

Mineral Industry Surveys

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MANGANESE IN AUGUST 2016

Preliminary data for August 2016 indicated that domestic consumption of manganese ore containing more than 20% manganese, exclusive of that consumed at iron and steel plants, was 25,000 metric tons (t) (gross weight). This was an 11% decrease compared with the amount consumed in July 2016 (28,100 t). Manganese ore consumption during the first 8 months of 2016 was 242,000 t, 20% less than the revised amount consumed during the same period of 2015 (301,000 t) (fig. 1). Industry stocks of ore at the end of August 2016 were 160,000 t, 9% more than that at the end of July 2016 (147,000 t).

On a gross-weight basis, U.S. imports of manganese ore in August 2016 were 61,500 t, significantly more than that imported in July 2016 (80 t) (fig. 1, table 5). Manganese ore imports were during the first 8 months of 2016 (163,000 t) compared with the revised amount (289,000 t) during the same period in 2015.

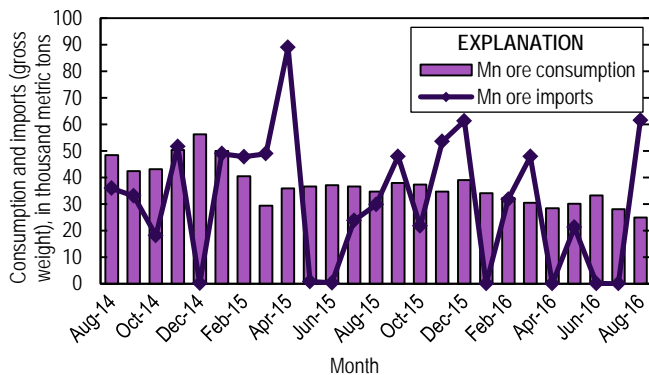


Figure 1. Monthly domestic consumption and imports of manganese (Mn) ore from August 2014 through August 2016. Sources: U.S. Census Bureau and U.S. Geological Survey.

In August 2016, the average spot prices were 3.48 dollars per metric ton unit, 36%–39% grade; 3.59 dollars per metric ton unit, 44% grade; and 3.59 dollars per metric ton unit, 46% grade (fig. 2, table 1). These prices were higher for the 36%–39% and 44% grades—37% and 28% more, respectively—and lower by 3% for the 46% grade compared to those in July 2016. Compared to August 2015, the prices were all higher—31% for the 36%–39%, 23% for the 44% grade, and 9% higher for the 46% grade. Compared to August 2014, the average monthly prices were lower—10% less for the 36%–39% grade, 17% less for the 44% grade, and 23% less for the 46% grade.

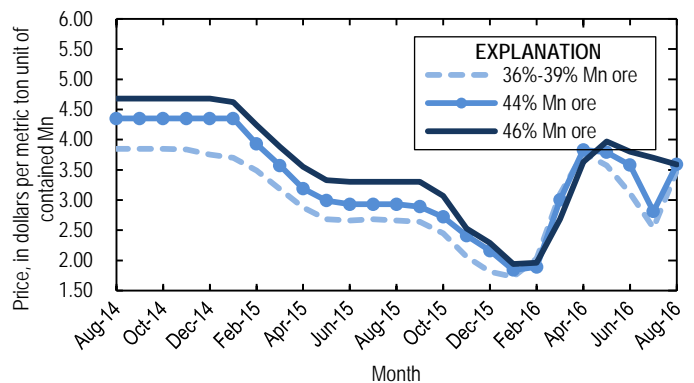


Figure 2. Average monthly spot prices for manganese (Mn) ore deliveries to China from August 2014 through August 2016. The prices shown are reported in dollars per metric ton unit of contained Mn. Source: CRU Ryan's Notes.

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

		Low	Average	High
Manganese ferroalloys:¹				
High-carbon ferromanganese, 75% manganese	dollars per long ton of contained manganese	820.00	838.00	870.00
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	76.00	77.00	78.00
Silicomanganese, 65% manganese	do.	40.00	40.65	42.00
Manganese metal, 99.9% manganese flake ²	cents per pound	90.00	95.39	100.00
Manganese ore:^{3,4}				
36%–39% manganese	dollars per metric ton unit contained manganese	3.05	3.48	3.85
44% manganese	do.	3.00	3.59	4.20
46% manganese	do.	2.90	3.59	4.60

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:						
August	16,300	27,800 ^r	44,100 ^r	76	739	815
January–August ³	144,000	349,000	493,000	246	4,330	4,570
2016:						
January	252	53,700	53,900	39	4,170	4,210
February	17,200	34,700	51,900	59	4,360	4,420
March	25,700	23,800	49,500	83	3,500	3,580
April	292	23,400	23,700	13	4,180	4,190
May	10,800	28,600 ^r	39,400 ^r	86	2,850	2,930
June	324	47,700 ^r	48,000 ^r	80	3,900	3,980
July	318	30,100 ^r	30,400 ^r	47	3,300	3,350
August	28,100	26,700	54,900	58	3,220	3,280
January–August ³	82,900	269,000	352,000	465	29,500	29,900

