

# Mineral Industry Surveys

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**For information, contact:**

Lisa A. Corathers, Manganese Commodity Specialist  
U.S. Geological Survey  
989 National Center  
Reston, VA 20192  
Telephone: (703) 648-4973, Fax: (703) 648-7757  
E-mail: lcorathers@usgs.gov

Hodan A. Fatah (Data)  
Telephone: (703) 648-4971  
Fax: (703) 648-7975  
E-mail: hfatah@usgs.gov

**Internet:** <http://minerals.usgs.gov/minerals>

## MANGANESE IN MARCH 2013

Preliminary domestic data (gross weight) for March 2013 indicated that consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 49,800 metric tons (t). This was a 10% increase from the revised amount of 45,200 t consumed in February 2013. Manganese ore consumption during the first 3 months of 2013 was 150,000 t, which was 13% higher than that of the

same period in 2012. Industry stocks of ore at the end of March 2013 were 221,000 t, which was a 9% decrease from those at the end of February 2013.

Included in this Mineral Industry Surveys are U.S. spot market prices and U.S. foreign trade data for selected manganese-containing materials in March 2013.

TABLE 1  
PRICES FOR MANGANESE FERROALLOYS, METAL, AND ORE IN MARCH 2013

		High	Low	Average	Average low, mid, and high
<u>Manganese ferroalloys:<sup>1</sup></u>					
High-carbon ferromanganese, 75% manganese	dollars per long ton of contained manganese	1,150.00	1,070.00	1,120.00	XX
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	89.50	87.00	88.00	XX
Silicomanganese, 65% manganese	do.	54.00	52.00	53.00	XX
Manganese metal, 99.9% manganese flake <sup>2</sup>	cents per pound	136.00	131.00	XX	131.67–133.94–136.22
<u>Manganese ore:<sup>3, 4</sup></u>					
36%–39% manganese	dollars per metric ton unit contained manganese	5.50	5.25	XX	5.29–5.34–5.39
44% manganese	do.	5.90	5.60	XX	5.67–5.74–5.82
46% manganese	do.	5.75	5.55	XX	5.59–5.64–5.69

do. Ditto. XX Not applicable.

<sup>1</sup>Platts Metals Week; in U.S. warehouse; average prices reported for all transactions during the month.

<sup>2</sup>Ryan's Notes North American transaction prices, electrolytic manganese metal flake, 99.99% manganese, free-on-board producing point or Chicago/Pittsburgh warehouse; average prices reported for the price range.

<sup>3</sup>Ryan's Notes, cost and freight, China; average prices reported for the price range.

<sup>4</sup>To determine dollars per metric ton of ore (gross weight), multiply the manganese content percentage by the price; that is, by 46 when the manganese content is 46%.

TABLE 2  
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
2012:						
March	24,500	54,000	78,400	352	848	1,200
January–March	48,700	142,000	191,000	546	2,070	2,610
2013:						
January	11,300	26,200	37,500	16	464	480
February	30,100	48,400	78,500	10	588	599
March	38,100	49,100	87,200	29	1,410	1,440
January–March	79,500	124,000	203,000	56	2,460	2,520

<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 3  
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN MARCH 2013<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>2</sup>	January–March		
				Gross weight	Mn content	Customs value <sup>2</sup>
Australia	7,570	5,100	\$7,860,000	16,800	11,300	\$17,800,000
Bahrain	19	13	27,600	1,220	817	1,490,000
Canada	--	--	--	45	30	36,400
Georgia	4,380	3,160	4,240,000	37,700	26,400	37,600,000
India	401	236	612,000	1,720	1,020	2,600,000
Korea, Republic of	2,500	1,630	2,510,000	5,650	2,900	5,970,000
Mexico	--	--	--	6,080	3,960	6,320,000
Norway	34	21	74,500	2,930	1,800	4,690,000
South Africa	15,000	11,600	16,500,000	20,100	15,000	22,000,000
Spain	--	--	--	5,000	3,250	5,400,000
Total	29,900	21,800	31,800,000	97,200	66,500	104,000,000

-- 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.

Source: U.S. Census Bureau.

