

# Mineral Industry Surveys

---

**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

Connie Lopez (Data)  
Telephone: (703) 648-7995  
Fax: (703) 648-7975  
E-mail: connielopez@usgs.gov

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

## MANGANESE IN JUNE 2012

Preliminary domestic data (gross weight) for June 2012 indicated that consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 43,300 metric tons (t). This was a 16% decrease from the amount consumed in May 2012. Manganese ore consumption during the first 6 months of 2012 was 263,000 t, which includes a revised amount of 220,000 t that was consumed during the first 5 months of 2012. Manganese ore consumption during the first half of 2012 was an 8% increase

from the revised amount that was consumed during the same period in 2011 (243,000 t). Industry stocks of ore at the end of June 2012 were 187,000 t, which was a 10% decrease from those at the end of May 2012.

Included in this Mineral Industry Surveys are U.S. spot market prices and U.S. foreign trade data for selected manganese-containing materials in June 2012.

TABLE 1  
PRICES FOR MANGANESE FERROALLOYS, METAL, AND ORE IN JUNE 2012

		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	1,310.00	1,250.00	1,277.50	XX
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	98.00	92.00	94.63	XX
Silicomanganese, 65% manganese	do.	70.00	63.00	66.88	XX
Manganese metal, 99.9% manganese flake <sup>2</sup>	cents per pound	158.00	150.00	XX	150.00–154.00–158.00
<u>Manganese ore:<sup>3, 4</sup></u>					
36%–39% manganese	dollars per metric ton unit contained manganese	4.95	4.50	XX	4.72–4.77–4.82
44% manganese	do.	5.25	4.90	XX	5.02–5.12–5.21
46% manganese	do.	5.35	5.00	XX	5.18–5.25–5.33

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
2011:						
January–December	283,000	541,000	824,000	681	12,500	13,200
January–June	139,000	291,000	430,000	309	7,530	7,830
January	28,900	44,500	73,400	36	1,080	1,120
February	9,160	30,400	39,600	46	1,240	1,290
March	50,900	68,900	120,000	73	1,740	1,810
April	1,720	27,800	29,500	61	1,150	1,210
May	21,100	51,000	72,100	33	1,800	1,830
June	26,800	68,700	95,500	59	519	578
2012:						
January	11,800	53,000	64,800	36	603	639
February	12,400	34,900	47,300	158	616	775
March	24,500	54,000	78,400	352	848	1,200
April	3,960	59,500	63,400	106	816	922
May	15,500	49,500	65,000	42	620	662
June	18,300	21,000	39,300	19	576	595
January–June	86,400	272,000	358,000	713	4,080	4,790

<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 JUNE 2012<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>2</sup>	January–June		
				Gross weight	Mn content	Customs value <sup>2</sup>
Australia	306	202	\$349,000	9,570	6,490	\$9,880,000
Azerbaijan	--	--	--	1,500	984	1,700,000
Canada	--	--	--	50	34	39,000
Georgia	1,560	925	1,770,000	42,300	28,900	40,100,000
Germany	--	--	--	216	95	281,000
India	--	--	--	1,440	819	2,210,000
Indonesia	304	198	393,000	602	393	786,000
Italy	--	--	--	1,270	843	1,740,000
Korea, Republic of	--	--	--	620	372	1,070,000
Macedonia	694	451	1,080,000	694	451	1,080,000
Mexico	3,000	1,960	3,630,000	8,860	5,780	10,200,000
Norway	--	--	--	15,500	9,630	26,700,000
Russia	--	--	--	5,880	3,990	8,040,000
South Africa	--	--	--	48,000	32,100	51,300,000
Spain	2,500	1,630	3,100,000	8,780	5,610	12,700,000
Vietnam	--	--	--	592	370	674,000
Total	8,370	5,370	10,300,000	146,000	96,800	169,000,000

