

Mineral Industry Surveys

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MANGANESE IN APRIL 2018

Preliminary data for April 2018 indicated that domestic consumption of manganese ore containing more than 20% manganese, exclusive of that consumed at iron and steel plants, was 33,600 metric tons (t) (gross weight). This was 16% less than the amount consumed in March 2018 (40,000 t) (fig. 1). Manganese ore consumption in the first 4 months of 2018 was 135,000 t; this was 6% less than that during the same period in 2017 (144,000 t) (fig. 1). Industry stocks of ore at the end of April 2018 were estimated to be 144,000 t, 25% more than the amount at the end of March 2018 (115,000 t).

On a gross-weight basis, U.S. imports of manganese ore in April 2018 were 21,100 t, down from 29,700 t in March 2018 (fig. 1, table 5).

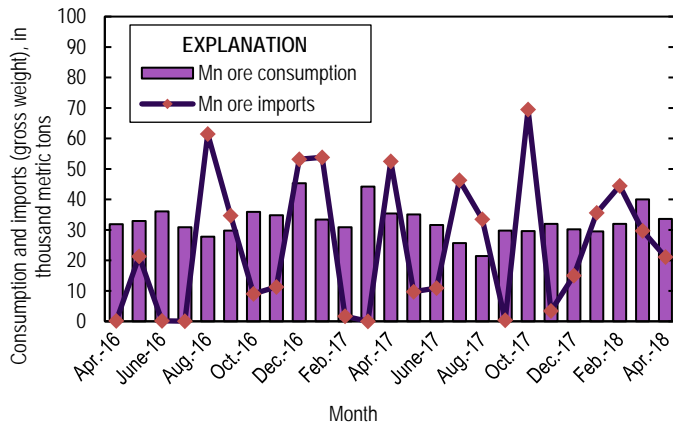


Figure 1. Monthly domestic consumption and imports of manganese (Mn) ore from April 2016 through April 2018. Sources: U.S. Census Bureau and U.S. Geological Survey.

In April 2018, the average spot prices for manganese ore deliveries to China were \$7.80 per metric ton unit, 36%–39% grade and \$8.10 per metric ton unit, 44% grade (fig. 2, table 1). Compared with March 2018 prices, they were 5% less for the 36%–39% grade and slightly more for the 44% grade. Compared with the prices of December 2016, they were 3% lower for the 36%–39% grade and 8% lower for the 44% grade. However, they were both more than double those of April 2016.

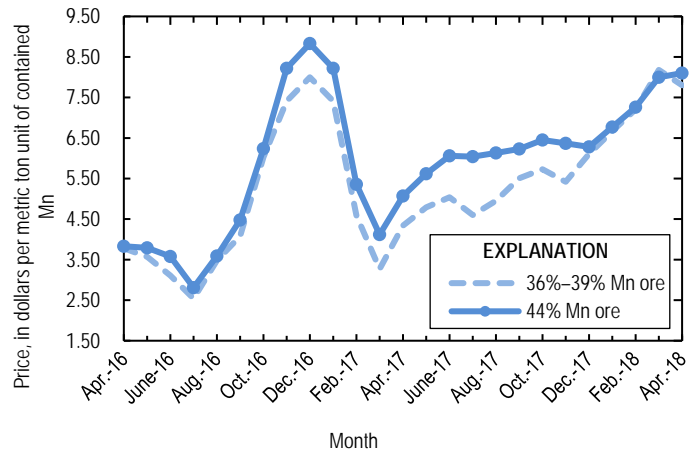


Figure 2. Average monthly spot prices for manganese (Mn) ore delivered to China from April 2016 through April 2018. Source: CRU Group.

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TABLE 1
PRICES FOR MANGANESE FERROALLOYS, METAL, AND ORE IN APRIL 2018

		Low	Average	High
<u>Manganese ferroalloys:¹</u>				
High-carbon ferromanganese, 75% manganese	dollars per long ton of contained manganese	1,550.00	1,585.00	1,640.00
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	114.00	115.00	116.00
Silicomanganese, 65% manganese	do.	67.00	67.20	69.00
<u>Manganese metal, 99.9% manganese flake²</u>	cents per pound	118.00	122.00	133.00
<u>Manganese ore:^{3,4}</u>				
36%–39% manganese	dollars per metric ton unit contained manganese	7.40	7.80	8.15
44% manganese	do.	7.65	8.10	8.65

do. Ditto.

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

²CRU Group 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 Group, 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 44 when the manganese content is 44%.

