

# Mineral Industry Surveys

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# **MANGANESE IN JULY 2010**

Preliminary reported data (gross weight) for July 2010 indicate that consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 36,700 metric tons (t), according to the U.S. Geological Survey. This was a slight increase from the amount consumed in June 2010. The amount of manganese ore consumed in the first 7 months of 2010 was 261,000 t. This was a 5% increase from the revised amount consumed during the same period in 2009 (248,000 t). Industry stocks of ore at the end of July 2010 were 181,000 t, which was a slight decrease from that at the end of June 2010.

Data for U.S. manganese imports and exports for June 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 65% lower and 46% higher, respectively, than those in May 2010. U.S. imports of

manganese ore plus dioxide and manganese ferroalloys plus metal during the first 6 months of 2010 were 22% higher and 165% 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 June 2010 were 94% lower and 13% higher, respectively, than those in May 2010. U.S. exports of manganese ore and manganese ferroalloys plus metal during the first 6 months of 2010 were 37% lower and 63% lower, respectively, than those during the same period in 2009 (table 1).

### Prices

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

# Ferroalloys prices<sup>1</sup>

Price Range	Average Price
1,320.00-1,365.00	1,337.50
122.00-132.00	128.00
62.50-65.00	63.75
	1,320.00-1,365.00 122.00-132.00

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

	Price Range	Average Low, Mid, and High Prices
Manganese metal <sup>3</sup>	150.00-158.00	150.33-152.83-155.33
36%-39% Manganese ore <sup>5</sup>	6.00-7.50	6.89-7.06-7.22
44% Manganese ore <sup>5</sup>	7.10-8.60	7.17-7.65-8.13
48% Manganese ore <sup>5</sup>	7.90-8.90	7.99-8.17-8.36

<sup>&</sup>lt;sup>1</sup>Source: Platts Metals Week, dealer import price; average prices reported for all transactions during the month.

<sup>&</sup>lt;sup>2</sup>Dollars per gross ton.

<sup>&</sup>lt;sup>3</sup>Cents per pound.

<sup>&</sup>lt;sup>4</sup>Source: Ryan's Notes, cost and freight, China; average prices reported for the price range.

<sup>&</sup>lt;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%.

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

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

	Impo	orts for consump	tion		Exports		
	Ore and	Ferroalloy			Ferroalloy		
	dioxide	and metal	Total	Ore	and metal	Total	
2009:							
June	61,300	8,970	70,300	526	5,360	5,890	
January-June	125,000	87,500	212,000	3,290	19,900	23,200	
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	
Total	152,000	232,000	384,000	2,060	7,390	9,450	

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

Source: U.S. Census Bureau.

 ${\rm TABLE}~2$  U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN JUNE  $2010^1$ 

# (Metric tons)

				Year to date			
	Gross	Mn	Customs	Gross	Mn	Customs	
Source	weight	content	value <sup>2</sup>	weight	content	value <sup>2</sup>	
Australia	4,510	2,950	\$5,520,000	19,700	13,100	\$20,800,000	
Bahrain				1,140	760	1,480,000	
Canada				14	5	11,400	
Georgia	12,900	9,310	15,400,000	18,800	13,400	22,000,000	
India				364	201	640,000	
Mexico	2,000	1,320	2,470,000	6,800	4,480	7,760,000	
Norway	5,100	3,500	7,000,000	24,500	15,300	37,500,000	
Russia				544	358	515,000	
Saudi Arabia				2,050	1,350	2,260,000	
South Africa	6,600	4,320	9,140,000	68,100	45,600	78,800,000	
Spain	897	547	1,710,000	2,490	1,500	4,520,000	
Vietnam	40	26	60,100	40	26	60,100	
Total	32,100	22,000	41,300,000	145,000	96,100	176,000,000	

<sup>--</sup> Zero.

<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.

 $<sup>^{1}\</sup>mbox{Data}$  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 charges incurred in bringing the material into the United States.

