

# Mineral Industry Surveys

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# **MANGANESE IN AUGUST 2007**

Preliminary data (gross weight) for August 2007 indicate that consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 9,730 metric tons (t), according to the U.S. Geological Survey. This was a 62% decrease from that in July 2007.

Corresponding industry stocks of ore at the end of the month were 94,600 t, which was a 16% increase from those at the end of July 2007. These data include estimates for annual respondents on the basis of 2006 data.

U.S. trade data for July 2007 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)
August 2	1,590.00-1,650.00	100.00-110.00	100.00-105.00	240.00-275.00
August 9	1,590.00-1,650.00	100.00-110.00	100.00-105.00	240.00-275.00
August 16	1,590.00-1,650.00	100.00-105.00	95.00-100.00	240.00-275.00
August 23	1,590.00-1,650.00	100.00-105.00	95.00-100.00	240.00-275.00
August 30	1,590.00-1,650.00	100.00-105.00	95.00-100.00	240.00-275.00

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

	44% Manganese Ore <sup>2</sup>	48% Manganese Ore <sup>2</sup>
August 2	6.75-7.00	7.25-7.50
August 9	6.75-7.00	7.25-7.50
August 16	6.75-7.00	7.25-7.50
August 23	6.75-7.00	7.25-7.40
August 30	6.75-7.00	7.25-7.40

<sup>&</sup>lt;sup>1</sup>Source: Platts Metals Week, dealer import price.

<sup>&</sup>lt;sup>2</sup>Source: Ryan's Notes, North American transaction price.

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

 $\label{eq:table1} \textbf{TABLE 1}$  SELECTED U.S. FOREIGN TRADE IN MANGANESE  $^{l}$ 

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

	Im	ports for consumption	on		Exports	
	Ore and	Ferroalloy			Ferroalloy	
	dioxide	and metal	Total	Ore	and metal	Total
2006:						
July	39,300	44,400	83,700	95	11,200	11,300
January-July	156,000	304,000	460,000	456	17,700	18,200
2007:						
January	24,500	40,300	64,800	77	1,180	1,250
February	48,500	35,700	84,200	144	7,350	7,500
March	20,300	36,000	56,400	29	694	724
April	15,600	44,800	60,400	57	1,030	1,090
May	37,200	66,500	104,000	93	6,110	6,200
June	26,000	47,200	73,300	163	4,250	4,410
July	25,600	30,000	55,700	93	1,830	1,930
Total	198,000	301,000	498,000	655	22,400	23,100

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

Source: U.S. Census Bureau.

 ${\it TABLE~2}$  U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN JULY  $2007^{\rm l}$ 

#### (Metric tons)

				·	Year to date	
	Gross		Customs	Gross		Customs
Source	weight	Mn content	value <sup>2</sup>	weight	Mn content	value <sup>2</sup>
Australia				18,600	12,700	\$13,100,000
Canada	20	13	\$6,470	478	345	352,000
China	16 <sup>3</sup>	16 <sup>3</sup>	61,100	34	33	115,000
Georgia				20,800	15,100	20,300,000
Korea, Republic of	2,440	1,460	3,010,000	2,640	1,600	3,200,000
Macedonia	5,820	3,870	5,460,000	13,000	8,640	11,500,000
Mexico	2,420	1,600	1,940,000	8,990	5,900	6,880,000
Morocco				20	20	6,000
Netherlands				21	13	24,400
Norway	6,290	3,990	6,130,000	28,800	18,100	29,800,000
Romania				14,100	9,630	11,200,000
Russia				344	239	323,000
South Africa	11,000	7,290	14,200,000	101,000	67,300	82,000,000
Total	28,000	18,200	30,900,000	209,000	140,000	179,000,000

<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>&</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.

