

# Mineral Industry Surveys

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# **MANGANESE IN JULY 2008**

Preliminary reported data (gross weight) for July 2008 indicate that consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 25,000 metric tons (t), according to the U.S. Geological Survey. This was up slightly from that reported consumed in June 2008, and 1.5 times greater than the net manganese ore imports in July (16,600 t).

Corresponding industry stocks of ore at the end of the July were 98,900 t, which was the same as that at the end of June

2008. These data include estimates for annual respondents on the basis of 2007 data.

The gap between reported consumption and net imports for consumption, as well as insignificant changes in ending stocks of manganese ore, are indicative of incomplete reporting to the USGS voluntary monthly manganese ore consumption survey.

Data for U.S. imports and exports for June are published in this issue.

### Ferroalloy Prices, manganese content

	High-carbon ferromanganese <sup>1</sup>	Medium-carbon ferromanganese <sup>1</sup>	Silicomanganese <sup>1</sup>	Manganese metal <sup>2</sup>
	(dollars per gross ton)	(cents per pound)	(cents per pound)	(cents per pound)
July 3	3,150.00-3,250.00	240.00-245.00	112.00-117.00	220.00-225.00
July 10	3,200.00-3,300.00	240.00-245.00	112.00-117.00	220.00-225.00
July 17	3,200.00-3,300.00	240.00-245.00	112.00-117.00	215.00-220.00
July 24	3,200.00-3,300.00	240.00-245.00	110.00-115.00	210.00-215.00
July 31	3,200.00-3,300.00	240.00-245.00	110.00-115.00	210.00-215.00

# Ore Prices, dollars per metric ton unit, manganese content<sup>3</sup>

	44% Manganese Ore <sup>2</sup>	48% Manganese Ore <sup>2</sup>
July 3	16.00-16.50	17.50-18.50
July 10	16.00-16.50	17.50-18.50
July 17	16.00-16.50	17.50-18.50
July 24	16.00-16.50	17.50-18.50
July 31	16.00-16.50	17.50-18.50

<sup>&</sup>lt;sup>1</sup>Source: Platts Metals Week, dealer import price. <sup>2</sup>Source: Ryan's Notes, cost and freight, China.

<sup>&</sup>lt;sup>3</sup>To determine dollars per metric ton, multiply the manganese content percentage by the price.

 $\label{eq:table 1} \textbf{TABLE 1}$  SELECTED U.S. FOREIGN TRADE IN MANGANESE  $^1$ 

(Metric tons, manganese content)<sup>2</sup>

	Im	Imports for consumption			Exports	
	Ore and	Ferroalloy			Ferroalloy	
	dioxide	and metal	Total	Ore	and metal	Total
2007:						
June	26,000	47,200	73,300	163	4,250	4,410
January-June	172,000	271,000	443,000	563 <sup>r</sup>	20,600	21,200
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
Total	150,000	326,000	476,000	14,400	15,300	29,700

rRevised.

Source: U.S. Census Bureau.

 ${\bf TABLE~2}$  U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN JUNE  $2008^1$ 

#### (Metric tons)

					Year to date	
	Gross		Customs	Gross		Customs
Source	weight	Mn content	value <sup>2</sup>	weight	Mn content	value <sup>2</sup>
Argentina	504	328	\$857,000	504	328	\$857,000
Australia	10,800	7,180	22,400,000	21,300	14,100	40,200,000
Canada				204	152	242,000
Georgia				40,500	30,400	72,200,000
Korea, Republic of	150	87	281,000	2,720	1,750	4,940,000
Macedonia				9,860	6,510	20,100,000
Mexico	1,300	848	1,910,000	7,200	4,720	9,360,000
Norway	5,550	3,370	13,000,000	39,600	24,800	69,200,000
Romania				2,340	1,660	5,010,000
Russia				2,070	1,370	3,870,000
Saudi Arabia	366	238	842,000	1,370	892	2,180,000
South Africa	18,700	12,400	39,800,000	76,400	51,400	135,000,000
Total	37,400	24,400	79,200,000	204,000	138,000	363,000,000

<sup>--</sup> Zero.

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

<sup>&</sup>lt;sup>2</sup>As reported except as estimated for imports of manganese dioxide and manganese waste and scrap and for exports from gross weights.

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

<sup>&</sup>lt;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.