-- 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 JUNE 2012<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>2</sup>	January–June		
				Gross weight	Mn content	Customs value <sup>2</sup>
<b>Low carbon:</b>						
China	561	522	\$1,590,000	3,740	3,490	\$10,500,000
India	648	526	1,120,000	3,170	2,580	5,480,000
Korea, Republic of	500	450	1,300,000	1,540	1,390	4,180,000
Mexico	800	646	1,390,000	3,720	3,010	6,400,000
Norway	--	--	--	4,620	3,730	7,480,000
South Africa	--	--	--	20	16	59,400
Vietnam	--	--	--	1,040	899	2,040,000
Total	2,510	2,140	5,400,000	17,800	15,100	36,100,000
<b>Medium carbon, 1%–2% C:</b>						
China	--	--	--	40	30	97,300
Korea, Republic of	5,000	4,000	7,430,000	15,900	12,800	23,600,000
Mexico	20	15	59,800	1,070	816	2,150,000
Norway	--	--	--	11,000	8,950	15,200,000
South Africa	635	512	1,060,000	13,200	10,600	20,000,000
Total	5,660	4,530	8,550,000	41,300	33,300	61,000,000
<b>Medium carbon, 2%–4% C, South Africa</b>						
	--	--	--	57	50	139,000
<b>High carbon:</b>						
Australia	--	--	--	17,000	13,200	16,600,000
Bahrain	11	9	13,700	100	79	141,000
Brazil	--	--	--	219	163	228,000
China	95	90	114,000	368	294	412,000
France	--	--	--	2,500	1,910	3,000,000
India	216	164	248,000	513	387	496,000
Korea, Republic of	3,290	2,540	3,140,000	3,430	2,650	3,300,000
Norway	--	--	--	6,620	5,110	6,610,000
Saudi Arabia	--	--	--	1,400	1,010	1,180,000
South Africa	1,630	1,290	1,840,000	92,900	71,500	96,200,000
Ukraine	694	445	825,000	8,000	6,120	8,420,000
Total	5,930	4,540	6,180,000	133,000	102,000	137,000,000
Grand total	14,100	11,200	20,100,000	192,000	151,000	234,000,000

-- 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 5  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn) IN JUNE 2012<sup>1,2</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>3</sup>	January–June		
				Gross weight	Mn content	Customs value <sup>3</sup>
More than 20%, but less than 47% manganese:						
Brazil	--	--	--	2,580	682	\$669,000
Colombia	18	5	\$4,170	18	5	4,170
Gabon	--	--	--	19,500	8,360	2,600,000
Mexico	--	--	--	3,040	1,100	602,000
South Africa	29,700	1 <sup>4</sup>	3,650,000	29,700	1 <sup>4</sup>	3,650,000
Total	29,700	6	3,660,000	54,800	10,100	7,520,000
47% or more manganese:						
Australia	--	--	--	20,700	10,300	3,120,000
Belgium	--	--	--	2,840	1,450	281,000
Brazil	78	41	121,000	2,770	1,470	982,000
Gabon	31,700	16,300	8,040,000	108,000	55,000	26,000,000
Japan	(5)	(5)	14,800	(5)	(5)	14,800
Korea, Republic of	--	--	--	20	(5)	137,000
Morocco	823	411	49,400	1,880	967	334,000
Poland	--	--	--	7	4	5,760
South Africa	60	29	14,400	60	29	14,400
United Kingdom	1	(5)	2,990	1	(5)	2,990
Total	32,700	16,700	8,240,000	136,000	69,200	30,900,000
Grand total	62,400	16,800	11,900,000	191,000	79,300	38,400,000

-- 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.

<sup>4</sup>Referred to the U.S. Census Bureau for verification.

<sup>5</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE IN JUNE 2012<sup>1</sup>

(Metric tons, gross weight)

Source	Quantity	Customs value <sup>2</sup>	January–June	
			Quantity	Customs value <sup>2</sup>
Belgium	60	\$30,400	605	\$331,000
Germany	--	--	24	40,200
India	--	--	25	20,500
Japan	692	1,650,000	3,860	9,300,000
Korea, Republic of	--	--	13	25,200
Mexico	--	--	40	35,100
Norway	--	--	260	197,000
Singapore	11	19,400	68	116,000
South Africa	1,390	3,170,000	6,130	14,200,000
Turkey	431	245,000	810	425,000
Total	2,580	5,110,000	11,800	24,700,000

-- 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.

Source: U.S. Census Bureau.

TABLE 7  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN JUNE 2012<sup>1</sup>

(Metric tons)

Source	Gross weight	Customs value <sup>2</sup>	January–June	
			Gross weight	Customs value <sup>2</sup>
<b>Unwrought flake:</b>				
Brazil	--	--	21	\$61,400
China	1,230	\$3,450,000	7,830	21,800,000
Japan	--	--	1	2,960
Mexico	7	34,100	96	456,000
South Africa	1,190	3,750,000	3,370	11,200,000
Vietnam	--	--	200	547,000
Total	2,430	7,230,000	11,500	34,000,000
<b>Unwrought powder:</b>				
China	--	--	238	679,000
Mexico	--	--	53	252,000
South Africa	20	93,400	996	3,940,000
Spain	--	--	1	2,220
Total	20	93,400	1,290	4,880,000
<b>Unwrought, other:</b>				
China	1,760	4,910,000	10,400	28,600,000
Germany	--	--	13	44,900
Poland	(3)	2,880	(3)	2,880
South Africa	38	155,000	305	1,130,000
Spain	56	170,000	476	1,820,000
Vietnam	100	286,000	100	286,000
Total	1,960	5,520,000	11,300	31,900,000
<b>Other manganese, wrought:</b>				
China	--	--	3	13,800
Germany	--	--	1	71,900
Japan	--	--	(3)	39,200
Mexico	--	--	7	31,300
Total	--	--	12	156,000
Grand total	4,410	12,800,000	24,100	70,900,000

-- 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 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>3</sup>Less than ½ unit.

