

# Mineral Industry Surveys

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## MANGANESE IN AUGUST 2008

Preliminary reported data (gross weight) for August 2008 indicate that consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 25,300 metric tons (t), according to the U.S. Geological Survey. This was slightly less than the revised amount of 25,400 t reported consumed in July 2008. Manganese ore consumption during the first 8 months of 2008 was 203,000 t (includes revisions). This was 63% of the revised net manganese ore imports during the same period (322,000 t).

Industry stocks of ore at the end of August were 101,000 t, which was the same as the revised amount at the end of July 2008. These data include estimates for annual respondents on the basis of 2007 data.

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

were 8% lower and 27% higher, respectively, than those in June 2008. U.S. manganese ore plus dioxide, and manganese ferroalloys plus metal imports during the first 7 months of 2008 were 14% lower and 31% higher, respectively, than those during the same period in 2007 (table 1).

On a contained-weight basis, U.S. manganese ore, and manganese ferroalloys plus metal exports for July were 69% lower and 78% higher, respectively, than those in June 2008. U.S. manganese ore, and manganese ferroalloys plus metal exports during the first 7 months of 2008 were about 23 times more and 20% less, respectively, than those during the same period in 2007 (table 1).

**Prices**

Prices for manganese materials in August 2008, manganese content, are listed below.

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

	<u>Price Range</u>	<u>Average Price</u>
High-carbon ferromanganese <sup>2</sup>	3,125.00-3,300.00	3,203.13
Medium-carbon ferromanganese <sup>3</sup>	238.00-245.00	241.75
Silicomanganese <sup>3</sup>	110.00-115.00	112.50

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

	<u>Price Range</u>	<u>Average Low-High Prices</u>
Manganese metal <sup>3</sup>	210.00-215.00	210.00-215.00
44% Manganese ore <sup>5</sup>	15.75-16.50	15.97-16.47
48% Manganese ore <sup>5</sup>	17.00-18.50	17.44-18.44

<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. To determine dollars per metric ton, multiply the manganese content percentage by the price.

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
2007:						
July	25,600	30,000	55,700	93	1,830	1,930
January-July	198,000	301,000	498,000	656	22,400	23,100
2008:						
January	3,910	77,900	81,800	2,200	586	2,790
February	43,700	47,200	90,900	45	556	601
March	1,250	41,600	42,800	81	5,080	5,160
April	53,000	33,100	86,100	4,660	6,370	11,000
May	25,200	73,600	98,800	5,380	1,270	6,650
June	22,700	52,500	75,100	2,060	1,440	3,500
July	20,800	66,800	87,600	634	2,560	3,190
Total	170,000	393,000	563,100	15,100	17,900	32,900

<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 JULY 2008<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>
Argentina	--	--	--	504	328	\$857,000
Australia	5,100	3,380	\$10,600,000	26,400	17,400	50,800,000
Canada	--	--	--	204	152	242,000
Georgia	3,200	2,360	7,340,000	43,700	32,700	79,500,000
Korea, Republic of	150	87	281,000	2,870	1,840	5,220,000
Macedonia	3,000	1,970	7,390,000	12,900	8,470	27,500,000
Mexico	1,440	941	2,180,000	8,640	5,660	11,500,000
Norway	1,500	891	3,920,000	41,100	25,700	73,100,000
Poland	13	8	17,000	13	8	17,000
Romania	--	--	--	2,340	1,660	5,010,000
Russia	--	--	--	2,070	1,370	3,870,000
Saudi Arabia	1,110	743	2,610,000	2,480	1,640	4,780,000
South Africa	11,800	7,770	24,900,000	88,100	59,100	160,000,000
Total	27,300	18,100	59,200,000	231,000	156,000	422,000,000

-- 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 represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other changes incurred in bringing the material into the United States.

Source: U.S. Census Bureau.