 ${\bf TABLE~3}$  U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN JUNE  $2008^1$ 

# (Metric tons)

					Year to date	
	Gross		Customs	Gross		Customs
Source	weight	Mn content	value <sup>2</sup>	weight	Mn content	value <sup>2</sup>
Low carbon:						
Brazil	649	508	\$2,420,000	649	508	\$2,420,000
Canada	37	30	130,000	42	34	137,000
China	1,570	1,300	5,890,000	20,000	16,600	58,200,000
Korea, Republic of				1,000	811	3,020,000
Mexico	915	783	2,300,000	5,460	4,460	11,900,000
Norway	681	560	2,770,000	2,230	1,810	7,500,000
United Kingdom				72	61	43,200
Total	3,860	3,180	13,500,000	29,400	24,300	83,300,000
Medium carbon, 1%-2% C:						
Brazil	425	349	1,630,000	425	349	1,630,000
China	2,660	2,080	8,520,000	16,800	13,400	38,200,000
France				40	32	128,000
Georgia				3,840	3,090	8,900,000
Korea, Republic of	1,000	813	3,170,000	3,100	2,520	8,050,000
Mexico	381	294	873,000	6,160	4,960	10,700,000
Norway	147	120	522,000	1,170	962	3,420,000
South Africa	1,250	1,040	4,470,000	18,200	14,700	41,100,000
Ukraine				395	354	1,120,000
Total	5,870	4,700	19,200,000	50,100	40,400	113,000,000
Medium carbon, 2%-4% C:						
China				633	498	275,000
Georgia	721	614	1,730,000	721	614	1,730,000
Total	721	614	1,730,000	1,350	1,110	2,000,000
High carbon:						
Australia	501	385	1,410,000	501	385	1,410,000
Brazil				966	721	1,640,000
British Virgin Islands				176	132	418,000
Canada				18	13	24,000
China	3,170	2,390	8,170,000	17,300	13,100	31,600,000
Georgia				488	415	1,170,000
India	2,550	1,910	6,630,000	8,880	6,470	19,900,000
Korea, Republic of				4,570	3,520	7,740,000
Macedonia				557	437	1,470,000
Mexico				20	16	61,900
Russia				2,000	1,520	5,360,000
South Africa	14,100	10,800	37,900,000	92,100	71,000	182,000,000
Spain				1,640	1,250	3,970,000
Ukraine	2,160	1,710	5,750,000	8,200	6,450	15,900,000
Venezuela	226	170	461,000	284	211	533,000
Total	22,700	17,400	60,300,000	138,000	106,000	273,000,000
Grand total	33,100	25,900	94,800,000	219,000	171,000	472,000,000

<sup>--</sup> Zero.

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

<sup>&</sup>lt;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.

TABLE 4 U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn) IN JUNE 2008  $^{\!1,2}$ 

#### (Metric tons)

					Year to date	
Source	Gross weight	Mn content	Customs value <sup>2</sup>	Gross weight	Mn content	Customs value <sup>3</sup>
More than 20%, but less than 47% manganese:						
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
47% or more manganese:						
Australia	21,100	11,100	\$9,790,000	35,900	18,600	11,800,000
Brazil				47,700	24,900	14,300,000
China	306	191	211,000	660	415	421,000
Gabon	19,800	10,700	5,740,000	79,200	44,800	21,100,000
Ghana				12,500	6,230	5,580,000
South Africa				24	22 4	38,100
Total	41,200	21,900	15,700,000	176,000	95,000	53,300,000
Grand total	41,200	21,900	15,700,000	282,000	145,000	72,600,000

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

 ${\it TABLE~5}$  U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE IN JUNE  $2008^{1.2}$ 

#### (Metric tons, gross weight)

			Year	to date
		Customs		Customs
Source	Quantity	value <sup>3</sup>	Quantity	value <sup>3</sup>
Australia			4,380	\$6,230,000
Belgium	20	\$64,400	190	483,000
Brazil			118	171,000
China			487	541,000
Germany	2	14,500	27	71,100
India	(4)	2,890	7	15,100
Japan	487	719,000	1,810	2,750,000
Mexico			505	762,000
Singapore	20	33,400	86	146,000
South Africa	664	1,430,000	897	1,960,000
Other (2 countries)	(4)	6,250	4	18,700
Total	1,190	2,270,000	8,510	13,200,000

<sup>--</sup> Zero.

<sup>&</sup>lt;sup>1</sup>Quantities for general imports and imports for consumption are identical.

<sup>&</sup>lt;sup>2</sup>Data rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;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>&</sup>lt;sup>4</sup>Content reported is typical of total manganese dioxide content rather than Mn content.

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

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

<sup>&</sup>lt;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>&</sup>lt;sup>4</sup>Less than ½ unit.

