

# Mineral Industry Surveys

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## MANGANESE IN NOVEMBER 2019

On a gross-weight basis, U.S. imports of manganese ore in November 2019 decreased to 49,600 metric tons (t) from 112,000 t in October 2019 (fig. 1, table 5). Imports for the year through November totaled 406,000 t, 6% less compared with imports in the same period in 2018.

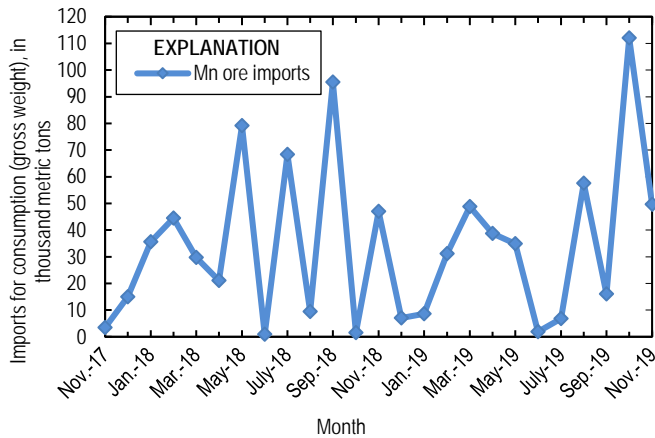


Figure 1. Monthly imports of manganese (Mn) ore from November 2017 through November 2019. Source: U.S. Census Bureau.

In November 2019, the average spot prices for manganese ore deliveries to China were \$3.30 per metric ton unit, 36%–39% grade, and \$3.67 per metric ton unit, 44% grade (fig. 2, table 1). Compared with October 2019 prices, the 36%–39%-grade price was 23% less and the 44%-grade price was 22% less. Compared with the monthly average prices in November 2018, the 36%–

39%-grade price was 51% less and the 44%-grade price was 49% less.

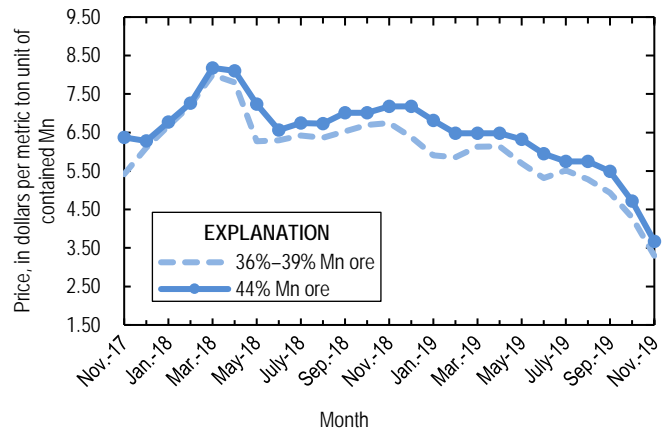


Figure 2. Average monthly spot prices for manganese (Mn) ore delivered to China from November 2017 through November 2019. Source: CRU Group.

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

		Low	Average	High
<b>Manganese ferroalloys:<sup>1</sup></b>				
High-carbon ferromanganese, 75% manganese	dollars per long ton of contained manganese	1,093.75	1,125.00	1,156.25
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	95.00	98.88	102.75
Silicomanganese, 65% manganese	do.	55.00	56.00	57.00
Manganese metal, 99.7% manganese flake <sup>2</sup>	cents per pound	95.00	97.50	100.00
<b>Manganese ore:<sup>3, 4</sup></b>				
36%–39% manganese	dollars per metric ton unit contained manganese	3.25	3.30	3.35
44% manganese	do.	3.50	3.67	3.90

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:						
November	23,500 <sup>r</sup>	75,600	99,100 <sup>r</sup>	19	2,040	2,060
January–November	202,000	595,000 <sup>r</sup>	797,000 <sup>r</sup>	1,450	13,800 <sup>r</sup>	15,200 <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
August	30,500	52,900	83,400	11	1,260	1,270
September	10,100	45,100	55,100	76	1,330	1,410
October	71,800	23,200	95,000	69	948	1,020
November	25,900	46,600	72,500	8	1,500	1,510
January–November	230,000	502,000	732,000	496	14,700	15,200

