

Mineral Industry Surveys

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MANGANESE IN JULY 2016

Preliminary data for July 2016 indicated that domestic consumption of manganese ore containing more than 20% manganese, exclusive of that consumed at iron and steel plants, was 28,100 metric tons (t) (gross weight). This was a 15% decrease compared with the amount consumed in June 2016 (33,200 t). Manganese ore consumption during the first 7 months of 2016 was 217,000 t, 19% less than the revised amount consumed during the same period of 2015 (266,000 t) (fig. 1). Industry stocks of ore at the end of July 2016 were 147,000 t, about the same as that at the end of June 2016 (146,000 t).

On a gross-weight basis, U.S. imports of manganese ore in July 2016 were 80 t, 47% less than that imported in June 2016 (152 t) (fig. 1, table 5). Manganese ore imports were 61% lower during the first 7 months of 2016 (101,000 t) compared with the revised amount (260,000 t) during the same period in 2015.

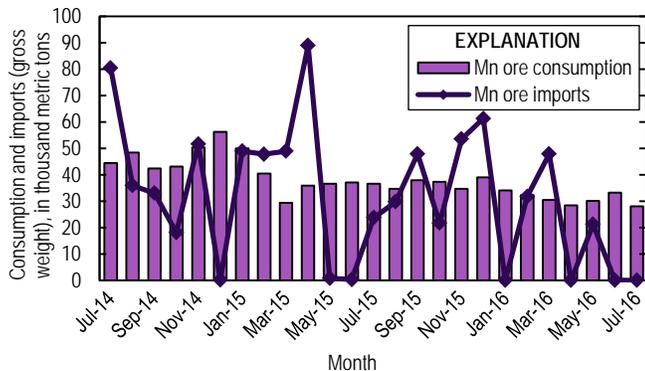


Figure 1. Monthly domestic consumption and imports of manganese (Mn) ore from July 2014 through July 2016. Sources: U.S. Census Bureau and U.S. Geological Survey.

In July 2016, the average spot prices were 2.54 dollars per metric ton unit, 36%–39% grade; 2.81 dollars per metric ton unit, 44% grade; and 3.70 dollars per metric ton unit, 46% grade (fig. 2, table 1). These prices were lower than those in June 2016—18%, 22%, and slightly, respectively, for the 36%–39%, 44%, and 46% grades. Compared to July 2015, the price for the 46% grade was 12% higher and the prices for the 36%–39% and 44% grades were lower—5% and 4% less, respectively. Compared to July 2014, the average monthly prices were lower—34% less for the 36%–39% grade, 35% less for the 44% grade, and 21% less for the 46% grade.

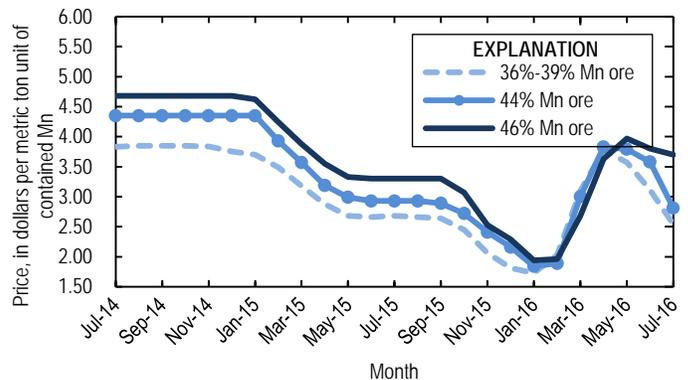


Figure 2. Average monthly spot prices for manganese (Mn) ore deliveries to China from July 2014 through July 2016. The prices shown are reported in dollars per metric ton unit of contained Mn. Source: CRU Ryan's Notes.

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TABLE 1
PRICES FOR MANGANESE FERROALLOYS, METAL, AND ORE IN JULY 2016

		Low	Average	High
Manganese ferroalloys:¹				
High-carbon ferromanganese, 75% manganese	dollars per long ton of contained manganese	820.00	835.00	850.00
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	76.00	77.00	78.00
Silicomanganese, 65% manganese	do.	40.00	40.50	41.00
Manganese metal, 99.9% manganese flake ²	cents per pound	95.00	97.50	100.00
Manganese ore:^{3,4}				
36%–39% manganese	dollars per metric ton unit contained manganese	2.40	2.54	2.85
44% manganese	do.	2.60	2.81	3.00
46% manganese	do.	2.90	3.70	3.85

do. Ditto.