TABLE 4  
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN MARCH 2013<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>2</sup>	January–March		
				Gross weight	Mn content	Customs value <sup>2</sup>
<b>Low carbon:</b>						
China	190	179	\$415,000	469	441	\$1,040,000
Korea, Republic of	700	630	1,590,000	795	716	1,810,000
Mexico	--	--	--	500	405	868,000
Norway	1,320	1,060	1,780,000	2,630	2,120	3,690,000
South Africa	20	19	49,600	125	102	194,000
Total	2,230	1,890	3,830,000	4,520	3,780	7,600,000
<b>Medium carbon, 1%–2% C:</b>						
China	40	30	93,300	60	46	140,000
India	--	--	--	189	142	254,000
Korea, Republic of	--	--	--	614	380	943,000
Mexico	--	--	--	681	513	1,500,000
Norway	2,000	1,630	2,270,000	3,300	2,680	3,790,000
South Africa	--	--	--	1,910	1,550	2,830,000
Total	2,040	1,660	2,360,000	6,750	5,310	9,450,000
Medium carbon, 2%–4% C, South Africa	--	--	--	18	14	40,300
<b>High carbon:</b>						
Australia	7,610	5,350	7,390,000	7,610	5,350	7,390,000
Bahrain	2	2	2,660	2	2	2,660
Brazil	--	--	--	216	163	200,000
Canada	10	6	7,590	36	21	41,700
France	--	--	--	8,250	6,420	7,840,000
Korea, Republic of	2,500	1,900	2,410,000	6,100	4,530	6,170,000
South Africa	16,500	12,600	17,100,000	29,400	22,500	30,600,000
Spain	--	--	--	144	109	152,000
Ukraine	39	25	47,000	39	25	47,000
Total	26,700	19,900	27,000,000	51,800	39,100	52,400,000
Grand total	30,900	23,400	33,200,000	63,100	48,200	69,500,000

-- 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.

Source: U.S. Census Bureau.

TABLE 5  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn) IN MARCH 2013<sup>1,2</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>3</sup>	January–March		
				Gross weight	Mn content	Customs value <sup>3</sup>
<b>More than 20%, but less than 47% manganese:</b>						
Australia	33,000	15,500	\$7,400,000	33,000	15,500	\$7,400,000
Belgium	--	--	--	12	5	6,370
Gabon	--	--	--	4,510	1,940	545,000
Ghana	--	--	--	39,800	11,200	3,830,000
Mexico	241	20	74,600	3,310	1,240	715,000
Total	33,200	15,500	7,480,000	80,600	29,900	12,500,000
<b>47% or more manganese:</b>						
Australia	10,700	5,300	3,090,000	10,700	5,300	3,090,000
Brazil	2,920	1,520	1,380,000	3,020	1,570	1,420,000
France	--	--	--	15	8	26,600
Gabon	29,300	14,700	6,710,000	69,900	39,500	16,100,000
Georgia	--	--	--	63	58	230,000
Morocco	--	--	--	851	425	51,100
South Africa	--	--	--	40	19	20,500
Total	43,000	21,600	11,200,000	84,600	46,900	20,900,000
Grand total	76,200	37,100	18,700,000	165,000	76,800	33,400,000

-- 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.

Source: U.S. Census Bureau.

TABLE 6  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE  
DIOXIDE IN MARCH 2013<sup>1</sup>

(Metric tons, gross weight)

Source	Quantity	Customs value <sup>2</sup>	January–March	
			Quantity	Customs value <sup>2</sup>
Belgium	2	\$10,300	7	\$19,100
Germany	23	39,300	23	39,300
Japan	682	1,630,000	1,520	3,500,000
Singapore	11	19,400	42	58,100
South Africa	980	2,130,000	2,860	6,340,000
Turkey	--	--	48	81,600
Total	1,700	3,820,000	4,500	10,000,000

-- 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.

Source: U.S. Census Bureau.

