

Mineral Industry Surveys

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MANGANESE IN NOVEMBER 2018

Preliminary data for November 2018 indicated that domestic consumption of manganese ore containing more than 20% manganese, exclusive of that consumed at iron and steel plants, was 28,900 metric tons (t) (gross weight). This was 4% more than the amount consumed in October 2018 (27,800 t) (fig. 1). Manganese ore consumption in the first 11 months of 2018 was 334,000 t (includes revisions during the reporting period); this was 4% less than that during the same period in 2017 (348,000 t) (fig. 1). Industry stocks of ore at the end of November 2018 were estimated to be 193,000 t, 4% less than the amount at the end of October 2018 (202,000 t).

On a gross-weight basis, U.S. imports of manganese ore in November 2018 were 47,000 t, 30 times more than the 1,500 t imported in October 2018 (fig. 1, table 5).

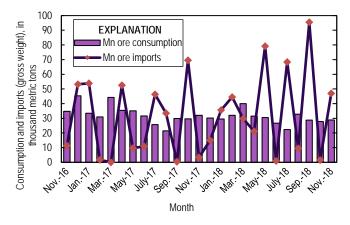


Figure 1. Monthly domestic consumption and imports of manganese (Mn) ore from November 2016 through November 2018. Sources: U.S. Census Bureau and U.S. Geological Survey.

In November 2018, the average spot prices for manganese ore deliveries to China were \$6.75 per metric ton unit, 36%–39% grade, and \$7.18 per metric ton unit, 44% grade (fig. 2, table 1). Compared with October 2018 prices, they were slightly more for each grade. Compared with the 2-year price highs of December 2016, they were 16% lower for the 36%–39% grade and 19% lower for the 44% grade.

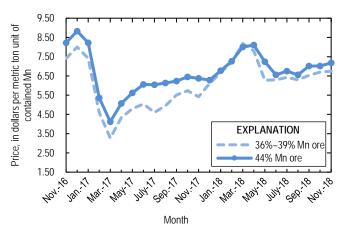


Figure 2. Average monthly spot prices for manganese (Mn) ore delivered to China from November 2016 through November 2018. Source: CRU Group.

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https://www.usgs.gov/centers/nmic/minerals-information-publication-list-services.

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

		Low	Average	High
Manganese ferroalloys: ¹				
High-carbon ferromanganese, 75% manganese	dollars per long ton of contained manganese	1,280.00	1,333.75	1,400.00
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	112.00	113.00	114.00
Silicomanganese, 65% manganese	do.	60.00	61.38	65.00
Manganese metal, 99.9% manganese flake ²	cents per pound	130.00	156.11	175.00
Manganese ore: ^{3,4}				
36%-39% manganese	dollars per metric ton unit contained manganese	6.60	6.75	6.85
44% manganese	do.	7.10	7.18	7.25

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%.

 $\label{eq:table 2} \textbf{TABLE 2}$ SELECTED U.S. FOREIGN TRADE IN MANGANESE 1

(Metric tons, manganese content)²

	Imports for consumption				Exports	
	Ore and	Ferroalloy		Ferroalloy		
	dioxide	and metal	Total	Ore	and metal	Total
2017:						
November	1,960	31,500	33,400	27	1,400	1,420
January-November	167,000	482,000	649,000	567 ^r	15,400	16,000 1
2018:						
January	17,300	66,800	84,000	18	221	239
February	23,200	34,700	57,900	48	806	853
March	10,600	59,300	69,900	26	993	1,020
April	10,500	41,700	52,200	16	1,250	1,260
May	36,500	67,700	104,000	30	1,240	1,270
June	754	56,800	57,500	30	1,800	1,830
July	32,900	35,900	68,800	1,180	1,740	2,910
August	5,240	84,100	89,300	38	1,350	1,380
September	40,600	33,700	74,300	35	1,080	1,110
October	1,110	37,600	38,700	16	1,420	1,440
November	23,200	75,600	98,800	19	2,040	2,060
January-November	202,000	594,000	796,000	1,450	13,900	15,400

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 (60%), manganese metal (100%), and manganese waste and scrap (50%). Manganese contained in exports are estimated from reported gross weights, as follows: ferromanganese (79%), manganese dioxide (60%), manganese metal (100%), manganese ore (50%), and silicomanganese (66%).

 ${\bf TABLE~3}$ U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN NOVEMBER 2018^1

(Metric tons)

				January–November ²		
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value ³	weight	content	value ³
Australia	12,000	7,950	\$15,100,000	80,100	51,900	\$101,000,000
Belgium				1,890	1,240	2,300,000
Brazil				3,270	2,170	3,440,000
Georgia	29,500	21,700	38,300,000	116,000	84,500	142,000,000
India	54	31	85,900	1,870	1,100	2,720,000
Malaysia	6,530	4,250	7,380,000	29,000	18,900	34,100,000
Mexico	1,740	1,130	1,990,000	22,300	14,800	25,400,000
Norway	2,500	1,500	3,550,000	18,200	11,700	26,000,000
Russia	194	113	231,000	9,160	6,100	11,500,000
Saudi Arabia				9,030	5,970	10,100,000
South Africa	500	325	549,000	57,500	37,400	63,400,000
Spain	7,500	4,830	8,560,000	28,000	18,100	34,900,000
Taiwan				200	132	237,000
Zambia				999	650	1,230,000
Total	60,500	41,800	75,800,000	377,000	255,000	458,000,000

⁻⁻ 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.