<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 NOVEMBER 2019<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>3</sup>	January–November <sup>2</sup>		
				Gross weight	Mn content	Customs value <sup>3</sup>
Australia	--	--	--	54,700	36,300	\$69,300,000
Brazil	--	--	--	631	413	639,000
Georgia	16,600	12,200	\$21,700,000	84,800	62,700	106,000,000
Iceland	--	--	--	166	131	138,000
India	--	--	--	267	157	388,000
Malaysia	4,000	2,600	4,260,000	30,600	19,900	32,300,000
Mexico	2,820	1,840	2,810,000	28,000	18,200	29,800,000
Norway	2,300	807	3,050,000	42,500	27,400	51,200,000
Russia	--	--	--	1	1	2,720
Saudi Arabia	--	--	--	4,550	2,870	4,470,000
South Africa	10,400	6,760	10,900,000	72,800	47,300	79,600,000
Spain	--	--	--	7,010	4,500	8,400,000
Thailand	--	--	--	25	9	38,800
Zambia	--	--	--	140	92	106,000
Total	36,200	24,200	42,700,000	326,000	220,000	383,000,000

-- 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 NOVEMBER 2019<sup>1</sup>

(Metric tons)

Source	Gross weight	Mn content	Customs value <sup>3</sup>	January–November <sup>2</sup>		
				Gross weight	Mn content	Customs value <sup>3</sup>
<b>Low carbon:</b>						
China	--	--	--	927	871	\$1,810,000
Germany	100	95	\$257,000	470	441	1,180,000
Japan	288	228	473,000	1,250	984	2,120,000
Korea, Republic of	700	644	1,290,000	11,700	10,200	22,800,000
Mexico	18	15	47,200	2,270	1,790	4,040,000
Norway	3,150	2,550	4,910,000	34,800	28,200	58,600,000
South Africa	100	83	161,000	775	646	1,250,000
Spain	--	--	--	9,890	7,980	16,300,000
Vietnam	--	--	--	1	1	3,220
Total	4,360	3,620	7,140,000	62,100	51,200	108,000,000
<b>Medium carbon, 1%–2% C:</b>						
China	--	--	--	21	16	28,000
India	108	97	152,000	336	278	528,000
Korea, Republic of	3,500	2,800	5,750,000	16,900	13,500	27,400,000
Malaysia	--	--	--	21	16	30,700
Mexico	49	39	98,200	4,220	3,280	6,870,000
Norway	1,200	967	1,640,000	12,100	9,830	18,200,000
South Africa	--	--	--	19,300	15,400	33,600,000
Spain	--	--	--	300	242	488,000
Total	4,860	3,900	7,640,000	53,200	42,600	87,200,000
<b>High carbon:</b>						
Australia	--	--	--	72,500	55,400	80,800,000
Brazil	391	286	399,000	2,500	1,840	2,680,000
France	--	--	--	3,960	3,020	4,350,000
India	75	57	75,800	1,170	893	1,280,000
Korea, Republic of	--	--	--	3,600	2,750	4,070,000
Malaysia	15,700	11,900	13,700,000	59,300	45,000	53,200,000
Mexico	--	--	--	14	11	23,700
Norway	--	--	--	776	602	945,000
Russia	--	--	--	26,400	20,100	23,800,000
Saudi Arabia	--	--	--	60	44	98,200
South Africa	18	1	30,400	24,400	18,600	27,900,000
Spain	--	--	--	19	14	38,700
Ukraine	--	--	--	5,740	4,370	5,060,000
Zambia	44	35	42,700	218	175	224,000
Total	16,200	12,300	14,300,000	201,000	153,000	205,000,000
Grand total	25,400	19,800	29,100,000	316,000	246,000	400,000,000

-- 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 NOVEMBER 2019<sup>1</sup>

