

# Mineral Industry Surveys

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# **MANGANESE IN APRIL 2008**

Preliminary reported data (gross weight) for April 2008 indicate that consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 24,900 metric tons (t), according to the U.S. Geological Survey. This was about the same amount that was reported consumed in March 2008, but only about 27% of net manganese ore imports in April (92,100 t).

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

March 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 March 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)
April 3	3,100.00-3,200.00	220.00-225.00	115.00-120.00	215.00-220.00
April 10	3,100.00-3,200.00	225.00-235.00	115.00-120.00	215.00-220.00
April 17	3,100.00-3,200.00	230.00-235.00	115.00-120.00	215.00-220.00
April 24	3,200.00-3,300.00	230.00-235.00	115.00-120.00	215.00-220.00

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

	44% Manganese Ore <sup>2</sup>	48% Manganese Ore <sup>2</sup>
April 3	15.00-15.50	16.00-18.00
April 10	15.00-15.50	16.00-18.00
April 17	15.50-16.00	17.00-18.00
April 24	15.50-16.00	17.00-18.00

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

<sup>2</sup>Source: Ryan's Notes, cost and freight, China.

<sup>3</sup>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>

	Im	ports for consumption	on			
	Ore and	Ferroalloy			Ferroalloy	
	dioxide	and metal	Total	Ore	and metal	Total
2007:						
March	20,300	36,000	56,400	29	694	724
January-March	93,300	112,000	205,000	250	9,220	9,470 <sup>r</sup>
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
Total	48,900	167,000	216,000	2,330	6,220	8,560

<sup>r</sup>Revised. -- Zero.

<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 MARCH 2008<sup>1</sup>

## (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				6,310	4,160	\$9,390,000	
Georgia				26,100	19,500	40,100,000	
Korea, Republic of	300	174	\$560,000	1,800	1,170	2,960,000	
Mexico	1,000	660	1,460,000	3,700	2,430	4,230,000	
Norway	5,750	3,580	8,890,000	18,900	12,000	29,500,000	
Russia				1,600	1,060	2,780,000	
Saudi Arabia	500	327	625,000	1,000	654	1,340,000	
South Africa	12,100	8,370	18,200,000	34,100	23,300	51,800,000	
Total	19,700	13,100	29,700,000	93,500	64,300	142,000,000	

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

# TABLE 3 U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN MARCH $2008^{\rm l}$

					Year to date	
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value <sup>2</sup>	weight	content	value <sup>2</sup>
Low carbon:						
Canada				5	4	\$6,870
China	1,580	1,290	\$4,410,000	11,400	9,520	28,700,000
Korea, Republic of				500	404	1,390,000
Mexico	1,190	957	2,540,000	2,710	2,190	4,920,000
Norway	220	178	647,000	804	647	2,170,000
United Kingdom				72	61	43,200
Total	2,990	2,420	7,590,000	15,500	12,800	37,200,000
Medium carbon, 1%-2% C:						
China	57	45	184,000	8,310	6,650	14,200,000
France	40	32	128,000	40	32	128,000
Korea, Republic of				1,500	1,230	3,540,000
Mexico	1,160	927	2,510,000	3,950	3,190	6,000,000
Norway	220	181	531,000	660	545	1,590,000
South Africa	4,510	3,660	10,500,000	12,600	10,200	25,500,000
Ukraine				199	180	616,000
Total	5,990	4,840	13,900,000	27,300	22,000	51,600,000
High carbon:						
Brazil	466	351	821,000	466	351	821,000
China	1,620	1,220	2,660,000	11,400	8,690	17,500,000
India	3,000	2,050	5,600,000	4,200	2,950	7,440,000
Korea, Republic of	448	349	439,000	4,570	3,520	7,740,000
South Africa	19,300	14,900	32,500,000	47,900	36,900	75,500,000
Spain	231	179	232,000	231	179	232,000
Ukraine				6,040	4,740	10,200,000
Venezuela				58	41	72,400
Total	25,000	19,000	42,300,000	74,900	57,400	120,000,000
Grand total	34,000	26,300	63,800,000	118,000	92,300	208,000,000

-- 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 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 MARCH 2008<sup>1, 2</sup>

#### (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				55,600	26,100	\$8,060,000	
India				4	1	6,050	
Total				55,600	26,100	8,060,000	
47% or more manganese:							
Australia				8,200	4,250	1,150,000	
Brazil				8,970	4,480	538,000	
China	335	214 4	\$186,000	335	214	186,000	
Gabon	786	723	1,240,000	16,500	9,950	4,850,000	
South Africa	6	6 4	9,980	6	6	9,980	
Total	1,130	943	1,440,000	34,000	18,900	6,730,000	
Grand total	1,130	943	1,440,000	89,500	45,000	14,800,000	

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

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

Source: U.S. Census Bureau.