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

²CRU 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.

³CRU Ryan's Notes, cost and freight, China; average prices reported for the price range.

⁴To 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 MANGANESE¹

(Metric tons, manganese content)²

	Imports for consumption			Exports		
	Ore and dioxide	Ferroalloy and metal	Total	Ore	Ferroalloy and metal	Total
2015:						
July	11,700	49,000	60,700	8	866	875
January–July ³	128,000 ^r	319,000 ^r	447,000 ^r	170	3,580 ^r	3,750
2016:						
January	252	53,700	53,900	29	1,970	2,000
February	17,200	34,700	51,900	18	2,350	2,370
March	25,700	23,800	49,500	15	963	978
April	292	23,400	23,700	7	1,040	1,050
May	10,800	31,400	42,200	29	499	528
June	324	48,700	49,000	34	1,060	1,090
July	318	30,500	30,800	10	951	961
January–July ³	54,800	246,000	301,000	143	8,830	8,980

^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²As reported except as estimated for imports of manganese dioxide and manganese waste and scrap and for exports from gross weights.

³May include revised data that are not broken out by specific month(s).

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN JULY 2016¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–July ²		
				Gross weight	Mn content	Customs value ³
Australia	6,500	4,300 ⁴	\$4,830,000	30,400	20,100 ⁴	\$20,700,000
Brazil	1,030	675	693,000	5,230	3,500	3,280,000
Gabon	--	--	--	312	221	201,000
Georgia	788	560	472,000	55,800	39,900	41,400,000
India	135	88	216,000	979	598	1,160,000
Mexico	2,970	1,640	1,350,000	18,700	11,900	11,300,000
Norway	2,360	1,440	2,600,000	21,300	13,800	18,600,000
Russia	--	--	--	14	7	20,400
South Africa	--	--	--	52,100	34,200	36,000,000
Spain	1,880	1,140	2,240,000	5,550	3,380	6,450,000
Total	15,700	9,850	12,400,000	190,000	128,000	139,000,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include revised data that are not broken out by specific month(s).

³Customs 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.

⁴Adjusted by the U.S. Geological Survey based on the stoichiometric ratio of silicomanganese (66.17%).

Source: U.S. Census Bureau.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN JULY 2016¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–July ²		
				Gross weight	Mn content	Customs value ³
Low carbon:						
Belgium	--	--	--	24	23	\$55,200
China	717	666	\$1,210,000	5,000	4,660	8,000,000
Germany	27	26	54,800	267	242	642,000
Korea, Republic of	500	400	582,000	2,350	2,050	3,320,000
Mexico	--	--	--	518	416	591,000
Norway	1,020	823	1,190,000	16,200	13,100	19,300,000
South Africa	--	--	--	50	46	82,000
Total	2,260	1,920	3,030,000	24,400	20,600	31,900,000
Medium carbon, 1%–2% C:						
Australia	--	--	--	6,860	5,440	5,670,000
China	--	--	--	60	46	122,000
Germany	--	--	--	8	6	15,400
Korea, Republic of	4,500	3,720	5,660,000	19,800	16,200	24,100,000
Mexico	2,730	2,190	2,950,000	6,250	4,990	7,110,000
Norway	219	176	249,000	2,630	2,140	2,760,000
South Africa	635	508	896,000	4,620	3,720	6,740,000
Turkey	--	--	--	79	60	143,000
Total	8,080	6,600	9,750,000	40,300	32,600	46,700,000
Medium carbon, 2%–4% C:						
China	--	--	--	323	254	160,000
South Africa	--	--	--	51	40	160,000
Total	--	--	--	374	294	320,000
High carbon:						
Australia	11,700	8,870	7,430,000	30,700	22,100	22,600,000
Brazil	240	182	212,000	536	408	538,000
Canada	--	--	--	109	75	161,000
China	--	--	--	10	8	14,400
Georgia	--	--	--	5,000	3,760	3,440,000
Korea, Republic of	--	--	--	3,420	2,310	3,110,000
Norway	--	--	--	7,800	5,610	5,280,000
Russia	--	--	--	1,830	1,200	1,420,000
Singapore	4	3	5,820	5	4	7,850
South Africa	1,650	279	1,080,000	23,200	15,900	18,100,000
Spain	--	--	--	312	238	207,000
Ukraine	1,500	920	807,000	3,100	1,910	1,790,000
Total	15,100	10,300	9,530,000	76,000	53,500	56,600,000
Grand total	25,400	18,800	22,300,000	141,000	107,000	136,000,000