Note: Imports for consumption of metallic waste and scrap totaled 73 metric tons (t), all of which was from Canada, to give a January–June total of 402 t.

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 JUNE 2012<sup>1,2</sup>

Source	Gross weight (metric tons)	F.a.s. <sup>3</sup> value (thousands)	January–June	
			Gross weight (metric tons)	F.a.s. <sup>3</sup> value (thousands)
<b>Ore and concentrates with 20% or more manganese:</b>				
Aruba	--	--	78	\$20
Canada	19	\$26	287	318
China	--	--	51	66
Denmark	--	--	77	32
Hong Kong	--	--	11	39
Indonesia	--	--	3	3
Korea, Republic of	--	--	204	264
Latvia	19	11	19	11
Netherlands	--	--	689	612
United Kingdom	--	--	4	13
Other (1 country)	--	--	3	10
<b>Total</b>	<b>38</b>	<b>37</b>	<b>1,430</b>	<b>1,390</b>
<b>Ferromanganese:</b>				
<b>2% or less carbon:</b>				
Canada	58	68	576	822
Guatemala	--	--	23	43
Hungary	--	--	3	5
Japan	--	--	100	245
Mexico	--	--	108	195
Saudi Arabia	1	10	1	10
Turkey	--	--	60	154
<b>Total</b>	<b>59</b>	<b>78</b>	<b>871</b>	<b>1,470</b>
<b>More than 2% carbon:</b>				
Brazil	4	11	18	50
Canada	106	141	493	629
Chile	--	--	15	43
Japan	--	--	4	11
Mexico	--	--	60	78
Norway	5	15	7	22
Saudi Arabia	--	--	11	31
Singapore	1	3	16	46
United Arab Emirates	--	--	3	8
United Kingdom	--	--	1	3
<b>Total</b>	<b>116</b>	<b>170</b>	<b>628</b>	<b>921</b>
<b>Silicomanganese:</b>				
Brazil	--	--	176	428
Canada	433	619	1,680	2,320
Dominican Republic	--	--	9	21
Indonesia	--	--	10	16
Mexico	--	--	362	514
<b>Total</b>	<b>433</b>	<b>619</b>	<b>2,240</b>	<b>3,300</b>
<b>Metal, including alloys and waste and scrap:<sup>4</sup></b>				
Belgium	--	--	24	52
Brazil	--	--	37	150
Canada	22	48	98	234
China	78	169	507	1,610
France	--	--	62	278
Germany	--	--	79	172
India	--	--	178	405
Japan	39	84	92	244
Mexico	--	--	186	505
Norway	--	--	62	278
Other (8 countries)	14	30	95	202
<b>Total</b>	<b>152</b>	<b>331</b>	<b>1,420</b>	<b>4,130</b>
<b>Grand total</b>	<b>798</b>	<b>1,240</b>	<b>6,580</b>	<b>11,200</b>

-- Zero.

<sup>1</sup>Presentation of monthly data is based on the year-to-date quantities (gross weight) of the leading countries.

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

TABLE 8  
U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE, SILICOMANGANESE,  
AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN JUNE 2012<sup>1,2</sup>

<sup>3</sup>Free alongside ship.

<sup>4</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 JUNE 2012, 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–June		
				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	598	\$504	South Africa 313; \$198	2,040	\$2,160	Mexico 493; \$476
Manganites, manganates, and other permanganates	--	--	XX	44	393	China 18; \$45
Potassium permanganate	180	563	India 180; \$563	905	2,890	India 846; \$2,680
Sodium permanganate	38	93	China 38; \$93	125	307	China 125; \$307
Sulfates, basket category, including manganese sulfate	3,380	4,000	Mexico 1,240; \$1,150	25,200	24,900	Mexico 8,340; \$7,340
<b>Exports:</b>						
Manganese dioxide	989	1,640	Canada 549; \$412	4,690	7,860	Canada 2,660; \$2,200
Manganese oxides other than dioxide	930	1,320	Canada 338; \$423	4,960	7,540	Canada 1,430; \$1,700
Manganites, manganates, and other permanganates	9	23	Canada 9; \$23	130	357	Canada 114; \$299
Potassium permanganate	482	1,280	Belgium 316; \$765	1,880	4,820	Belgium 1,340; \$3,100
Sodium permanganate	97	229	Belgium 62; \$127	543	1,250	Belgium 244; \$459
Sulfates, basket category, including manganese sulfate	1,620	1,100	Canada 1,380; \$665	8,220	6,640	Canada 6,750; \$3,600

XX Not applicable. -- Zero.

<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.