 ${\it TABLE~4}$ U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN NOVEMBER 2018^1

(Metric tons)

			_	January–November ²		
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value ³	weight	content	value ³
Low carbon:						
China	529	495	\$1,190,000	4,800	4,490	\$10,500,000
France				19	15	58,900
Germany				264	233	657,000
Japan	240	187	403,000	340	267	568,000
Korea, Republic of	1,000	921	2,670,000	10,200	9,380	23,200,000
Mexico	18	15	45,400	3,100	2,510	4,690,000
Norway	4,060	3,290	7,070,000	41,500	33,600	70,000,000
South Africa	81	69	134,000	293	256	489,000
Vietnam	40	36	100,000	280	252	629,000
Total	5,970	5,010	11,600,000	60,800	51,000	111,000,000
Medium carbon, 1%–2% C:						
China				145	119	319,000
France				2,900	2,360	4,600,000
Korea, Republic of	2,500	2,000	4,180,000	29,500	23,600	47,500,000
Mexico	1,080	844	1,690,000	6,400	5,050	10,300,000
Norway	1,550	1,260	2,400,000	19,200	15,600	29,600,000
South Africa	1,910	1,520	3,280,000	33,700	27,100	55,200,000
Total	7,030	5,620	11,600,000	91,800	73,800	148,000,000
High carbon:		<u> </u>	<u> </u>	•	·	
Australia	16,900	12,000	18,900,000	76,000	57,000	93,900,000
Brazil	108	79	128,000	3,350	2,090	3,810,000
Canada				20	8	34,400
France				2,200	1,680	2,470,000
Georgia				3,100	2,410	3,930,000
India				4,850	1,710	5,640,000
Korea, Republic of				5,840	4,440	8,290,000
Malaysia	10,200	7,750	12,700,000	58,900	44,700	74,900,000
Mexico	4	3	6,120	119	96	175,000
Norway				3,090	2,390	3,870,000
Russia				28,100	21,400	27,500,000
Saudi Arabia	39	24	68,300	395	251	635,000
South Africa	2,050	1,530	2,650,000	43,300	32,800	57,200,000
Spain				18,700	14,200	22,800,000
Ukraine				6,580	5,020	6,540,000
Total	29,300	21,300	34,400,000	254,000	190,000	312,000,000
Grand total	42,300	32,000	57,600,000	407,000	315,000	570,000,000

⁻⁻ 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.

TABLE 5 $\mbox{U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn) } \\ \mbox{IN NOVEMBER 2018}^1$

(Metric tons)

					January-November	.2
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value ³	weight	content	value ³
More than 20%, but less than 47% manganese:						
Brazil	6,570	2,630	\$1,620,000	6,570	2,630	\$1,620,000
Cote d'Ivoire				27	12	\$11,000
Gabon				9,610	4,130	1,910,000
Mexico				15,500	5,450	3,560,000
South Africa	4,130	1,940	419,000	108,000	36,500	20,000,000
Turkey				57	26	27,700
Total	10,700	4,570	2,040,000	139,000	48,700	27,100,000
47% or more manganese:						
Australia				13,500	6,430	5,220,000
Brazil	26	13	17,100	2,290	1,260	919,000
China				2	2	4,400
Gabon	35,800	18,100	11,900,000	266,000	137,000	83,400,000
Mexico				7,620	3,890	2,470,000
Morocco				116	66	153,000
South Africa	477	231	206,000	3,000	1,460	1,270,000
Turkey				361	263	175,000
Total	36,300	18,300	12,100,000	293,000	150,000	93,600,000
Grand total	47,000	22,900	14,100,000	433,000	199,000	121,000,000

⁻⁻ 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.

$\label{eq:table 6} \text{U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE} \\ \text{IN NOVEMBER 2018}^{\text{I}}$

(Metric tons, gross weight)

-			January–1	November ²	
	Customs			Customs	
Source	Quantity	value ³	Quantity	value ³	
Belgium			59	\$158,000	
Brazil			32	54,100	
China			71	160,000	
France			14	23,800	
Germany	12	\$20,300	37	62,500	
India			5	15,700	
Japan	430	963,000	4,770	10,700,000	
Mexico			(4)	2,210	
Morocco			19	86,600	
Spain			60	102,000	
Ukraine			23	38,700	
Total	442	984,000	5,090	11,400,000	

⁻⁻ 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.