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
2017:						
April	42,300	59,500	102,000	10	1,950	1,960
January–April	71,500	135,000	206,000	62	6,980	7,040
2018:						
January	17,300	66,800	84,000	18	221	239
February	23,200	34,700	57,900	47	805	852
March	10,600	59,300	69,900	25	993	1,020
April	10,500	41,700	52,200	16	1,250	1,270
January–April	61,600	202,000	264,000	106	3,270	3,370

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.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN APRIL 2018¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–April ²		
				Gross weight	Mn content	Customs value ³
Australia	1,500	454	\$545,000	29,500	18,900	\$36,600,000
Belgium	1,890	1,240	2,300,000	1,890	1,240	2,300,000
Brazil	1,030	674	1,080,000	2,840	1,890	2,950,000
Georgia	12,700	9,440	14,600,000	41,500	30,200	46,300,000
India	416	247	610,000	1,260	744	1,810,000
Malaysia	3,000	1,950	3,300,000	3,000	1,950	3,300,000
Mexico	5,250	3,450	5,960,000	10,200	6,680	11,600,000
Norway	4,550	3,330	5,980,000	7,900	5,420	10,700,000
Russia	3,000	2,000	3,750,000	3,000	2,000	3,750,000
Saudi Arabia	--	--	--	5,010	3,310	4,810,000
South Africa	12,000	7,810	13,300,000	28,900	18,800	31,900,000
Spain	567	370	682,000	567	370	682,000
Total	46,000	31,000	52,000,000	136,000	91,500	157,000,000

-- 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 APRIL 2018¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–April ²		
				Gross weight	Mn content	Customs value ³
Low carbon:						
China	61	58	\$114,000	343	326	\$557,000
France	--	--	--	19	15	58,900
Germany	--	--	--	170	154	414,000
Japan	--	--	--	100	80	165,000
Korea, Republic of	--	--	--	2,900	2,670	5,550,000
Mexico	500	407	732,000	968	785	1,440,000
Norway	2,640	2,140	4,580,000	12,900	10,400	21,700,000
South Africa	--	--	--	82	71	138,000
Vietnam	80	72	174,000	160	144	352,000
Total	3,280	2,670	5,600,000	17,700	14,700	30,400,000
Medium carbon, 1%–2% C:						
China	--	--	--	94	74	208,000
Korea, Republic of	874	699	1,380,000	9,060	7,250	14,200,000
Mexico	932	727	1,650,000	2,420	1,900	3,910,000
Norway	590	477	931,000	3,780	3,070	5,810,000
South Africa	--	--	--	11,800	9,480	20,100,000
Total	2,400	1,900	3,960,000	27,200	21,800	44,200,000
High carbon:						
Australia	--	--	--	20,800	15,900	27,300,000
Brazil	--	--	--	1,480	681	1,300,000
France	--	--	--	4	3	8,120
Georgia	--	--	--	3,100	2,410	3,930,000
India	262	197	323,000	3,420	1,270	4,040,000
Korea, Republic of	--	--	--	1,000	760	1,150,000
Malaysia	--	--	--	20,400	15,500	26,400,000
Mexico	--	--	--	103	83	149,000
Norway	--	--	--	416	323	519,000
Russia	2,920	2,220	2,940,000	6,270	4,790	6,290,000
Saudi Arabia	19	12	32,000	77	49	131,000
South Africa	18	1	31,100	14,300	10,800	19,300,000
Spain	7	5	8,820	11,200	8,510	13,400,000
Ukraine	1,300	993	1,320,000	5,630	4,300	5,610,000
Total	4,520	3,430	4,650,000	88,200	65,300	110,000,000
Grand total	10,200	8,010	14,200,000	133,000	102,000	184,000,000

-- 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 APRIL 2018¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–April ²		
				Gross weight	Mn content	Customs value ³
More than 20%, but less than 47% manganese:						
Gabon	--	--	--	9,610	4,130	\$1,910,000
Mexico	1,520	560	\$367,000	1,520	560	367,000
South Africa	--	--	--	29,400	10,100	5,070,000
Total	1,520	560	367,000	40,600	14,800	7,350,000
47% or more manganese:						
Australia	7,510	3,590	3,100,000	7,510	3,590	3,100,000
Brazil	--	--	--	142	72	81,900
China	--	--	--	2	2	4,400
Gabon	9,900	4,950	1,830,000	79,800	40,600	23,100,000
Mexico	1,610	792	713,000	1,730	870	814,000
Morocco	39	22	50,900	39	22	50,900
South Africa	497	241	202,000	1,070	520	440,000
Turkey	19	15	9,110	19	15	9,110
Total	19,600	9,610	5,900,000	90,400	45,700	27,600,000
Grand total	21,100	10,200	6,270,000	131,000	60,400	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.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE
IN APRIL 2018¹

(Metric tons, gross weight)

Source	Quantity	Customs value ³	January–April ²	
			Quantity	Customs value ³
Belgium	39	\$65,700	40	\$71,700
Brazil	--	--	11	18,000
China	--	--	37	82,000
Germany	13	21,400	13	21,400
Japan	520	1,150,000	1,810	4,020,000
Mexico	--	--	(4)	2,210
Morocco	--	--	19	86,600
Spain	8	13,600	44	75,000
Ukraine	--	--	23	38,700
Total	579	1,250,000	2,000	4,420,000

