

# Mineral Industry Surveys

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## MANGANESE IN JULY 2019

On a gross-weight basis, U.S. imports of manganese ore in July 2019 increased to 6,820 metric tons (t) from 1,830 t in June 2019 (fig. 1, table 5). Imports for the year through July totaled 171,000 t, 39% less compared with imports in the same period in 2018.

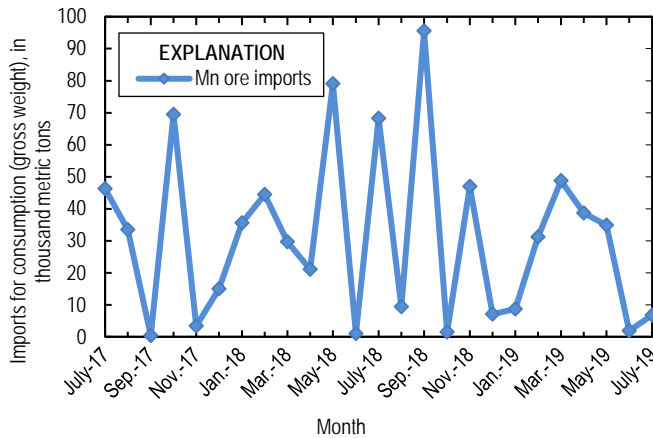


Figure 1. Monthly imports of manganese (Mn) ore from July 2017 through July 2019. Source: U.S. Census Bureau.

In July 2019, the average spot prices for manganese ore deliveries to China were \$5.52 per metric ton unit, 36%–39% grade, and \$5.75 per metric ton unit, 44% grade (fig. 2, table 1). Compared with June 2019 prices, the 36%–39%-grade price was 4% more but the 44%-grade price was 3% less. Compared with

the monthly average prices in July 2018, the 36%–39%-grade price was 14% less and the 44%-grade price was 15% less.

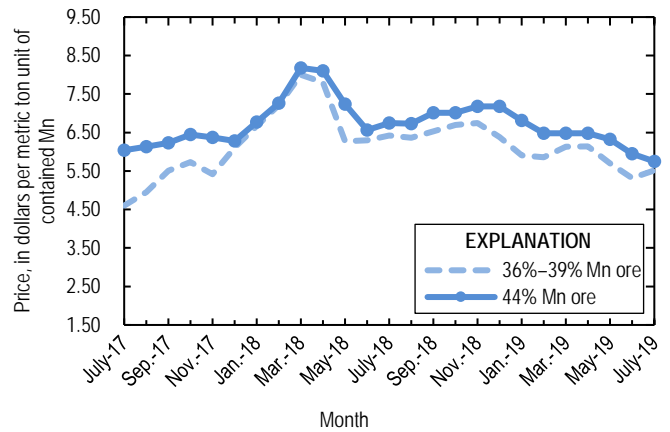


Figure 2. Average monthly spot prices for manganese (Mn) ore delivered to China from July 2017 through July 2019. Source: CRU Group.

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TABLE 1  
PRICES FOR MANGANESE FERROALLOYS, METAL, AND ORE IN JULY 2019

		Low	Average	High
<b>Manganese ferroalloys:<sup>1</sup></b>				
High-carbon ferromanganese, 75% manganese	dollars per long ton of contained manganese	1,330.00	1,365.00	1,400.00
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	112.00	113.00	114.00
Silicomanganese, 65% manganese	do.	63.40	65.60	67.80
Manganese metal, 99.7% manganese flake <sup>2</sup>	cents per pound	115.00	118.50	125.00
<b>Manganese ore:<sup>3, 4</sup></b>				
36%–39% manganese	dollars per metric ton unit contained manganese	5.20	5.52	5.70
44% manganese	do.	5.65	5.75	5.85

do. Ditto.

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

<sup>2</sup>CRU Ryan's Notes North American transaction prices, electrolytic manganese metal flake, 99.7% manganese, ex-works; average prices reported for the price range.

<sup>3</sup>CRU 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 44 when the manganese content is 44%.

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
2018:						
July	32,900	35,900	68,800	1,180	1,550 <sup>r</sup>	2,730 <sup>r</sup>
January–July	132,000	364,000 <sup>r</sup>	496,000 <sup>r</sup>	1,340	7,860 <sup>r</sup>	9,200 <sup>r</sup>
2019:						
January	4,670	27,000	31,600	19	1,690	1,710
February	12,300	66,700	79,100	94	1,840	1,930
March	25,600	55,700	81,300	45	1,330	1,370
April	27,000	46,300	73,400	20	1,140	1,160
May	17,500	59,300	76,800	27	1,090	1,120
June	924	50,800	51,700	31	946	977
July	3,400	28,800	32,200	96	1,610	1,700
January–July	91,400	335,000	426,000	331	9,640	9,970

<sup>r</sup>Revised.