-- Zero.

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

²May include revised data that are not broken out by specific month(s).

³Customs 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 JULY 2016¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–July ²		
				Gross weight	Mn content	Customs value ³
More than 20%, but less than 47% manganese, China	--	--	--	57	26	\$3,920
47% or more manganese:						
Australia	--	--	--	7,130	3,510	1,200,000
Belgium	--	--	--	18	11	86,600
Brazil	54	28	\$59,400	263	131	152,000
Gabon	--	--	--	82,400	43,600	11,100,000
Mexico	--	--	--	10,900	5,540	1,360,000
Morocco	--	--	--	116	66	152,000
South Africa	26	17	19,400	526	258	159,000
Total	80	45	78,800	101,000	53,100	14,200,000
Grand total	80	45	78,800	101,000	53,100	14,200,000

-- Zero.

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

²May include revised data that are not broken out by specific month(s).

³Customs 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 JULY 2016¹

(Metric tons, gross weight)

Source	Quantity	Customs value ³	January–July ²	
			Quantity	Customs value ³
Belgium	--	--	44	\$111,000
Brazil	--	--	31	52,600
China	6	\$10,600	28	47,500
France	--	--	18	33,300
Germany	2	8,540	8	42,700
India	17	35,400	17	35,400
Japan	430	909,000	2,600	5,680,000
Netherlands	--	--	11	19,400
Singapore	--	--	79	134,000
Ukraine	--	--	10	16,900
United Kingdom	--	--	(4)	2,070
Total	455	964,000	2,850	6,170,000

-- Zero.

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

²May include revised data that are not broken out by specific month(s).

³Customs 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.

⁴Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN JULY 2016¹

(Metric tons)

Source	Gross weight	Customs value ³	January–July ²	
			Gross weight	Customs value ³
Unwrought flake:				
China	294	\$635,000	1,810	\$4,280,000
Gabon	--	--	97	157,000
Japan	42	142,000	231	773,000
Mexico	10	32,300	37	122,000
South Africa	791	1,540,000	3,830	7,090,000
Total	1,140	2,350,000	6,010	12,400,000
Unwrought powder:				
China	40	67,200	205	475,000
Mexico	39	126,000	148	478,000
New Zealand	--	--	3	2,500
South Africa	162	436,000	1,530	4,140,000
Total	241	630,000	1,890	5,090,000
Unwrought, other:				
Belgium	--	--	22	40,400
China	151	283,000	5,190	9,720,000
Germany	110	193,000	403	731,000
Poland	(4)	4,320	(4)	4,320
South Africa	102	208,000	462	940,000
Spain	--	--	175	368,000
United Kingdom	38	65,500	38	65,500
Total	401	754,000	6,290	11,900,000
Other manganese, wrought:				
China	--	--	109	182,000
France	(4)	10,300	2	29,500
Germany	6	57,300	67	659,000
Japan	--	--	(4)	24,800
Mexico	--	--	2	6,350
South Africa	--	--	10	25,200
Total	7	67,500	189	926,000
Metallic waste and scrap, Canada	143	38,000	318	82,900
Grand total	1,930	3,840,000	14,700	30,400,000

-- Zero.

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

²May include revised data that are not broken out by specific month(s).

³Customs 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.