TABLE 7 $\mbox{U.s. IMPORTS FOR CONSUMPTION OF MANGANESE METAL } \mbox{IN NOVEMBER $20181

(Metric tons)

			January–November ²		
	Gross	Customs	Gross	Customs	
Source	weight	value ³	weight	value ³	
Unwrought flake:					
China	322	\$754,000	4,030	\$7,230,000	
Gabon			6	14,700	
Hong Kong			102	263,000	
Japan	(4)	280,000	153	2,660,000	
Latvia			10	27,500	
Mexico			20	69,900	
Netherlands			1	2,900	
South Africa	419	1,430,000	3,780	9,340,000	
Vietnam			100	221,000	
Total	741	2,470,000	8,200	19,800,000	
Unwrought powder:	 -				
China			97	216,000	
Mexico	8	31,000	195	651,000	
South Africa	129	372,000	1,230	3,390,000	
Total	138	403,000	1,530	4,260,000	
Unwrought, other:					
China	490	1,380,000	11,600	23,800,000	
Germany	194	516,000	1,330	2,970,000	
New Zealand			(4)	2,040	
Poland			(4)	6,310	
South Africa	122	292,000	819	1,900,000	
Spain			3	4,280	
Total	806	2,190,000	13,700	28,700,000	
Other manganese, wrought:			·		
Canada		21,900	5	21,900	
China		11,800	42	68,400	
France			(4)	2,150	
Germany	10	110,000	286	3,300,000	
India			(4)	5,640	
Japan			(4)	163,000	
Malaysia			(4)	3,040	
Mexico	43	175,000	137	450,000	
Poland		,	(4)	9,250	
Sweden			9	85,600	
Total	72	319,000	481	4,110,000	
Metallic waste and scrap, Canada	87	21,800	372	116,000	
Grand total	1,840	5,400,000	24,300	57,000,000	

⁻⁻ 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.

TABLE 8 U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE, SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OR LOCALITIES OF DESTINATION IN NOVEMBER $2018^{1.2}$

			January-	January–November ³		
		F.a.s. ⁴		F.a.s. ⁴		
	Gross weight	value	Gross weight	value		
Source	(metric tons)	(thousands)	(metric tons)	(thousands)		
Ore and concentrates with 20% or more manganese:						
Canada	21	\$25	340	\$334		
Mexico	6	6	2,330	1,940		
Netherlands	10	45	177	812		
Other [3 countries and (or) localities]			45	165		
Total	38	75	2,900	3,250		
Ferromanganese:						
2% or less carbon:						
Canada	19	32	758	1,300		
Mexico			41	110		
Morocco			4	8		
Taiwan			21	40		
Other [2 countries and (or) localities]			5	18		
Total	19	32	829	1,480		
More than 2% carbon:						
Canada	1,470	1,900	8,390	11,400		
Costa Rica	1	6	5	24		
Mexico			105	100		
United Kingdom			23	65		
Other [4 countries and (or) localities]			7	20		
Total	1,470	1,910	8,530	11,600		
Silicomanganese:	0					
Canada	906	1,350	4,140	5,960		
Ecuador			125	162		
Mexico	6	13	8	16		
Total	911	1,360	4,280	6,130		
Metal, including alloys and waste and scrap: ⁵						
Canada	2	9	15	60		
China			5	75		
France			9	36		
India	57	25	275	266		
Japan			83	303		
Malaysia	169	88	2,860	1,540		
Mexico	7	93	165	1,280		
Norway			10	472		
Pakistan	19	6	59	16		
South Africa			216	192		
Venezuela			7	6		
Other [10 countries and (or) localities]	3	29	8	125		
Total	257	250	3,710	4,370		
Grand total	2,700	3,630	20,200	26,800		

⁻⁻ Zero.

¹Presentation of monthly data is based on the "January–November" quantities of the leading countries and (or) localities.

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.

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

				January–November ²		November ²
			Principal sources			Principal sources
			and destinations:			and destinations:
	Gross weight	Value ³	gross weight (metric tons);	Gross weight	Value ³	gross weight (metric tons);
Class	(metric tons)	(thousands)	value ³ (thousands)	(metric tons)	(thousands)	value ³ (thousands)
Imports for consumption:						
Manganese oxides other than dioxide	2,430	\$1,550	South Africa 1,310; \$591	31,000	\$24,700	South Africa 15,300; \$9,270
Manganites, manganates, and other permanganates	(4)	4	Canada (4); \$4	20	54	Hong Kong 20; \$42
Potassium permanganate	72	196	India 71; \$190	1,340	3,520	India 1,320; \$3,430
Sodium permanganate	87	203	China 87; \$203	1,340	3,000	China 1,320; \$2,960
Sulfates, basket category, including manganese sulfate	6,980	5,590	China 3,710; \$2,690	63,500	52,300	China 27,200; \$20,700
Exports:						
Manganese dioxide	708	807	Canada 565; \$501	7,140	9,980	Canada 4,790; \$4,180
Manganese oxides other than dioxide	291	531	United Kingdom 57; \$58	5,790	10,900	Poland 932; \$1,270
Manganites, manganates, and other permanganates	23	51	Canada 21; \$44	218	737	Mexico 153; \$592
Potassium permanganate	187	601	Belgium 126; \$305	3,020	8,820	Belgium 1,420; \$3,450
Sodium permanganate	36	105	Belgium 19; \$40	751	2,460	Belgium 267; \$544
Sulfates, basket category, including manganese sulfate	1,130	2,020	Canada 834; \$777	18,500	29,600	Canada 13,100; \$10,700

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.