.00	1,351.50
Medium-carbon ferromanganese ³	119.00-125.00	120.80
Silicomanganese ³	58.00-62.00	60.60

Manganese metal and ore prices⁴

	<u>Price Range</u>	<u>Average Low, Mid, and High Prices</u>
Manganese metal ³	154.00-167.00	157.50-159.63-161.75
36%-39% Manganese ore ⁵	5.80-6.30	5.83-5.89-5.95
44% Manganese ore ⁵	6.25-7.10	6.32-6.40-6.49
48% Manganese ore ⁵	7.00-7.50	7.03-7.09-7.15

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
2009:						
August	11,300	11,500	22,900	1,110	2,930	4,040
January-August	137,000	115,000	252,000	5,800	26,900	32,700
2010:						
January	782	34,600	35,400	51	992	1,040
February	75,800	37,800	114,000	159	1,400	1,560
March	14,600	42,300	56,900	820	1,540	2,360
April	18,000	33,600	51,600	113	1,290	1,410
May	31,800	33,900	65,700	864	1,010	1,880
June	11,100	49,400	60,500	54	1,140	1,200
July	26,900	59,300	86,200	4,390	591	4,980
August	2,570	52,100	54,700	95	3,120	3,210
Total	182,000	343,000	525,000	6,550	11,100	17,600

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 AUGUST 2010¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ²	Year to date		
				Gross weight	Mn content	Customs value ²
Australia	--	--	--	24,100	16,000	\$25,800,000
Bahrain	--	--	--	1,140	760	1,480,000
Canada	--	--	--	14	5	11,400
Georgia	14,300	9,970	\$17,800,000	43,500	30,300	53,000,000
India	130	72	238,000	494	273	878,000
Macedonia	--	--	--	986	657	1,310,000
Mexico	--	--	--	8,330	5,480	9,650,000
Norway	4,800	2,960	8,450,000	34,200	21,400	54,600,000
Russia	--	--	--	545	359	517,000
Saudi Arabia	--	--	--	2,540	1,670	2,990,000
South Africa	21,500	14,200	27,500,000	103,000	68,500	124,000,000
Spain	--	--	--	2,490	1,500	4,520,000
Vietnam	--	--	--	40	26	60,100
Total	40,700	27,200	54,000,000	221,000	147,000	279,000,000

-- 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 AUGUST 2010¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ²	Year to date		
				Gross weight	Mn content	Customs value ²
Low carbon:						
China	1,210	1,100	\$3,100,000	18,900	16,500	\$47,500,000
Korea, Republic of	--	--	--	3,000	2,420	6,760,000
Mexico	--	--	--	7,450	6,000	15,100,000
Netherlands	--	--	--	220	178	429,000
Norway	350	280	782,000	3,310	2,690	6,800,000
South Africa	--	--	--	23	21	69,800
Vietnam	--	--	--	57	54	112,000
Total	1,560	1,380	3,890,000	33,000	27,800	76,700,000
Medium carbon, 1%-2% C:						
China	--	--	--	7,110	5,670	12,100,000
India	250	193	543,000	1,110	875	2,340,000
Korea, Republic of	--	--	--	12,400	9,920	27,100,000
Mexico	141	108	402,000	7,730	6,090	15,500,000
Netherlands	--	--	--	48	39	118,000
Norway	--	--	--	15,300	12,300	28,600,000
Russia	--	--	--	18	14	46,300
South Africa	5,550	4,400	10,700,000	23,400	18,600	43,300,000
Spain	--	--	--	99	80	146,000
Total	5,940	4,700	11,700,000	67,200	53,700	129,000,000
Medium carbon, 2%-4% C:						
Brazil	--	--	--	1	1	2,780
China	20	11	38,900	40	22	74,800
South Africa	36	32	89,700	126	114	320,000
Switzerland	--	--	--	50	39	49,100
Total	56	43	129,000	217	176	446,000
High carbon:						
Australia	1,140	888	1,140,000	4,040	3,140	4,200,000
Bahrain	--	--	--	300	229	360,000
Brazil	--	--	--	1,100	829	1,340,000
France	--	--	--	7,730	5,690	9,170,000
Kazakhstan	--	--	--	1,450	1,100	1,620,000
Korea, Republic of	1,500	1,130	1,800,000	1,500	1,130	1,800,000
Mexico	--	--	--	7	5	11,500
Norway	800	630	914,000	1,500	1,200	1,660,000
Russia	--	--	--	649	473	659,000
South Africa	10,000	7,700	12,600,000	70,400	54,400	86,300,000
Ukraine	7,830	6,110	8,850,000	24,900	19,500	28,000,000
Venezuela	--	--	--	1,000	750	1,450,000
Zambia	--	--	--	994	698	1,030,000
Total	21,300	16,400	25,300,000	116,000	89,100	138,000,000
Grand total	28,800	22,600	41,000,000	216,000	171,000	344,000,000