⁴Less 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 JULY 2016^{1,2}

Source	Gross weight (metric tons)	F.a.s. ⁴ value (thousands)	January–July ³	
			Gross weight (metric tons)	F.a.s. ⁴ value (thousands)
Ore and concentrates with 20% or more manganese:				
Canada	--	--	78	\$71
China	--	--	33	32
El Salvador	--	--	2	3
Guatemala	--	--	11	29
Korea, Republic of	--	--	3	17
Mexico	3	\$13	13	46
Netherlands	17	53	125	519
Taiwan	--	--	(5)	6
United Kingdom	--	--	20	17
Total	20	66	285	739
Ferromanganese:				
2% or less carbon:				
Brazil	--	--	7	14
Canada	6	14	1,650	2,030
Colombia	--	--	2	4
Jamaica	--	--	22	42
Mexico	--	--	85	176
Suriname	25	48	51	96
Vietnam	6	10	6	10
Total	37	72	1,820	2,370
More than 2% carbon:				
Canada	20	14	3,940	3,220
Chile	--	--	20	57
Mexico	--	--	16	45
Singapore	1	4	1	4
United Arab Emirates	--	--	8	23
Other (3 countries)	--	--	8	34
Total	21	18	3,990	3,380
Silicomanganese:				
Canada	368	324	1,200	1,130
Germany	--	--	2	3
Mexico	--	--	14	31
Venezuela	--	--	3	5
Total	368	324	1,220	1,170
Metal, including alloys and waste and scrap:⁶				
Canada	4	9	119	106
China	133	306	314	1,260
Germany	--	--	49	189
India	2	33	57	252
Japan	--	--	42	145
Malaysia	366	110	1,910	681
Mexico	145	442	700	1,910
United Kingdom	10	115	20	210
Vietnam	--	--	180	33
Other (11 countries)	1	13	48	358
Total	663	1,030	3,430	5,140
Grand total	1,110	1,510	10,800	12,800

-- Zero.

¹Presentation of monthly data is based on the "January–July" quantities of the leading countries.

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

³May include revised data that are not broken out by specific month(s).

⁴Free alongside ship.

⁵Less than ½ unit.

⁶Includes manganese-aluminum, other alloys, and waste and scrap.

Source: U.S. Census Bureau.

TABLE 9
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS
IN JULY 2016, BY CLASS¹

Class	Gross weight (metric tons)	Value ³ (thousands)	Principal sources and destinations: gross weight (metric tons); value ³ (thousands)	January–July ²		
				Gross weight (metric tons)	Value ³ (thousands)	Principal sources and destinations: gross weight (metric tons); value ³ (thousands)
Imports for consumption:						
Manganese oxides other than dioxide	1,200	\$1,030	Korea, Republic of 749; \$607	12,000	\$8,280	Korea, Republic of 3,260; \$4,190
Manganites, manganates, and other permanganates						
Permanganates	(4)	4	Canada (4); \$4	10	33	Canada 10; \$33
Potassium permanganate	54	136	India 54; \$136	415	1,050	India 415; \$1,050
Sodium permanganate	79	175	China 79; \$175	581	1,360	China 563; \$1,300
Sulfates, basket category, including manganese sulfate	5,140	3,890	Mexico 1,870; \$1,610	36,700	31,000	Mexico 13,800; \$12,300
Exports:						
Manganese dioxide	314	559	Canada 159; \$99	2,490	4,550	Canada 1,130; \$949
Manganese oxides other than dioxide	548	757	Netherlands 191; \$108	3,670	7,310	Canada 652; \$880
Manganites, manganates, and other permanganates	17	43	Canada 17; \$35	64	160	Canada 61; \$124
Potassium permanganate	428	1,100	Belgium 250; \$563	1,870	5,280	Belgium 971; \$2,200
Sodium permanganate	60	182	Mexico 56; \$164	366	1,530	Mexico 150; \$481
Sulfates, basket category, including manganese sulfate	1,540	1,140	Canada 1,320; \$707	12,200	10,200	Canada 9,620; \$4,330

¹Data are rounded to no more than three significant digits.

²May include revised data that are not broken out by specific month(s).

³For imports, customs value; for exports, free alongside ship value.

⁴Less than ½ unit.

Source: U.S. Census Bureau.