<sup>1</sup>Data are 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 JULY 2019<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>3</sup>	January–July <sup>2</sup>		
				Gross weight	Mn content	Customs value <sup>3</sup>
Australia	--	--	--	38,500	25,500	\$48,500,000
Brazil	371	241	\$348,000	631	413	639,000
Georgia	10,700	7,930	12,600,000	58,100	43,100	72,300,000
India	120	60	168,000	267	157	388,000
Malaysia	503	328	515,000	16,500	10,700	17,300,000
Mexico	3,550	2,310	3,550,000	14,900	9,670	16,600,000
Norway	2,550	1,690	3,010,000	29,800	19,900	35,000,000
Russia	--	--	--	1	1	2,720
Saudi Arabia	102	82	106,000	102	82	106,000
South Africa	6,500	4,230	7,150,000	49,400	32,100	54,300,000
Spain	500	300	693,000	4,510	2,910	5,290,000
Thailand	--	--	--	25	9	38,800
Zambia	--	--	--	140	92	106,000
Total	24,900	17,200	28,200,000	213,000	145,000	251,000,000

-- Zero.

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

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

<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 4  
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN JULY 2019<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>3</sup>	January–July <sup>2</sup>		
				Gross weight	Mn content	Customs value <sup>3</sup>
<b>Low carbon:</b>						
China	--	--	--	927	871	\$1,810,000
Germany	--	--	--	237	220	594,000
Japan	96	75	\$164,000	673	530	1,150,000
Korea, Republic of	450	414	938,000	7,190	6,320	14,600,000
Mexico	18	15	45,400	2,180	1,720	3,810,000
Norway	1,400	1,130	2,360,000	26,800	21,700	45,400,000
South Africa	98	80	156,000	380	322	622,000
Spain	1,700	1,400	2,730,000	5,990	4,850	9,860,000
Vietnam	1	1	3,220	1	1	3,220
Total	3,760	3,120	6,400,000	44,400	36,500	77,900,000
<b>Medium carbon, 1%–2% C:</b>						
China	--	--	--	21	16	28,000
India	125	99	213,000	228	181	376,000
Korea, Republic of	--	--	--	9,850	7,880	15,900,000
Malaysia	--	--	--	21	16	30,700
Mexico	448	348	705,000	3,750	2,920	6,010,000
Norway	1,000	823	1,520,000	7,900	6,430	12,000,000
South Africa	--	--	--	12,800	10,200	22,300,000
Spain	--	--	--	300	242	488,000
Total	1,570	1,270	2,440,000	34,900	27,900	57,000,000
<b>High carbon:</b>						
Australia	--	--	--	58,900	45,000	65,600,000
Brazil	--	--	--	1,320	949	1,430,000
France	306	235	328,000	796	608	921,000
India	--	--	--	200	151	241,000
Korea, Republic of	--	--	--	1,600	1,230	1,940,000
Malaysia	3,870	2,940	3,250,000	30,000	22,700	27,300,000
Mexico	4	3	6,790	10	7	16,300
Norway	306	237	373,000	306	237	373,000
Russia	2,890	2,220	2,590,000	19,600	14,900	17,500,000
Saudi Arabia	--	--	--	60	44	98,200
South Africa	77	59	98,900	12,200	9,260	14,100,000
Ukraine	--	--	--	5,540	4,210	4,880,000
Total	7,450	5,700	6,650,000	131,000	99,300	134,000,000
Grand total	12,800	10,100	15,500,000	210,000	164,000	269,000,000

-- Zero.

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

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

<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 5  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn)  
IN JULY 2019<sup>1</sup>

Source	(Metric tons)			January–July <sup>2</sup>		
	Gross weight	Mn content	Customs value <sup>3</sup>	Gross weight	Mn content	Customs value <sup>3</sup>
<b>More than 20%, but less than 47% manganese:</b>						
China	--	--	--	7	3	\$3,600
Mexico	--	--	--	8,140	3,050	1,760,000
South Africa	6,280	2,890	\$3,330,000	31,300	11,900	8,080,000
Total	6,280	2,890	3,330,000	39,500	15,000	9,840,000
<b>47% or more manganese:</b>						
Brazil	93	50	111,000	464	234	383,000
Gabon	208	104	221,000	130,000	74,200	44,700,000
Morocco	39	22	50,900	77	44	102,000
South Africa	200	97	87,800	877	425	375,000
Turkey	--	--	--	4	3	2,380
Total	539	273	471,000	131,000	74,900	45,600,000
Grand total	6,820	3,160	3,800,000	171,000	89,900	55,400,000

-- Zero.

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

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

<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 JULY 2019<sup>1</sup>

(Metric tons, gross weight)

Source	Quantity	Customs value <sup>3</sup>	January–July <sup>2</sup>	
			Quantity	Customs value <sup>3</sup>
Belgium	--	--	19	\$86,600
Brazil	19	\$21,800	85	133,000
China	--	--	36	84,300
Germany	--	--	20	101,000
Greece	99	248,000	173	493,000
India	--	--	17	30,100
Japan	270	589,000	2,120	4,690,000
Morocco	15	25,300	82	140,000
Slovakia	--	--	13	22,500
Total	403	884,000	2,570	5,780,000

-- Zero.

