

Mineral Industry Surveys

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MANGANESE IN SEPTEMBER 2018

Preliminary data for September 2018 indicated that domestic consumption of manganese ore containing more than 20% manganese, exclusive of that consumed at iron and steel plants, was 28,800 metric tons (t) (gross weight). This was 12% less than the revised amount consumed in August 2018 (32,800 t) (fig. 1). Manganese ore consumption in the first 9 months of 2018 was 277,000 t (includes revisions during the reporting period); this was about 4% less than that during the same period in 2017 (287,000 t) (fig. 1). Industry stocks of ore at the end of September 2018 were estimated to be 162,000 t, 10% less than the revised amount at the end of August 2018 (181,000 t).

On a gross-weight basis, U.S. imports of manganese ore in September 2018 were 95,500 t, more than 10 times greater than 9,410 t imported in August 2018 (fig. 1, table 5).

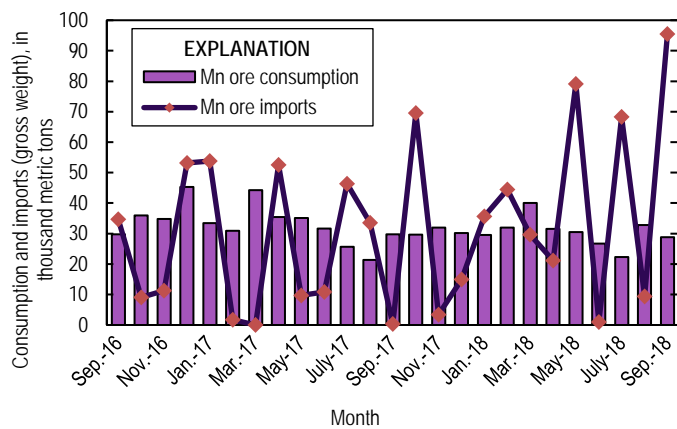


Figure 1. Monthly domestic consumption and imports of manganese (Mn) ore from September 2016 through September 2018. Sources: U.S. Census Bureau and U.S. Geological Survey.

In September 2018, the average spot prices for manganese ore deliveries to China were \$6.53 per metric ton unit, 36%–39% grade, and \$7.01 per metric ton unit, 44% grade (fig. 2, table 1). Compared with August 2018 prices, they were 4% more for the 36%–39% grade and 7% more for the 44% grade. Compared with the 2-year price highs of December 2016, they were 18% lower for the 36%–39% grade and 21% lower for the 44% grade. However, they were both more than 1.5 times those of September 2016.

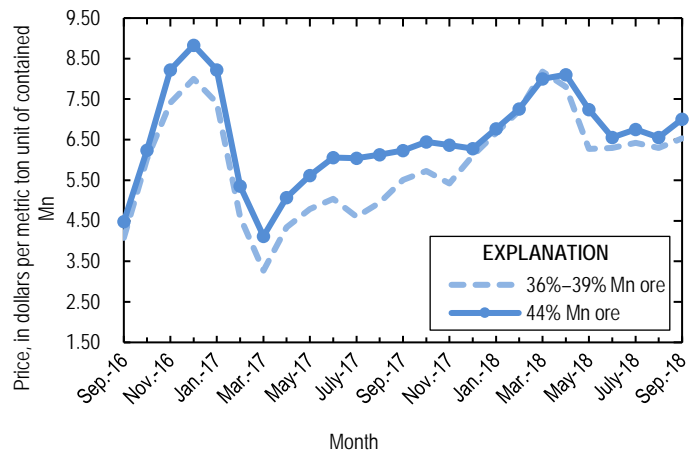


Figure 2. Average monthly spot prices for manganese (Mn) ore delivered to China from September 2016 through September 2018. Source: CRU Group.

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

		Low	Average	High
<u>Manganese ferroalloys:¹</u>				
High-carbon ferromanganese, 75% manganese	dollars per long ton of contained manganese	1,360.00	1,400.63	1,450.00
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	112.00	113.50	115.00
Silicomanganese, 65% manganese	do.	63.00	63.63	65.00
<u>Manganese metal, 99.9% manganese flake²</u>	cents per pound	155.00	157.50	160.00
<u>Manganese ore:^{3,4}</u>				
36%–39% manganese	dollars per metric ton unit contained manganese	6.40	6.53	6.65
44% manganese	do.	6.90	7.01	7.10

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:						
September	610	49,700	50,300	5	1,080	1,090
January–September	133,000	387,000	520,000	515	12,100	12,700
2018:						
January	17,300	66,800 ^r	84,000 ^r	18	221	239
February	23,200	34,700	57,900 ^r	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 ^r	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 ^r	1,350	1,380
September	40,600	33,700	74,300	35	1,080	1,110
January–September	178,000	480,000	658,000	1,410	10,500	11,900

^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 (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%).

Source: U.S. Census Bureau.