^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 AUGUST 2016¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–August ²		
				Gross weight	Mn content	Customs value ³
Australia	--	--	--	30,400	18,400	\$20,700,000
Brazil	324	214	\$218,000	5,560	3,710	3,490,000
Gabon	--	--	--	312	221	201,000
Georgia	14,600	10,600	11,500,000	70,400	50,600	52,900,000
India	216	128	205,000	1,200	726	1,360,000
Mexico	--	--	--	18,700	11,900	11,300,000
Norway	20	13	37,900	17,400	11,400	13,800,000
Russia	--	--	--	14	7	20,400
South Africa	3,900	2,540	2,650,000	56,000	36,800	38,600,000
Spain	1,670	1,090	1,400,000	2,460	1,610	2,000,000
Total	20,700	14,600	16,000,000	202,000	135,000	144,000,000

-- 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.

Source: U.S. Census Bureau.

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

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–August ²		
				Gross weight	Mn content	Customs value ³
Low carbon:						
Belgium	--	--	--	24	23	\$55,200
China	1,200	1,120	\$1,920,000	6,210	5,780	9,920,000
Germany	58	50	133,000	325	292	775,000
Korea, Republic of	--	--	--	2,350	2,050	3,320,000
Mexico	18	15	32,700	536	430	624,000
Norway	2,030	1,650	2,440,000	18,300	14,800	21,700,000
South Africa	--	--	--	50	46	82,000
Total	3,310	2,840	4,530,000	27,700	23,400	36,500,000
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	3,000	2,400	3,200,000	22,800	18,600	27,300,000
Mexico	34	27	89,300	6,280	5,020	7,200,000
Norway	1,010	821	1,060,000	3,640	2,960	3,820,000
South Africa	20	15	40,800	4,640	3,730	6,780,000
Turkey	--	--	--	79	60	143,000
Total	4,060	3,260	4,400,000	44,300	35,800	51,100,000
Medium carbon, 2%–4% C:						
China	--	--	--	323	254	160,000
South Africa	--	--	--	51	40	160,000
Total	--	--	--	374	294	320,000
High carbon:						
Australia	--	--	--	30,700	22,100	22,600,000
Brazil	--	--	--	536	408	538,000
Canada	5	4	9,240	114	79	170,000
China	--	--	--	10	8	14,400
Georgia	440	342	635,000	5,440	4,110	4,070,000
Korea, Republic of	--	--	--	3,420	2,310	3,110,000
Norway	--	--	--	7,800	5,610	5,280,000
Russia	143	111	206,000	1,980	1,310	1,620,000
Singapore	--	--	--	5	4	7,850
South Africa	2,600	1,770	1,550,000	25,800	17,700	19,600,000
Spain	--	--	--	312	238	207,000
Ukraine	2,370	1,460	1,280,000	5,470	3,360	3,070,000
Total	5,560	3,680	3,680,000	81,600	57,200	60,300,000
Grand total	12,900	9,780	12,600,000	154,000	117,000	148,000,000

-- 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 AUGUST 2016¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–August ²		
				Gross weight	Mn content	Customs value ³
More than 20%, but less than 47% manganese:						
China	--	--	--	57	26	\$3,920
South Africa	33,000	12,300	\$2,820,000	33,000	12,300	2,820,000
Total	33,000	12,300	2,820,000	33,100	12,400	2,820,000
47% or more manganese:						
Australia	--	--	--	7,130	3,510	1,200,000
Belgium	--	--	--	18	11	86,600
Brazil	53	27	23,600	316	159	175,000
Gabon	28,400	15,400	5,770,000	111,000	58,900	16,900,000
Mexico	--	--	--	10,900	5,580	1,400,000
Morocco	59	40	38,800	116	67	152,000
South Africa	--	--	--	526	258	159,000
Total	28,500	15,400	5,830,000	130,000	68,500	20,100,000
Grand total	61,500	27,800	8,650,000	163,000	80,900	22,900,000

-- 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 AUGUST 2016¹

(Metric tons, gross weight)

Source	Quantity	Customs value ³	January–August ²	
			Quantity	Customs value ³
Belgium	--	--	45	\$111,000
Brazil	12	\$20,400	43	72,900
China	35	59,400	63	107,000
France	--	--	18	33,300
Germany	--	--	8	42,700
India	--	--	34	69,300
Japan	522	1,080,000	3,120	6,760,000
Netherlands	--	--	11	19,400
Singapore	--	--	79	134,000
Ukraine	--	--	10	16,900
United Kingdom	--	--	(4)	2,070
Total	569	1,160,000	3,430	7,370,000

-- 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 AUGUST 2016¹

(Metric tons)