 ${\bf TABLE~3}$  U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN JUNE  $2010^{\rm l}$ 

# (Metric tons)

				Year to date			
	Gross	Mn	Customs	Gross	Mn	Customs	
Source	weight	content	value <sup>2</sup>	weight	content	value <sup>2</sup>	
Low carbon:							
China	2,590	2,270	\$6,800,000	15,400	13,400	\$38,500,000	
Korea, Republic of				1,700	1,360	3,570,000	
Mexico	900	726	2,060,000	6,550	5,270	13,100,000	
Netherlands				220	178	429,000	
Norway	540	436	1,250,000	2,660	2,170	5,310,000	
South Africa				3	2	7,080	
Vietnam	57	54	112,000	57	54	112,000	
Total	4,090	3,490	10,200,000	26,600	22,400	60,900,000	
Medium carbon, 1%-2% C:							
China	2,810	2,240	6,010,000	7,110	5,670	12,100,000	
India	200	158	426,000	662	526	1,360,000	
Korea, Republic of	499	399	1,250,000	9,140	7,250	19,700,000	
Mexico	2,520	1,940	5,370,000	6,810	5,370	13,300,000	
Netherlands				48	38	118,000	
Norway	4,100	3,320	8,570,000	14,000	11,300	25,700,000	
Russia				18	14	46,300	
South Africa	1,270	1,020	2,980,000	11,900	9,520	22,200,000	
Spain				99	80	146,000	
Total	11,400	9,070	24,600,000	49,800	39,700	94,800,000	
Medium carbon, 2%-4% C:							
China				20	11	36,000	
South Africa				72	66	185,000	
Switzerland	50	39	49,100	50	39	49,100	
Total	50	39	49,100	142	116	270,000	
High carbon:							
Australia				501	388	648,000	
Bahrain				300	229	360,000	
Brazil				1,100	829	1,340,000	
France	3,000	2,060	4,020,000	7,730	5,690	9,170,000	
Kazakhstan				1,450	1,100	1,620,000	
Mexico				5	4	6,940	
Norway				704	565	746,000	
Russia	629	459	641,000	649	473	659,000	
South Africa	6,860	5,330	10,200,000	44,600	34,500	54,500,000	
Ukraine	3,930	3,090	4,540,000	12,100	9,470	13,500,000	
Venezuela	1,000	750	1,450,000	1,000	750	1,450,000	
Zambia				994	698	1,030,000	
Total	15,400	11,700	20,900,000	71,200	54,700	85,000,000	
Grand total	30,900	24,300	55.700.000	148,000	117,000	241,000,000	
Grand total	50,700	21,300	33,700,000	110,000	117,000	_11,000,000	

<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 charges 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  $2010^{1.\,2}$ 

# (Metric tons)

					Year to date	
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value <sup>3</sup>	weight	content	value <sup>3</sup>
More than 20%, but less than 47% manganese:						
Gabon				8,020	3,570	\$399,000
Ghana	36,600	10,300	\$5,080,000	36,600	10,300	5,080,000
Mexico				1,470	528	345,000
South Africa				44,300	17,700	7,250,000
Total	36,600	10,300	5,080,000	90,500	32,100	13,100,000
47% or more manganese:						
Australia				69,600	56,900	20,100,000
Brazil				3,960	2,020	1,230,000
China	133	91	120,000	265	181	239,000
Gabon				70,700	36,100	16,300,000
Georgia				12,400	8,610	13,000,000
Morocco	501	240	28,800	1,360	670	70,100
South Africa	<del></del>			18,000	9,850	6,010,000
Total	634	331	149,000	176,000	114,000	57,000,000
Grand total	37,300	10,600	5,230,000	267,000	146,000	70,000,000

<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 charges incurred in bringing the material into the United States.

 ${\it TABLE 5}$  U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE IN JUNE  $2010^1$ 

# (Metric tons, gross weight)

			Year to d	late
		Customs		Customs
Source	Source Quantity value <sup>2</sup>		Quantity	value <sup>2</sup>
Belgium			38	\$156,000
Brazil			1	2,240
Germany			38	67,800
India			(3)	3,970
Japan	828	\$1,800,000	3,340	7,240,000
Morocco			45	28,800
Netherlands			126	71,400
Singapore	11	19,400	76	129,000
South Africa			5,690	15,400,000
Spain			24	48,600
Total	840	1,820,000	9,380	23,100,000

<sup>--</sup> Zero.

 $<sup>^{1}\</sup>mbox{Data}$  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 charges incurred in bringing the material into the United States.