#### TABLE 5

#### U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE IN MARCH 2008<sup>1,2</sup>

#### (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	\$34,400	129	318,000
Brazil	12	19,800	32	54,800
China			487	541,000
Germany			15	24,700
India	6	12,200	6	12,200
Japan	465	689,000	829	1,210,000
Mexico			505	762,000
Singapore	8	13,500	29	49,400
South Africa	1	4,400	24	44,900
Other (2 countries)	4	9,260	4	9,260
Total	516	783,000	6,440	9,260,000

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

#### TABLE 6

# U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN MARCH 2008<sup>1</sup>

# (Metric tons)

			Year to date		
Source	Gross weight	Customs value <sup>2</sup>	Gross weight	Customs value <sup>2</sup>	
Unwrought flake:					
China	766	\$2,500,000	5,120	\$14,900,000	
Germany			500	1,470,000	
New Caledonia			120	348,000	
South Africa	38	76,600	225	460,000	
Total	804	2,580,000	5,970	17,200,000	
Unwrought powder:					
China	721	3,000,000	1,540	6,020,000	
Korea, Republic of			44	143,000	
Mexico			20	74,000	
South Africa	119	537,000	1,020	4,000,000	
Total	840	3,540,000	2,620	10,200,000	
Unwrought, other:					
China	319	771,000	683	1,710,000	
Germany	78	318,000	447	1,860,000	
Russia			17	94,700	
United kingdom	56	260,000	170	730,000	
Total	453	1,350,000	1,320	4,390,000	
Other manganese, wrought:					
China	22	114,000	22	114,000	
Mexico	41	314,000	143	810,000	
Singapore			(3)	2,100	
United Kingdom			(3)	5,860	
Total	63	429,000	165	933,000	
Grand total	2,160	7,890,000	10,100	32,700,000	

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

<sup>3</sup>Less than <sup>1</sup>/<sub>2</sub> unit.

Note: Imports for consumption of metallic waste and scrap totaled 15 metric tons, all of which was from Canada, to give a year-to-date total of 35.

## TABLE 7

# U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE, SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN MARCH 2008<sup>1</sup>

			Ferrom	anganese,					
	Manga	Manganese ore		2% or less C		Silicomanganese		Manganese metal <sup>2</sup>	
Country	March	Year to date	March	Year to date	March	Year to date	March	Year to date	
Argentina							4	4	
Australia			10	10					
Belgium								77	
Brazil					14	14			
Canada	36	158	5,260	5,340	145	149	9	34	
Chile			4	13					
China		4,300					33	146	
Colombia							1	1	
Germany	51	70						38	
Hong Kong							73	155	
India							7	31	
Israel		16							
Italy								11	
Japan		2		6		217	210	210	
Korea, Republic of	76	106							
Mexico		10			88	176		7	
Netherlands					429	429			
Peru							4	12	
Spain					38	38			
United Kingdom							1	1	
Vietnam							4	15	
Total	163	4,660	5,280	5,370	714	1,020	345	741	

# (Metric tons, gross weight)

-- 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.

Note: Exports of ferromanganese with more than 2% carbon totaled 125 metric tons, of which 85 tons went to Canada, and 40 tons went to Malaysia, to give a year-to-date total of 719 metric tons.

# TABLE 8 U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN MARCH 2008, BY CLASS $^{\rm 1}$

					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:	(metric tons)	(mousanus)	value (mousanus)	(metric tons)	(mousanus)	value (mousanus)
Manganese oxides other than dioxide	175	\$104	Mexico 130; \$58	1,240	\$851	Mexico 544; \$257
Manganites, manganates, and						
other permanganates	32	23	Poland 32; \$23	49	47	Poland 49; \$47
Potassium permanganate	94	244	Czech Republic 58; \$152	300	764	Czech Republic 161; \$406
Sodium permanganate	17	66	Germany 17; \$66	88	211	China 71; \$145
Sulfates, basket category,						
including manganese sulfate	2,710	2,420	Mexico 1,470; \$1,150	8,840	6,460	Chile 3,500; \$1,480
Exports:						
Manganese dioxide	1,250	1,130	Canada 763; \$434	2,960	2,440	Canada 1,850; \$1,050
Manganese oxides other than dioxide	1,110	1,120	Canada 746; \$296	3,450	3,160	Canada 2,370; \$964
Manganites, manganates, and						
other permanganates	33	81	Mexico 19; \$34	74	236	Mexico 39; \$67
Potassium permanganate	248	637	Belgium 153; \$306	663	1,550	Belgium 497; \$969
Sodium permanganate	57	155	Spain 18; \$38	233	681	China 97; \$253
Sulfates, basket category,						
including manganese sulfate	2,140	2,130	Canada 1,500; \$1,130	5,990	6,700	Canada 4,690; \$4,700

<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.