Source	(Metric tons)			January–November <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>						
Brazil	--	--	--	16,200	7,190	\$3,330,000
China	--	--	--	7	3	3,600
Mexico	--	--	--	27,300	10,400	5,770,000
South Africa	621	275	\$157,000	42,100	16,600	10,500,000
Total	621	275	157,000	85,500	34,100	19,600,000
<b>47% or more manganese:</b>						
Brazil	--	--	--	3,700	1,880	1,310,000
Gabon	48,600	25,100	15,200,000	298,000	179,000	93,000,000
Mexico	--	--	--	16,600	11,000	2,900,000
Morocco	--	--	--	177	93	148,000
South Africa	400	194	176,000	1,960	949	849,000
Turkey	--	--	--	4	3	2,380
Total	49,000	25,300	15,400,000	321,000	193,000	98,200,000
Grand total	49,600	25,600	15,600,000	406,000	227,000	118,000,000

-- 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 6  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE  
IN NOVEMBER 2019<sup>1</sup>

(Metric tons, gross weight)

Source	Quantity	Customs value <sup>3</sup>	January–November <sup>2</sup>	
			Quantity	Customs value <sup>3</sup>
Belgium	18	\$89,900	55	\$263,000
Brazil	--	--	104	155,000
China	--	--	54	132,000
Germany	2	9,070	25	128,000
Greece	--	--	470	1,160,000
India	--	--	477	818,000
Japan	376	821,000	3,130	6,950,000
Morocco	77	149,000	322	554,000
Slovakia	--	--	13	22,500
Span	19	31,800	37	63,700
United Kingdom	8	12,900	8	12,900
Total	499	1,110,000	4,690	10,300,000

-- 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 NOVEMBER 2019<sup>1</sup>

(Metric tons)

Source	Gross weight	Customs value <sup>3</sup>	January–November <sup>2</sup>	
			Gross weight	Customs value <sup>3</sup>
<b>Unwrought flake:</b>				
China	148	\$242,000	6,770	\$13,600,000
Gabon	--	--	50	122,000
Hong Kong	--	--	33	66,300
Japan	(4)	189,000	2	2,180,000
Mexico	--	--	6	24,500
South Africa	120	265,000	3,480	8,940,000
Switzerland	--	--	20	39,500
<b>Total</b>	<b>268</b>	<b>696,000</b>	<b>10,400</b>	<b>25,000,000</b>
<b>Unwrought powder:</b>				
China	--	--	99	216,000
Mexico	24	85,500	234	866,000
South Africa	141	439,000	1,090	3,130,000
<b>Total</b>	<b>164</b>	<b>524,000</b>	<b>1,420</b>	<b>4,220,000</b>
<b>Unwrought, other:</b>				
Belgium	--	--	36	86,800
China	1,520	2,520,000	19,500	38,600,000
Germany	99	229,000	1,910	4,520,000
Hong Kong	388	685,000	388	685,000
Japan	--	--	(4)	6,260
New Zealand	1	2,910	1	2,910
Poland	(4)	2,750	(4)	9,060
South Africa	82	194,000	981	2,510,000
Spain	--	--	143	245,000
<b>Total</b>	<b>2,090</b>	<b>3,630,000</b>	<b>23,000</b>	<b>46,700,000</b>
<b>Other manganese, wrought:</b>				
Austria	--	--	(4)	6,040
China	--	--	(4)	27,300
Germany	20	234,000	335	4,080,000
Japan	--	--	(4)	67,700
Korea, Republic of	--	--	(4)	51,000
Mexico	79	184,000	596	1,650,000
Sweden	--	--	10	130,000
United Kingdom	--	--	(4)	2,090
<b>Total</b>	<b>99</b>	<b>418,000</b>	<b>942</b>	<b>6,020,000</b>
Metallic waste and scrap, Canada	--	--	364	119,000
<b>Grand total</b>	<b>2,620</b>	<b>5,270,000</b>	<b>36,100</b>	<b>82,000,000</b>

-- 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 NOVEMBER 2019<sup>1,2</sup>