 ${\it TABLE~6}$  U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN JUNE  $2008^{\rm l}$ 

#### (Metric tons)

			Year	to date
	Gross	Customs	Gross	Customs
Source	weight	value <sup>2</sup>	weight	value <sup>2</sup>
Unwrought flake:				
China	922	\$3,340,000	7,160	\$22,000,000
Germany			500	1,470,000
New Caledonia			120	348,000
South Africa	57	115,000	415	1,060,000
Total	979	3,460,000	8,190	24,800,000
Unwrought powder:				
China	270	1,280,000	2,360	9,610,000
Korea, Republic of			44	143,000
Mexico			41	217,000
South Africa	275	1,260,000	2,180	9,270,000
Total	545	2,550,000	4,620	19,200,000
Unwrought, other:				
China	458	1,310,000	1,900	5,170,000
Germany	47	191,000	787	3,310,000
Russia			17	94,700
United Kingdom	18	69,500	310	1,360,000
Total	523	1,570,000	3,010	9,930,000
Other manganese, wrought:				
Belgium			(3)	2,350
Canada	(3)	4,210	(3)	4,210
China			187	628,000
Japan	(3)	5,160	(3)	5,160
Mexico	102	450,000	388	2,260,000
Singapore			(3)	2,100
United Kingdom			(3)	5,860
Total	102	459,000	575	2,910,000
Grand total	2,150	8,040,000	16,400	56,900,000
7000				

<sup>--</sup> Zero.

Note: There were no imports for consumption of metallic waste and scrap in June 2008. The year-to-date total was 35 metric tons.

 $<sup>^{1}\</sup>mbox{Data}$  rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;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>&</sup>lt;sup>3</sup>Less than ½ unit.

 $TABLE\ 7$  U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE, SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN JUNE  $2008^1$ 

			Ferrom	anganese,				
	Mang	anese ore	2% c	r less C	Silicomanganese		Manganese metal <sup>2</sup>	
Country	June	Year to date	June	Year to date	June	Year to date	June	Year to date
Argentina								4
Australia				10				
Belgium								77
Brazil		1			14	96		
Canada	168	725	129	7,150	46	238	3	67
Chile				13				
China	3,910	27,800					192	400
Colombia								1
Germany	34	219					3	119
Hong Kong							76	330
India							55	136
Israel		16						
Italy						203		11
Japan				6		217	181	518
Korea, Republic of		106						
Malaysia		5						
Mexico		10		3,160	134	1,870		7
Netherlands				796		429		
Niger						405		
Peru							13	33
Poland							20	20
Russia		13						
South Africa							47	47
Spain			502	502		1,640		
Sweden	12	12						
United Kingdom								1
Vietnam								44
Total	4,120	28,900	631	11,600	195	5,100	589	1,820

<sup>--</sup> Zero.

Note: Exports of ferromanganese with more than 2% carbon totaled 283 metric tons, all of which went to Canada, to give a year-to-date total of 1,170 metric tons.

 $<sup>^{1}\</sup>mathrm{Data}$  rounded to no more than three significant digits; may not add to totals shown.

 $<sup>^2\</sup>mbox{Includes}$  manganese-aluminum, some other alloys, and waste and scrap.

 ${\it TABLE~8}$  U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN JUNE 2008, BY  ${\it CLASS}^1$ 

					Year to date	
	Gross weight	Value <sup>2</sup>	Principal sources and destinations: gross weight (metric tons);	Gross weight	Value <sup>2</sup>	Principal sources and destinations: gross weight (metric tons):
Class	(metric tons)	(thousands)	value <sup>2</sup> (thousands)	(metric tons)	(thousands)	value <sup>2</sup> (thousands)
Imports for consumption:						
Manganese oxides other than dioxide	388	\$272	Brazil 240; \$132	2,450	\$1,750	Norway 1,000; \$400
Manganites, manganates, and						
other permanganates				49	47	Poland 49; \$47
Potassium permanganate	42	118	Czech Republic 42; \$118	454	1,180	Czech Republic 261; \$679
Sodium permanganate	(3)	4	Canada (3); \$4	177	409	China 160; \$340
Sulfates, basket category,						
including manganese sulfate	6,150	5,180	China 3,990; \$2,680	21,800	18,500	China 7,640; \$6,160
Exports:						
Manganese dioxide	970	1,300	Canada 329; \$195	5,450	5,960	Canada 2,870; \$1,750
Manganese oxides other than dioxide	1,400	1,340	Canada 814; \$371	7,910	8,420	Canada 4,670; \$2,010
Manganites, manganates, and						
other permanganates	21	40	Mexico 20; \$34	166	445	Canada 85; \$221
Potassium permanganate	164	393	Belgium 95; \$188	1,360	3,030	Belgium 974; \$1,770
Sodium permanganate	199	394	Singapore 58; \$149	600	1,570	China 148; \$389
Sulfates, basket category,						
including manganese sulfate	2,800	3,170	Canada 1,740; \$2,070	14,100	14,700	Canada 10,700; \$9,800

<sup>--</sup> Zero.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits.

<sup>&</sup>lt;sup>2</sup>For imports, Customs value; for exports, free alongside ship value.

<sup>&</sup>lt;sup>3</sup>Less than ½ unit.