-- 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 APRIL 2018¹

(Metric tons)

Source	Gross weight	Customs value ³	January–April ²	
			Gross weight	Customs value ³
Unwrought flake:				
China	1,070	\$1,690,000	2,280	\$3,560,000
Japan	57	294,000	121	784,000
South Africa	587	1,320,000	1,250	2,820,000
Total	1,710	3,310,000	3,650	7,160,000
Unwrought powder:				
China	--	--	40	81,600
Mexico	5	19,100	28	97,200
South Africa	79	218,000	502	1,360,000
Total	84	237,000	570	1,540,000
Unwrought, other:				
China	611	1,130,000	4,040	7,140,000
Germany	101	207,000	477	954,000
South Africa	122	282,000	265	600,000
Spain	--	--	3	4,280
Total	835	1,620,000	4,780	8,690,000
Other manganese, wrought:				
China	7	13,700	7	20,300
France	--	--	(4)	2,150
Germany	27	330,000	92	1,100,000
Japan	--	--	(4)	122,000
Malaysia	--	--	(4)	3,040
Mexico	--	--	74	203,000
Poland	--	--	(4)	6,310
Sweden	--	--	8	75,600
Total	34	344,000	181	1,530,000
Metallic waste and scrap, Canada	88	25,800	150	45,700
Grand total	2,760	5,530,000	9,330	19,000,000

-- 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 OR LOCALITIES OF DESTINATION
 IN APRIL 2018^{1,2}

Source	Gross weight (metric tons)	F.a.s. ⁴ value (thousands)	January–April ³	
			Gross weight (metric tons)	F.a.s. ⁴ value (thousands)
Ore and concentrates with 20% or more manganese:				
Belgium	--	--	19	\$75
Canada	22	\$25	94	87
Mexico	9	12	29	32
Netherlands	--	--	71	339
Total	31	37	213	532
Ferromanganese:				
2% or less carbon:				
Canada	41	66	64	99
Honduras	1	4	2	11
Morocco	--	--	4	8
Total	42	69	70	118
More than 2% carbon:				
Australia	--	--	1	4
Canada	764	1,080	931	1,340
Costa Rica	2	9	4	18
Mexico	5	9	105	100
Total	771	1,100	1,040	1,460
Silicomanganese, Canada	343	509	1,380	1,970
Metal, including alloys and waste and scrap:⁵				
Canada	2	7	8	28
China	2	32	2	32
Costa Rica	(6)	5	1	25
Germany	--	--	(6)	4
Guinea	--	--	1	5
India	--	--	77	22
Japan	--	--	39	128
Korea, Republic of	--	--	(6)	4
Malaysia	269	123	1,060	707
Mexico	9	118	83	551
Singapore	1	3	1	3
South Africa	98	83	197	167
Taiwan	(6)	3	(6)	3
Venezuela	--	--	7	6
Total	380	375	1,480	1,690
Grand total	1,570	2,090	4,180	5,770

-- Zero.

¹Presentation of monthly data is based on the "January–April" 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.

⁵Includes manganese-aluminum, other alloys, and waste and scrap.

⁶Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 9
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS
IN APRIL 2018, BY CLASS¹

Class	Gross weight (metric tons)	Value ³ (thousands)	Principal sources and destinations: gross weight (metric tons); value ³ (thousands)	January–April 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	3,870	\$2,890	South Africa 2,360; \$1,380	12,100	\$9,830	South Africa 5,870; \$3,790
Manganites, manganates, and other permanganates	20	42	Hong Kong 20; \$42	20	42	Hong Kong 20; \$42
Potassium permanganate	102	265	India 102; \$265	393	1,030	India 373; \$982
Sodium permanganate	171	385	China 153; \$342	500	1,150	China 483; \$1,100
Sulfates, basket category, including manganese sulfate	3,510	3,400	Mexico 1,330; \$836	19,100	17,600	China 7,880; \$6,370
Exports:						
Manganese dioxide	614	812	Canada 441; \$406	2,410	3,370	Canada 1,590; \$1,410
Manganese oxides other than dioxide	414	749	Poland 101; \$129	2,230	4,110	Poland 412; \$543
Manganites, manganates, and other permanganates	40	161	Mexico 38; \$158	58	218	Mexico 40; \$181
Potassium permanganate	399	1,050	Belgium 163; \$395	1,290	3,520	Belgium 584; \$1,430
Sodium permanganate	26	78	Taiwan 19; \$49	262	762	Mexico 78; \$257
Sulfates, basket category, including manganese sulfate	2,300	3,910	Canada 1,300; \$906	7,360	11,500	Canada 4,770; \$3,660

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.