<sup>&</sup>lt;sup>3</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

 ${\bf TABLE~3}$  U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN JULY  $2007^{\rm l}$ 

# (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:						
China	2,780	2,390	\$5,520,000	19,200	16,000	\$26,100,000
Japan	1,100	935	1,400,000	1,100	935	1,400,000
Korea, Republic of				2,000	1,600	2,230,000
Mexico				2,950	2,390	3,270,000
Norway	219	178	325,000	439	357	649,000
Russia				60	50	189,000
South Africa				5,400	4,410	4,990,000
Total	4,100	3,510	7,240,000	31,100	25,800	38,800,000
Medium carbon, 1%-2% C:						
China	117	91	137,000	6,180	4,960	6,570,000
Japan				1,700	1,450	1,990,000
Korea, Republic of	1,000	800	1,110,000	3,800	3,070	4,090,000
Mexico	665	535	640,000	4,270	3,420	3,830,000
South Africa	650	523	693,000	10,900	8,830	12,500,000
Spain	20	16	36,800	60	48	107,000
Turkey	20 3	$20^{-3}$	38,000	20	20	38,000
Total	2,470	1,990	2,650,000	26,900	21,800	29,200,000
High carbon:						
Australia				503	384	312,000
Brazil	701	538	557,000	1,720	1,340	1,300,000
China	383	289	306,000	21,000	16,000	15,700,000
Egypt				1,470	1,100	1,440,000
France				1,300	1,050	970,000
Georgia				2,010	1,580	1,910,000
Mexico				20	16	29,900
Poland				778	595	1,090,000
South Africa	1,380	1,060	1,460,000	87,500	67,700	66,300,000
Venezuela				750	489	503,000
Total	2,470	1,890	2,320,000	117,000	90,300	89,500,000
Grand total	9,040	7,380	12,200,000	175,000	138,000	158,000,000

<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.

<sup>&</sup>lt;sup>3</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

TABLE~4 U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn) IN JULY 2007  $^{1,\,2}$ 

# (Metric tons)

	·			·	Year to date	·
	Gross		Customs	Gross		Customs
Source	weight	Mn content	value <sup>3</sup>	weight	Mn content	value <sup>3</sup>
More than 20%, but less than 47% manganese:						
Australia				27,500	12,500	\$2,940,000
China	24,000	4,890	\$730,000	31,500	7,830	1,060,000
Gabon				46,600	20,300	3,860,000
Mexico				3,110	1,120	367,000
South Africa				41,800	18,200	2,630,000
Total	24,000	4,890	730,000	150,000	59,900	10,800,000
47% or more manganese:						
Australia	26,500	13,800	3,770,000	43,000	22,500	6,300,000
Brazil	5,180	2,590	311,000	21,600	10,900	1,870,000
China				4,550	2,620	515,000
Gabon				114,000	70,800	12,100,000
Mexico	3,040	1,520	183,000	3,040	1,520	183,000
South Africa				35,700	17,700	3,280,000
Total	34,700	17,900	4,260,000	222,000	126,000	24,300,000
Grand total	58,700	22,800	4,990,000	373,000	186,000	35,100,000

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

 ${\bf TABLE~5}$  U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE IN JULY  $2007^{\rm l}$ 

### (Metric tons, gross weight)

			Year	to date
		Customs		Customs
Source	Quantity	value <sup>2</sup>	Quantity	value <sup>2</sup>
Australia	1,880	\$2,580,000	9,200	\$12,600,000
Belgium			199	510,000
Brazil	23	39,900	73	100,000
China	1,020	1,080,000	6,740	7,030,000
Colombia			44	22,900
Germany	7	12,500	58	125,000
Japan	1,520	2,040,000	3,160	4,320,000
Mexico	334	567,000	347	577,000
Singapore	14	23,900	54	70,400
South Africa	- 		1	3,200
Total	4,800	6,330,000	19,900	25,300,000

<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>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.