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

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

<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 7  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL  
IN JULY 2019<sup>1</sup>

(Metric tons)

Source	Gross weight	Customs value <sup>3</sup>	January–July <sup>2</sup>	
			Gross weight	Customs value <sup>3</sup>
<b>Unwrought flake:</b>				
China	341	\$720,000	5,590	\$11,100,000
Gabon	--	--	50	122,000
Hong Kong	--	--	33	66,300
Japan	(4)	315,000	1	1,420,000
Mexico	5	21,600	6	24,500
South Africa	339	779,000	2,640	6,960,000
Total	687	1,840,000	8,320	19,700,000
<b>Unwrought powder:</b>				
China	19	35,500	79	182,000
Mexico	21	80,300	139	533,000
South Africa	--	--	804	2,270,000
Total	40	116,000	1,020	2,980,000
<b>Unwrought, other:</b>				
Belgium	--	--	23	50,400
China	512	975,000	13,900	28,100,000
Germany	97	235,000	1,410	3,340,000
Japan	--	--	(4)	6,260
Poland	--	--	(4)	6,310
South Africa	102	266,000	633	1,620,000
Spain	--	--	132	226,000
Total	711	1,480,000	16,100	33,400,000
<b>Other manganese, wrought:</b>				
Austria	--	--	(4)	6,040
China	--	--	(4)	27,300
Germany	33	420,000	242	2,950,000
Japan	(4)	27,400	(4)	47,900
Mexico	80	238,000	320	957,000
Sweden	--	--	2	23,300
United Kingdom	--	--	(4)	2,090
Total	113	686,000	564	4,010,000
Metallic waste and scrap, Canada	--	--	261	79,200
Grand total	1,550	4,110,000	26,300	60,200,000

-- Zero.

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

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

<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>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 OR LOCALITY OF DESTINATION  
IN JULY 2019<sup>1,2</sup>

Source	Gross weight (metric tons)	F.a.s. <sup>4</sup> value (thousands)	January–July <sup>3</sup>	
			Gross weight (metric tons)	F.a.s. <sup>4</sup> value (thousands)
<b>Ore and concentrates with 20% or more manganese:</b>				
Bahamas	--	--	6	\$6
Canada	105	\$95	279	269
India	--	--	(5)	5
Mexico	--	--	14	13
Netherlands	87	151	290	564
Singapore	--	--	73	120
Total	192	246	662	977
<b>Ferromanganese:</b>				
2% or less carbon:				
Canada	3	4	1,120	2,000
China	3	6	28	54
Taiwan	--	--	6	11
United Kingdom	--	--	29	55
Other [5 countries and (or) localities]	--	--	26	49
Total	6	11	1,210	2,170
More than 2% carbon:				
Canada	68	84	3,510	4,510
China	--	--	16	46
Hong Kong	--	--	1	3
United Kingdom	--	--	26	73
Total	68	84	3,560	4,630
<b>Silicomanganese:</b>				
Canada	61	74	140	173
Mexico	--	--	4	9
Total	61	74	144	182
<b>Metal, including alloys and waste and scrap:<sup>6</sup></b>				
Australia	8	8	8	8
Brazil	(5)	8	(5)	8
Canada	--	--	62	234
Costa Rica	(5)	3	1	28
Germany	1	3	1	8
Guatemala	--	--	2	19
Guyana	4	13	4	13
Hungary	--	--	(5)	4
India	7	29	139	78
Japan	16	61	85	317
Malaysia	1,240	685	4,550	2,290
Mexico	1	24	41	354
New Zealand	--	--	(5)	5
Norway	--	--	17	67
Pakistan	233	70	858	251
Other [4 countries and (or) localities]	--	--	12	60
Total	1,510	904	5,780	3,750
Grand total	1,830	1,320	11,300	11,700

-- Zero.

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

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

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

<sup>4</sup>Free alongside ship.

<sup>5</sup>Less than ½ unit.

<sup>6</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 JULY 2019, 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–July <sup>2</sup>		
				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	675	\$617	Brazil 326; \$225	9,870	\$7,270	South Africa 4,330; \$2,650
Manganites, manganates, and other permanganates	19	43	China 19; \$43	38	90	China 38; \$87
Potassium permanganate	56	139	India 56; \$133	689	1,750	India 682; \$1,720
Sodium permanganate	56	104	China 56; \$104	518	1,150	China 499; \$1,100
Sulfates, basket category, including manganese sulfate	3,030	2,810	India 1,230; \$720	30,600	27,000	Mexico 13,172; \$9,790
<b>Exports:</b>						
Manganese dioxide	554	806	Canada 302; \$232	3,260	5,630	Canada 1,670; \$1,600
Manganese oxides other than dioxide	367	597	Poland 100; \$132	2,930	5,580	Poland 521; \$683
Manganites, manganates, and other permanganates	5	27	Canada 4; \$9	113	340	Canada 73; \$145
Potassium permanganate	286	891	Belgium 109; \$266	2,250	6,240	Belgium 977; \$2,370
Sodium permanganate	77	174	Brazil 58; \$124	447	1,080	Belgium 287; \$620
Sulfates, basket category, including manganese sulfate	2,200	3,390	Canada 1,610; \$889	13,800	21,300	Canada 10,300; \$6,530

<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.