TABLE 7  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN MARCH 2013<sup>1</sup>  
(Metric tons)

Source	Gross weight	Customs value <sup>2</sup>	January–March	
			Gross weight	Customs value <sup>2</sup>
<b>Unwrought flake:</b>				
China	824	\$1,900,000	1,540	\$3,730,000
Japan	--	--	13	42,800
Mexico	31	125,000	74	313,000
Netherlands	76	208,000	76	208,000
South Africa	1,470	4,060,000	2,840	7,700,000
Total	2,400	6,290,000	4,540	12,000,000
Unwrought powder, South Africa	319	1,240,000	498	2,050,000
<b>Unwrought, other:</b>				
China	1,010	2,350,000	3,530	8,170,000
Poland	(3)	4,320	(3)	8,640
South Africa	19	77,300	133	540,000
Spain	24	69,800	24	69,800
Total	1,050	2,500,000	3,690	8,790,000
<b>Other manganese, wrought:</b>				
China	60	119,000	61	124,000
Japan	--	--	(3)	4,000
Total	60	119,000	61	128,000
Metallic waste and scrap, Canada	51	41,800	270	196,000
Grand total	3,890	10,200,000	9,060	23,200,000

-- 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 ½ unit.

Source: U.S. Census Bureau.

TABLE 8  
U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE, SILICOMANGANESE,  
AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN MARCH 2013<sup>1</sup>

Source	Gross weight (metric tons)	F.a.s. value <sup>2</sup> (thousands)	January–March	
			Gross weight (metric tons)	F.a.s. value <sup>2</sup> (thousands)
<b>Ore and concentrates with 20% or more manganese:</b>				
Canada	--	--	5	\$6
Malaysia	6	\$8	6	8
Netherlands	35	48	83	241
Poland	18	21	18	21
Total	59	77	112	276
<b>Ferromanganese:</b>				
<b>2% or less carbon:</b>				
Canada	40	56	86	115
Japan	--	--	40	82
Korea, Republic of	--	--	10	27
Sweden	20	35	20	35
Turkey	--	--	100	220
United Kingdom	2	4	2	4
Total	62	95	258	483
<b>More than 2% carbon:</b>				
Brazil	8	23	17	48
Canada	18	21	114	129
Mexico	--	--	3	7
Singapore	3	8	3	8
Total	29	52	137	193
Silicomanganese, Canada	1,700	1,810	2,470	2,780
<b>Metal, including alloys and waste and scrap:<sup>3</sup></b>				
Canada	2	17	10	45
China	66	148	212	630
Germany	1	3	1	3
India	--	--	37	80
Japan	4	15	4	15
Korea, Republic of	22	107	22	107
Norway	--	--	75	344
Pakistan	121	68	121	68
Taiwan	--	--	22	47
Vietnam	--	--	17	37
Total	216	358	521	1,380
Grand total	2,060	2,390	3,490	5,110

-- Zero.

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

<sup>2</sup>Free alongside ship.

<sup>3</sup>Includes manganese-aluminum, other alloys, and waste and scrap.

Source: U.S. Census Bureau.

TABLE 9  
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN MARCH 2013, 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)	January–March		
				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	347	\$308	Korea, Republic of 181; \$114	826	\$856	Mexico 402; \$367
Manganites, manganates, and other permanganates	8	11	India 8; \$11	8	14	India 8; \$11
Potassium permanganate	126	364	India 126; \$364	306	895	India 306; \$895
Sodium permanganate	92	237	China 90; \$219	185	463	China 183; \$446
Sulfates, basket category, including manganese sulfate	5,340	5,000	China 3,090; \$3,060	15,100	14,200	China 6,360; \$6,720
<b>Exports:</b>						
Manganese dioxide	646	1,370	Belgium 177; \$596	1,510	3,120	Belgium 472; \$1,590
Manganese oxides other than dioxide	657	1,210	Canada 148; \$159	1,740	3,360	Canada 510; \$603
Manganites, manganates, and other permanganates	48	111	Canada 29; \$73	71	196	Canada 49; \$126
Potassium permanganate	234	635	Belgium 162; \$375	777	2,050	Belgium 607; \$1,410
Sodium permanganate	39	96	Belgium 19; \$40	124	333	Belgium 44; \$93
Sulfates, basket category, including manganese sulfate	1,460	1,440	Canada 1,070; \$609	4,730	4,490	Canada 3,710; \$2,270

<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.