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

 ${\it TABLE~6}$  U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN JUNE  $2010^{\rm l}$ 

# (Metric tons)

			Year	to date
Source	Gross weight	Customs value <sup>2</sup>	Gross weight	Customs value <sup>2</sup>
Unwrought flake:				
China	1,700	\$4,020,000	7,980	\$19,900,000
Hong Kong			444	1,150,000
South Africa	38	120,000	666	1,960,000
Vietnam	167	153,000	1,110	2,690,000
Total	1,900	4,300,000	10,200	25,700,000
Unwrought powder:				
China	20	59,900	160	433,000
Mexico			20	79,800
South Africa	39	138,000	1,240	4,170,000
Total	59	198,000	1,420	4,680,000
Unwrought, other:				
China	953	2,320,000	5,460	12,800,000
Germany	84	267,000	447	1,330,000
Hong Kong			132	339,000
Poland			(3)	3,010
South Africa	19	64,600	438	1,440,000
Spain			9	22,700
United Kingdom	18	63,500	93	316,000
Total	1,070	2,720,000	6,580	16,200,000
Other manganese, wrought:				
Canada			(3)	7,110
China			45	136,000
France	4	3860	12	35,400
Mexico	65	376,000	145	801,000
Poland			(3)	4,900
South Africa			40	124,000
United Kingdom			8	30,700
Total	69	380,000	250	1,140,000
Grand total	3,110	7,590,000	18,400	47,800,000

<sup>--</sup> Zero.

Note: Imports for consumption of metallic waste and scrap totaled 137 metric tons, all of which was from Canada, to give a year-to-date total of 446 metric tons.

<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 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>&</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 2010  $^1$ 

(Metric tons, gross weight)

				Ferroman	ganese,					
	Mang	ganese ore	2%	or less C	More	than 2% C	Silicon	nanganese	Manga	nese metal <sup>2</sup>
Country	June	Year to date	June	Year to date	June	Year to date	June	Year to date	June	Year to date
Australia								1		22
Belgium	38	113						240		192
Brazil			189	189		25				
Canada	19	3,100	37	229	679	3,430	19	870	10	68
China		34							80	542
Colombia		1								
Germany	17	75								59
Hong Kong									141	613
India									21	184
Indonesia						1				38
Ireland						19				
Japan									18	128
Korea, Republic of	34	136								
Luxembourg										3
Malaysia		102								1
Mexico		2		19		20	199	1,350	14	46
Norway						3		19		
Singapore						9				
Spain		8						60		
Suriname										1
Taiwan		548								13
Trinidad and Tobago		4						279		
Turkey								420		
United Kingdom										1
Venezuela						1				
Vietnam										217
Total	108	4,120	226	437	679	3,510	218	3,240	284	2,130

<sup>--</sup> Zero.

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

<sup>&</sup>lt;sup>2</sup>Includes manganese-aluminum, other alloys, and waste and scrap.

 ${\it TABLE~8}$  U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN JUNE 2010, BY CLASS  $^1$ 

					Year to date		
			Principal sources and destinations:		_	Principal sources and destinations:	
	Gross weight	Value <sup>2</sup>	gross weight (metric tons);	Gross weight	Value <sup>2</sup>	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	860	\$781	Brazil 436; \$337	4,870	\$3,870	South Africa 1,770; \$1,070	
Manganites, manganates, and							
other permanganates				17	62	Germany 17; \$62	
Potassium permanganate	78	235	Czech Republic 42; \$124	634	1,960	India 378; \$1,180	
Sodium permanganate	41	98	China 40; \$89	292	661	China 290; \$646	
Sulfates, basket category, including manganese sulfate	4,941	4,991	China 2,380; \$1,760	22,700	19,900	Mexico 11,000; \$9,240	
Exports:							
Manganese dioxide	956	1,288	Canada 265; \$291	4,320	6,210	Canada 2,020; \$2,000	
Manganese oxides other than dioxide	613	949	Canada 188; \$170	3,940	6,350	Canada 1,230; \$1,190	
Manganites, manganates, and							
other permanganates	16	42	Canada 16; \$42	41	178	Canada 40; \$103	
Potassium permanganate	427	1,134	Belgium 350; \$892	1,560	4,450	Belgium 952; \$2,440	
Sodium permanganate	117	313	Belgium 38; \$92	619	1,460	Singapore 243; \$610	
Sulfates, basket category, including manganese sulfate	1,274	1,182	Canada 972; \$658	8,990	7,380	Canada 6,990; \$4,270	

<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.