Source	Gross weight	Customs value ³	January–August ²	
			Gross weight	Customs value ³
Unwrought flake:				
China	114	\$388,000	1,950	\$4,660,000
Gabon	--	--	97	157,000
Japan	42	145,000	273	918,000
Mexico	2	6,900	39	129,000
South Africa	853	1,670,000	4,690	8,770,000
Total	1,010	2,210,000	7,040	14,600,000
Unwrought powder:				
China	40	41,800	245	516,000
Mexico	11	35,900	159	514,000
New Zealand	--	--	3	2,500
South Africa	256	667,000	1,770	4,780,000
Total	307	745,000	2,170	5,810,000
Unwrought, other:				
Belgium	--	--	22	40,400
China	844	1,400,000	5,920	10,900,000
Germany	95	165,000	499	897,000
Poland	(4)	4,320	(4)	8,640
South Africa	20	41,600	380	785,000
Spain	2	6,090	177	374,000
United Kingdom	--	--	38	65,500
Total	961	1,610,000	7,040	13,100,000
Other manganese, wrought:				
China	--	--	109	182,000
France	1	18,100	3	47,600
Germany	39	401,000	106	1,060,000
Japan	(4)	9,210	(4)	34,000
Mexico	12	42,800	14	49,200
Total	53	471,000	232	1,370,000
Metallic waste and scrap, Canada	--	--	318	82,900
Grand total	2,330	5,040,000	16,800	35,000,000

-- 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.

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 AUGUST 2016^{1,2}

Source	Gross weight (metric tons)	F.a.s. ⁴ value (thousands)	January–August ³	
			Gross weight (metric tons)	F.a.s. ⁴ value (thousands)
Ore and concentrates with 20% or more manganese:				
Canada	97	\$78	693	\$587
China	--	--	33	32
El Salvador	--	--	2	3
Guatemala	--	--	11	29
Korea, Republic of	--	--	3	17
Mexico	2	6	24	73
Netherlands	16	71	141	590
Taiwan	--	--	(5)	6
United Kingdom	--	--	20	17
Total	115	154	926	1,350
Ferromanganese:				
2% or less carbon:				
Brazil	--	--	7	14
Canada	369	482	3,650	4,860
Colombia	--	--	2	4
Jamaica	--	--	22	42
Mexico	--	--	177	466
Suriname	--	--	51	96
Vietnam	--	--	6	10
Total	369	482	3,910	5,490
More than 2% carbon:				
Canada	842	626	16,300	13,200
Chile	--	--	20	57
Korea, Republic of	--	--	6	23
Mexico	8	14	39	79
United Arab Emirates	--	--	8	23
Other (4 countries)	1	3	6	22
Total	852	644	16,400	13,400
Silicomanganese:				
Canada	1,990	1,850	10,500	10,000
Germany	--	--	2	3
Mexico	14	18	340	413
Venezuela	--	--	3	5
Total	2,000	1,870	10,800	10,500
Metal, including alloys and waste and scrap:⁶				
Canada	18	46	164	242
China	92	169	406	1,430
Germany	7	30	56	219
India	--	--	63	392
Japan	32	100	74	244
Malaysia	609	183	2,510	864
Mexico	144	397	2,750	8,410
United Kingdom	19	199	39	409
Vietnam	--	--	180	33
Other (12 countries)	16	61	64	416
Total	937	1,180	6,310	12,700
Grand total	4,270	4,330	38,300	43,400

-- Zero.

¹Presentation of monthly data is based on the "January–August" 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 AUGUST 2016, BY CLASS¹

Class	Gross weight (metric tons)	Value ³ (thousands)	Principal sources and destinations: gross weight (metric tons); value ³ (thousands)	January–August 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	1,320	\$1,120	Korea, Republic of 999; \$761	13,400	\$9,400	Korea, Republic of 4,260; \$4,950
Manganites, manganates, and other permanganates						
Permanganates	--	--	--	10	33	Canada 10; \$33
Potassium permanganate	55	144	India 54; \$136	470	1,190	India 469; \$1,180
Sodium permanganate	102	266	China 80; \$192	683	1,620	China 643; \$1,500
Sulfates, basket category, including manganese sulfate	2,880	3,210	China 1,080; \$1,070	39,600	34,200	Mexico 14,900; \$13,200
Exports:						
Manganese dioxide	339	544	Canada 185; \$202	4,500	6,710	Canada 2,970; \$2,730
Manganese oxides other than dioxide	344	528	Malaysia 90; \$84	5,130	7,950	Canada 802; \$1,050
Manganites, manganates, and other permanganates	7	21	Canada 6; \$11	71	182	Canada 67; \$135
Potassium permanganate	110	341	Belgium 54; \$131	1,980	5,620	Belgium 1,030; \$2,330
Sodium permanganate	111	774	Belgium 38; \$82	479	2,320	Mexico 168; \$524
Sulfates, basket category, including manganese sulfate	2,740	2,060	Canada 2,150; \$711	16,100	13,700	Canada 12,800; \$6,010

-- Zero.

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.

Source: U.S. Census Bureau.