-- 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 AUGUST 2010^{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:						
Gabon	--	--	--	8,020	3,570	\$399,000
Ghana	--	--	--	36,600	10,300	5,080,000
Mexico	--	--	--	1,470	528	345,000
South Africa	--	--	--	44,300	17,700	7,250,000
Total	--	--	--	90,500	32,100	13,100,000
47% or more manganese:						
Australia	--	--	--	69,600	56,900	20,100,000
Brazil	2,820	1,420	\$1,290,000	6,780	3,440	2,520,000
China	--	--	--	265	181	239,000
Gabon	--	--	--	119,000	60,900	30,700,000
Georgia	--	--	--	12,400	8,610	13,000,000
Morocco	35	17	28,800	1,390	687	98,900
South Africa	--	--	--	18,000	9,850	6,010,000
Total	2,860	1,440	1,320,000	227,000	141,000	72,600,000
Grand total	2,860	1,440	1,320,000	318,000	173,000	85,700,000

-- 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 AUGUST 2010¹

(Metric tons, gross weight)

Source	Quantity	Customs value ²	Year to date	
			Quantity	Customs value ²
Belgium	17	\$69,300	55	\$225,000
Brazil	--	--	1	2,240
China	1	4,200	41	20,200
Colombia	80	154,000	80	154,000
Germany	--	--	38	67,800
India	--	--	(3)	3,970
Japan	637	1,450,000	4,580	9,980,000
Mexico	--	--	2	4,000
Morocco	--	--	45	28,800
Netherlands	--	--	246	145,000
Singapore	11	19,400	87	148,000
South Africa	1,140	3,120,000	9,570	26,100,000
Spain	--	--	214	424,000
Total	1,890	4,820,000	15,000	37,300,000

-- 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 AUGUST 2010¹

(Metric tons)

Source	Gross weight	Customs value ²	Year to date	
			Gross weight	Customs value ²
Unwrought flake:				
China	621	\$1,570,000	10,400	\$25,400,000
Hong Kong	--	--	444	1,150,000
South Africa	--	--	914	2,780,000
Vietnam	--	--	1,110	2,690,000
Total	621	1,570,000	12,900	32,000,000
Unwrought powder:				
China	40	108,000	200	541,000
Mexico	--	--	20	79,800
South Africa	159	542,000	1,740	5,870,000
Total	199	650,000	1,960	6,490,000
Unwrought, other:				
China	1,290	3,020,000	8,380	19,800,000
Germany	91	287,000	582	1,750,000
Hong Kong	--	--	132	339,000
Poland	--	--	(3)	3,010
South Africa	76	259,000	686	2,280,000
Spain	--	--	9	22,700
United Kingdom	18	63,700	111	379,000
Total	1,470	3,640,000	9,900	24,600,000
Other manganese, wrought:				
Canada	--	--	(3)	7,110
China	--	--	45	136,000
France	11	48,300	23	83,700
Mexico	60	363,000	264	1,530,000
Poland	--	--	(3)	4,900
South Africa	--	--	40	124,000
United Kingdom	--	--	8	30,700
Total	71	411,000	380	1,910,000
Grand total	2,360	6,270,000	25,100	65,000,000

-- 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 38 metric tons (t), of which 37 t was from Canada and 1 t from Mexico, to give a year-to-date total of 545 t.