 $\label{eq:table 6} \text{U.s. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN JULY 2007}^{1}$ 

# (Metric tons)

			Year	to date
		Customs		Customs
Source	Quantity	value <sup>2</sup>	Quantity	value <sup>2</sup>
Unwrought flake:				
China	2,960	\$9,070,000	14,700	\$33,800,000
Hong Kong	120	410,000	180	617,000
South Africa	133	322,000	1,050	2,050,000
Total	3,210	9,810,000	15,900	36,500,000
Unwrought powder:				
China	280	990,000	1,340	3,140,000
South Africa	468	850,000	2,710	4,950,000
Total	748	1,840,000	4,060	8,090,000
Unwrought, other:				
China	203	582,000	1,430	2,950,000
Germany	115	518,000	648	1,640,000
Russia			16	85,700
Spain	25	42,300	85	135,000
United Kingdom			11	51,900
Total	343	1,140,000	2,190	4,870,000
Other manganese, wrought:				
China			354	878,000
France	3	50,400	32	461,000
Japan			(3)	2,100
Mexico	20	80,600	135	306,000
Spain			50	127,000
Taiwan			1	14,300
United Kingdom	56	278,000	56	278,000
Total	79	410,000	627	2,070,000
Grand total	4,380	13,200,000	22,800	51,500,000

<sup>--</sup> Zero.

Note: Imports for consumption of metallic waste and scrap totaled 42 metric tons, all of which was from Canada, to give a year-to-date total of 721 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 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 JULY  $2007^1$ 

(Metric tons, gross weight)

			Ferrom	anganese,				
	Manga	anese ore	2% o	r less C	Silicomanganese		Manganese metal <sup>2</sup>	
Country	July	Year to date	July	Year to date	July	Year to date	July	Year to date
Argentina								6
Australia						1	2	3
Belgium		8					19	493
Brazil								1
Canada	112	610	434	2,530	1,150	2,810	9	17
Chile								8
China							65	154
Colombia								138
France								5
Germany	70	366					35	154
Hong Kong								216
India							24	114
Ireland			5	29				
Israel								8
Jamaica								(3)
Japan								394
Korea, Republic of		94						1
Malaysia	5	5						5
Mexico		20			5	186	1	17
South Africa							5	5
Sweden								26
Taiwan								65
United Kingdom				5				3
Venezuela							28	28
Vietnam		209						
Total	186	1,310	439	2,560	1,150	3,000	189	1,860

<sup>--</sup> Zero.

Note: Exports of ferromanganese with more than 2% carbon totaled 679 metric tons, of which 406 metric tons went to Mexico and 273 metric tons went to Canada, to give a year-to-date total of 21,000 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.

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

 ${\it TABLE~8}$  U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN JULY 2007, BY 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	315	\$214	Mexico 165; \$82	3,000	\$1,990	Mexico 1,950; \$884	
Manganites, manganates, and							
other permanganates							
Potassium permanganate	109	264	India 72; \$180	761	1,830	India 392; \$950	
Sodium permanganate	35	67	China 35; \$67	169	282	China 169; \$282	
Sulfates, basket category,							
including manganese sulfate	2,530	1,470	Mexico 1,250; \$669	25,200	12,600	China 12,700; \$5,300	
Exports:							
Manganese dioxide	851	723	Canada 483; \$237	5,220	5,100	Canada 2,480; \$1,330	
Manganese oxides other than dioxide	1,420	831	Canada 1,170; \$456	9,220	6,310	Canada 6,170; \$2,420	
Manganites, manganates, and							
other permanganates	4	9	Canada 4; \$9	51	127	Canada 42; \$99	
Potassium permanganate	79	251	Canada 44; \$131	1,380	3,270	Belgium 635; \$1,120	
Sodium permanganate	56	172	Japan 18; \$59	1,020	2,510	Spain 398; \$1,010	
Sulfates, basket category,							
including manganese sulfate	2,200	1,820	Canada 1,590; \$1,060	15,800	12,300	Canada 10,400; \$6,050	

<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.