TABLE 3  
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN JULY 2008<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>						
Brazil	--	--	--	649	508	\$2,420,000
Canada	--	--	--	42	34	137,000
China	4,920	4,130	\$19,000,000	24,900	20,700	77,300,000
Korea, Republic of	--	--	--	1,000	811	3,020,000
Mexico	866	694	2,160,000	6,320	5,150	14,000,000
Norway	650	562	2,690,000	2,880	2,370	10,200,000
United Kingdom	--	--	--	72	61	43,200
Total	6,440	5,390	23,900,000	35,900	29,700	107,000,000
<b>Medium carbon, 1%-2% C:</b>						
Brazil	36	30	146,000	461	378	1,780,000
China	8,620	6,820	30,700,000	25,400	20,200	68,900,000
France	40	34	217,000	80	66	345,000
Georgia	294	250	702,000	4,140	3,340	9,600,000
Korea, Republic of	--	--	--	3,100	2,520	8,050,000
Mexico	579	463	1,280,000	6,740	5,420	12,000,000
Norway	--	--	--	1,170	962	3,420,000
South Africa	4,820	3,880	16,000,000	23,000	18,600	57,200,000
Turkey	20	16	94,200	20	16	94,200
Ukraine	--	--	--	395	354	1,120,000
Total	14,400	11,500	49,200,000	64,500	51,900	162,000,000
<b>Medium carbon, 2%-4% C:</b>						
China	--	--	--	633	498	275,000
Georgia	1,980	1,700	6,940,000	2,710	2,310	8,670,000
Total	1,980	1,700	6,940,000	3,340	2,810	8,950,000
<b>High carbon:</b>						
Australia	--	--	--	501	385	1,410,000
Brazil	395	303	1,110,000	1,360	1,020	2,740,000
British Virgin Islands	--	--	--	176	132	418,000
Canada	--	--	--	18	13	24,000
China	8,970	6,940	23,900,000	26,200	20,100	55,500,000
Georgia	--	--	--	488	415	1,170,000
India	1,660	1,270	4,650,000	10,500	7,740	24,500,000
Korea, Republic of	1,250	929	2,990,000	5,820	4,450	10,700,000
Macedonia	--	--	--	557	437	1,470,000
Mexico	2	2	6,800	22	17	68,700
Russia	1,020	780	3,010,000	3,020	2,300	8,370,000
South Africa	15,500	11,800	42,400,000	108,000	82,800	224,000,000
Spain	1,100	844	3,120,000	2,740	2,100	7,090,000
Ukraine	5,100	3,960	14,600,000	13,300	10,400	30,500,000
Venezuela	--	--	--	284	211	533,000
Total	35,000	26,800	95,800,000	173,000	133,000	369,000,000
Grand total	57,800	45,400	176,000,000	276,000	217,000	648,000,000

-- 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 represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other changes 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 JULY 2008<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>
<b>More than 20%, but less than 47% manganese:</b>						
Brazil	--	--	--	436	201	\$195,000
Gabon	--	--	--	106,000	49,400	19,100,000
India	--	--	--	4	1	6,050
Total	--	--	--	106,000	49,600	19,300,000
<b>47% or more manganese:</b>						
Australia	--	--	--	35,900	18,600	11,800,000
Brazil	4,040	2,050	\$349,000	51,700	27,000	14,700,000
China	--	--	--	660	415	421,000
Gabon	1,500	1,500 <sup>4</sup>	845,000	80,700	46,300	21,900,000
Ghana	--	--	--	12,500	6,230	5,580,000
South Africa	30,300	14,300	18,300,000	30,300	14,300	18,400,000
Total	35,800	17,900	19,500,000	212,000	113,000	72,800,000
Grand total	35,800	17,900	19,500,000	318,000	162,000	92,100,000

-- 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 changes incurred in bringing the material into the United States.

<sup>4</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 5  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE IN JULY 2008<sup>1,2</sup>

(Metric tons, gross weight)

Source	Quantity	Customs value <sup>3</sup>	Year to date	
			Quantity	Customs value <sup>3</sup>
Australia	--	--	4,380	\$6,230,000
Belgium	60	\$210,000	251	693,000
Brazil	32	54,500	150	225,000
China	20	23,300	507	565,000
Germany	--	--	27	71,100
India	--	--	7	15,100
Japan	705	1,060,000	2,520	3,820,000
Mexico	2,490	661,000	3,000	1,420,000
Singapore	10	16,700	96	163,000
South Africa	1,570	3,240,000	2,470	5,200,000
Others (2 countries)	--	--	4	18,700
Total	4,890	5,260,000	13,400	18,400,000

-- Zero.

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

<sup>2</sup>Presentation of monthly data is based on the year-to-date quantities of the 10 leading countries.