Source	Gross weight (metric tons)	F.a.s. <sup>4</sup> value (thousands)	January–November <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	--	--	453	425
India	--	--	19	33
Mexico	--	--	23	26
Netherlands	16	\$76	322	723
Singapore	--	--	86	132
United Kingdom	--	--	81	63
Total	16	76	990	1,410
<b>Ferromanganese:</b>				
<b>2% or less carbon:</b>				
Canada	19	33	1,140	2,040
China	--	--	28	54
Taiwan	--	--	6	11
United Kingdom	--	--	29	55
Other [6 countries and (or) localities]	--	--	28	55
Total	19	33	1,230	2,210
<b>More than 2% carbon:</b>				
Canada	--	--	3,680	4,800
China	--	--	16	46
Hong Kong	--	--	1	3
United Kingdom	--	--	26	73
Total	--	--	3,720	4,920
<b>Silicomanganese:</b>				
Canada	489	541	1,500	1,710
Mexico	--	--	8	18
Total	489	541	1,510	1,730
<b>Metal, including alloys and waste and scrap:<sup>5</sup></b>				
Australia	--	--	8	8
Brazil	--	--	(6)	14
Canada	13	47	106	366
Costa Rica	(6)	5	1	49
Dominican Republic	--	--	21	15
France	--	--	15	5
Germany	--	--	1	14
Guatemala	--	--	2	19
Guyana	--	--	4	13
Hungary	--	--	(6)	4
India	28	10	210	103
Japan	--	--	85	319
Malaysia	1,100	433	8,270	4,040
Mexico	(6)	8	43	426
New Zealand	--	--	(6)	5
Norway	--	--	25	494
Pakistan	--	--	900	263
Turkey	16	6	52	28
Other [6 countries and (or) localities]	(6)	4	22	76
Total	1,160	514	9,760	6,260
Grand total	1,680	1,160	17,200	16,500

-- Zero.

<sup>1</sup>Presentation of monthly data is based on the "January–November" 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>Includes manganese-aluminum, other alloys, and waste and scrap.

<sup>6</sup>Less than ½ unit.

TABLE 9  
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS  
IN NOVEMBER 2019, BY CLASS<sup>1</sup>

Class	Gross weight (metric tons)	Value <sup>3</sup> (thousands)	Principal sources and destinations: gross weight (metric tons); value <sup>3</sup> (thousands)	January–November <sup>2</sup>		
				Gross weight (metric tons)	Value <sup>3</sup> (thousands)	Principal sources and destinations: gross weight (metric tons); value <sup>3</sup> (thousands)
<b>Imports for consumption:</b>						
Manganese oxides other than dioxide	1,500	\$1,050	Korea, Republic of 569; \$388	15,700	\$11,400	South Africa 5,920; \$3,690
Manganites, manganates, and other permanganates	19	37	China 19; \$37	78	181	China 77; \$177
Potassium permanganate	74	189	India 74; \$186	1,150	2,870	India 1,150; \$2,830
Sodium permanganate	249	479	China 230; \$427	1,060	2,190	China 1,020; \$2,080
Sulfates, basket category, including manganese sulfate	6,280	4,540	Mexico 1,980; \$1,580	49,700	44,000	Mexico 20,300; \$15,900
<b>Exports:</b>						
Manganese dioxide	456	527	Canada 331; \$256	5,510	8,200	Canada 3,130; \$2,800
Manganese oxides other than dioxide	295	626	Korea, Republic of 79; \$137	4,470	8,630	Poland 741; \$974
Manganites, manganates, and other permanganates	5	11	Canada 5; \$11	167	480	Canada 125; \$249
Potassium permanganate	109	411	Brazil 36; \$83	2,800	8,110	Belgium 1,140; \$2,770
Sodium permanganate	15	66	Korea, Republic of 11; \$35	693	1,720	Belgium 382; \$826
Sulfates, basket category, including manganese sulfate	1,100	2,000	Canada 674; \$461	21,700	32,000	Canada 16,500; \$10,400

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits.

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

<sup>3</sup>For imports, customs value; for exports, free alongside ship value.

Source: U.S. Census Bureau.