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 AUGUST 2010¹

(Metric tons, gross weight)

Country	Manganese ore		Ferromanganese,				Silicomanganese		Manganese metal ²		
	August	Year to date	2% or less C		More than 2% C		August	Year to date	August	Year to date	
			August	Year to date	August	Year to date					
Australia	2	2	--	--	--	--	--	--	1	--	22
Belgium	81	218	--	--	--	--	--	--	240	--	192
Brazil	--	--	500	689	231	256	--	--	--	99	99
Canada	--	3,110	4	292	395	4,190	178	1,070	4	73	73
Chile	--	--	904	904	168	168	--	--	--	28	28
China	--	8,730	--	--	--	--	--	--	--	4	615
Colombia	--	1	21	21	--	--	--	--	--	--	--
Denmark	--	--	--	--	--	2	--	--	--	--	--
France	--	--	--	--	--	--	--	--	--	(3)	(3)
Germany	(3)	75	--	--	--	--	--	--	--	22	82
Guyana	--	--	--	--	--	--	--	--	--	2	2
Hong Kong	--	--	--	--	--	--	--	--	--	28	704
India	--	--	--	--	--	--	--	--	--	134	338
Indonesia	--	--	--	--	--	1	--	--	--	--	38
Ireland	--	--	--	--	--	19	--	--	--	--	--
Japan	--	--	--	--	--	--	--	--	--	18	163
Korea, Republic of	34	204	--	--	--	--	--	--	--	--	--
Luxembourg	--	--	--	--	--	--	--	--	--	--	3
Malaysia	--	102	--	--	--	--	--	--	--	--	1
Mexico	19	21	140	159	--	20	1,160	2,600	16	71	71
Norway	--	--	--	--	--	3	--	19	--	--	--
Russia	14	14	--	--	--	--	--	--	--	--	--
Singapore	--	--	--	--	13	23	--	--	--	--	--
Spain	--	8	--	--	--	--	--	60	--	--	--
Suriname	--	--	--	--	--	--	--	--	--	--	1
Taiwan	--	560	--	--	--	--	--	--	--	1	16
Trinidad and Tobago	--	7	--	--	--	--	--	279	--	--	--
Turkey	--	--	--	--	--	--	--	420	--	--	--
United Kingdom	40	40	--	--	--	--	--	--	--	--	1
Venezuela	--	--	--	--	--	1	--	--	--	--	--
Vietnam	--	--	--	--	--	--	--	--	--	--	217
Total	190	13,100	1,570	2,070	807	4,690	1,340	4,690	354	2,660	2,660

-- 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.

³Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 8
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN AUGUST 2010, BY CLASS¹

Class	Gross weight (metric tons)	Value ² (thousands)	Principal sources and destinations: gross weight (metric tons); value ² (thousands)	Year to date		
				Gross weight (metric tons)	Value ² (thousands)	Principal sources and destinations: gross weight (metric tons); value ² (thousands)
<u>Imports for consumption:</u>						
Manganese oxides other than dioxide	434	\$550	Mexico 205; \$236	5,610	\$4,760	South Africa 1,920; \$1,260
Manganites, manganates, and other permanganates	--	--	--	17	62	Germany 17; \$62
Potassium permanganate	60	172	Czech Republic 42; \$123	774	2,360	India 432; \$1,340
Sodium permanganate	165	372	China 165; \$372	457	1,030	China 455; \$1,020
Sulfates, basket category, including manganese sulfate	2,440	5,590	China 1,010; \$1,010	27,400	27,600	Mexico 12,600; \$10,700
<u>Exports:</u>						
Manganese dioxide	1,090	2,090	Canada 430; \$498	6,210	9,700	Canada 2,780; \$2,880
Manganese oxides other than dioxide	670	1,340	United Arab Emirates 133; \$130	5,440	9,050	Canada 1,700; \$1,530
Manganites, manganates, and other permanganates	13	37	Canada 13; \$33	69	250	Canada 68; \$171
Potassium permanganate	286	813	Belgium 151; \$381	2,000	5,720	Belgium 1,190; \$3,030
Sodium permanganate	161	433	Belgium 104; \$224	885	2,160	Singapore 286; \$737
Sulfates, basket category, including manganese sulfate	1,030	801	Canada 884; \$498	11,600	9,580	Canada 9,050; \$5,450

-- 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.