<sup>3</sup>Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other changes 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 JULY 2008<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	1,560	\$6,690,000	8,710	\$28,700,000
Germany	--	--	500	1,470,000
New Caledonia	--	--	120	348,000
South Africa	76	281,000	491	1,340,000
Total	1,630	6,970,000	9,830	31,800,000
<b>Unwrought powder:</b>				
China	140	621,000	2,500	10,200,000
Korea, Republic of	--	--	44	143,000
Mexico	--	--	41	217,000
South Africa	414	1,900,000	2,590	11,200,000
Total	554	2,520,000	5,170	21,800,000
<b>Unwrought, other:</b>				
China	643	2,270,000	2,540	7,440,000
Germany	245	1,090,000	1,030	4,400,000
Russia	17	34,100	34	129,000
United Kingdom	112	517,000	422	1,880,000
Total	1,020	3,920,000	4,030	13,900,000
<b>Other manganese, wrought:</b>				
Belgium	--	--	(3)	2,350
Canada	--	--	(3)	4,210
China	--	--	187	628,000
Japan	--	--	(3)	5,160
Mexico	38	267,000	426	2,530,000
Singapore	--	--	(3)	2,100
United Kingdom	--	--	(3)	5,860
Total	38	267,000	613	3,170,000
Grand total	3,240	13,700,000	19,600	70,600,000

-- 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 changes 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 July 2008; the year-to-date total remains at 35 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 JULY 2008<sup>1</sup>

Country	Manganese ore		Ferromanganese, 2% or less C		Silicomanganese		Manganese metal <sup>2</sup>	
	July	Year to date	July	Year to date	July	Year to date	July	Year to date
Argentina	--	--	--	--	--	--	--	4
Australia	--	--	--	10	--	--	--	--
Belgium	--	--	--	--	--	--	32	109
Brazil	--	1	--	--	--	96	--	--
Canada	91	816	219	7,360	60	298	--	67
Chile	--	--	--	13	--	--	--	--
China	640	28,400	--	--	--	--	34	434
Colombia	--	--	--	--	--	--	--	1
Germany	430	649	--	--	--	--	--	119
Hong Kong	--	--	--	--	--	--	--	330
India	--	--	--	--	--	--	23	159
Israel	--	16	--	--	--	--	--	--
Italy	--	--	--	--	--	203	--	11
Japan	--	2 <sup>3</sup>	--	6	--	217	71	589
Korea, Republic of	106	212	--	--	--	--	--	--
Malaysia	--	5	--	--	--	--	--	--
Mexico	--	10	2	3,160	92	1,970	--	7
Netherlands	--	--	--	796	--	429	--	--
Niger	--	--	--	--	--	405	--	--
Peru	--	--	--	--	--	--	8	41
Poland	--	--	--	--	--	--	--	20
Russia	--	13	--	--	--	--	--	--
South Africa	--	--	--	--	--	--	--	47
Spain	--	--	--	502	--	1,640	--	--
Sweden	--	12	--	--	--	--	--	--
Taiwan	--	--	--	--	--	--	43	43
United Kingdom	--	--	--	--	--	--	1	2
Vietnam	--	--	--	--	--	--	8	52
Total	1,270	30,100	221	11,900	153	5,260	219	2,030

<sup>4</sup>Revised. -- 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.

Note: Exports of ferromanganese with more than 2% carbon totaled 2,610 metric tons (t), of which 1,870 t went to Canada, 136 t went to Ireland, and 602 t went to Spain, to give a year-to-date total of 3,780 t.

Source: U.S. Census Bureau.

TABLE 8  
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN JULY 2008, 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	322	\$429	Mexico 225; \$236	2,780	\$2,170	Mexico 1,150; \$795
Manganites, manganates, and other permanganates	20	23	Poland 20; \$23	69	70	Poland 69; \$70
Potassium permanganate	36	99	Czech Republic 36; \$99	490	1,280	Czech Republic 297; \$778
Sodium permanganate	35	83	China 35; \$83	212	492	China 195; \$422
Sulfates, basket category, including manganese sulfate	2,840	4,120	Mexico 1,490; \$1,960	24,600	22,700	Mexico 10,300; \$10,000
<b>Exports:</b>						
Manganese dioxide	1,230	1,460	Canada 711; \$540	6,680	7,430	Canada 3,580; \$2,290
Manganese oxides other than dioxide	1,270	1,140	Canada 843; \$386	9,180	9,550	Canada 5,520; \$2,390
Manganites, manganates, and other permanganates	23	58	Mexico 19; \$47	189	503	Mexico 97; \$182
Potassium permanganate	498	1,090	Belgium 439; \$881	1,860	4,120	Belgium 1,410; \$2,650
Sodium permanganate	314	693	Belgium 189; \$296	914	2,260	Belgium 321; \$581
Sulfates, basket category, including manganese sulfate	2,410	3,010	Canada 1,610; \$1,180	16,500	17,700	Canada 12,300; \$11,000

-- 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.