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

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–September ²		
				Gross weight	Mn content	Customs value ³
Australia	4,610	3,060	\$6,100,000	68,200	43,900	\$85,500,000
Belgium	--	--	--	1,890	1,240	2,300,000
Brazil	--	--	--	3,270	2,170	3,440,000
Georgia	761	558	901,000	84,300	61,400	102,000,000
India	--	--	--	1,820	1,070	2,640,000
Malaysia	--	--	--	22,500	14,600	26,700,000
Mexico	2,540	1,650	2,950,000	18,700	12,400	21,300,000
Norway	620	380	979,000	14,900	9,780	21,200,000
Russia	--	--	--	8,960	5,990	11,300,000
Saudi Arabia	--	--	--	5,010	3,310	4,810,000
South Africa	7,800	5,070	8,580,000	50,500	32,800	55,700,000
Spain	232	153	312,000	18,300	12,000	23,300,000
Taiwan	--	--	--	200	132	237,000
Zambia	--	--	--	999	650	1,230,000
Total	16,600	10,900	19,800,000	300,000	202,000	361,000,000

-- 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 SEPTEMBER 2018¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–September ²		
				Gross weight	Mn content	Customs value ³
Low carbon:						
China	852	794	\$1,920,000	3,680	3,440	\$7,950,000
France	--	--	--	19	15	58,900
Germany	--	--	--	264	233	657,000
Japan	--	--	--	100	80	165,000
Korea, Republic of	1,020	942	2,500,000	8,190	7,530	17,800,000
Mexico	1,320	1,070	1,980,000	3,040	2,470	4,550,000
Norway	2,200	1,790	3,740,000	35,000	28,300	58,800,000
South Africa	103	90	170,000	185	161	308,000
Vietnam	--	--	--	240	216	529,000
Total	5,500	4,690	10,300,000	50,700	42,500	90,900,000
Medium carbon, 1%–2% C:						
China	--	--	--	145	119	319,000
France	--	--	--	2,900	2,360	4,600,000
Korea, Republic of	3,000	2,400	5,030,000	25,500	20,400	40,800,000
Mexico	476	372	802,000	4,710	3,720	7,620,000
Norway	1,700	1,390	2,650,000	15,700	12,700	24,200,000
South Africa	--	--	--	26,000	20,900	44,300,000
Total	5,180	4,160	8,470,000	74,900	60,200	122,000,000
High carbon:						
Australia	10,400	7,930	11,900,000	59,100	45,000	75,100,000
Brazil	215	161	193,000	3,240	2,010	3,680,000
France	--	--	--	2,200	1,680	2,470,000
Georgia	--	--	--	3,100	2,410	3,930,000
India	1,170	237	1,300,000	4,850	1,710	5,640,000
Korea, Republic of	1,500	1,140	1,670,000	3,840	2,920	6,060,000
Malaysia	--	--	--	41,000	31,100	52,200,000
Mexico	--	--	--	115	92	169,000
Norway	--	--	--	3,090	2,390	3,870,000
Russia	2,970	2,270	2,670,000	23,900	18,300	23,400,000
Saudi Arabia	40	25	69,900	336	214	533,000
South Africa	18	1	28,200	37,400	28,400	49,400,000
Spain	--	--	--	18,700	14,200	22,800,000
Ukraine	--	--	--	6,240	4,770	6,230,000
Total	16,300	11,800	17,800,000	207,000	155,000	256,000,000
Grand total	27,000	20,600	36,600,000	333,000	258,000	468,000,000

-- 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 SEPTEMBER 2018¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–September ²		
				Gross weight	Mn content	Customs value ³
More than 20%, but less than 47% manganese:						
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	44,000	13,400	\$7,150,000	103,000	34,600	19,600,000
Turkey	57	26	27,700	57	26	27,700
Total	44,100	13,400	7,180,000	129,000	44,200	25,100,000
47% or more manganese:						
Australia	--	--	--	13,500	6,430	5,220,000
Brazil	53	26	34,300	856	517	459,000
China	--	--	--	2	2	4,400
Gabon	45,600	24,100	17,100,000	231,000	119,000	71,500,000
Mexico	5,470	2,730	1,300,000	7,520	3,830	2,390,000
Morocco	39	22	50,900	116	66	153,000
South Africa	200	97	87,800	2,520	1,220	1,070,000
Turkey	--	--	--	361	263	175,000
Total	51,400	27,000	18,600,000	255,000	131,000	81,000,000
Grand total	95,500	40,400	25,700,000	384,000	175,000	106,000,000

-- 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 SEPTEMBER 2018¹

(Metric tons, gross weight)

Source	Quantity	Customs value ³	January–September ²	
			Quantity	Customs value ³
Belgium	--	--	59	\$158,000
Brazil	--	--	21	36,100
China	26	\$48,000	71	160,000
France	--	--	14	23,800
Germany	--	--	25	42,200
India	--	--	5	13,500
Japan	286	641,000	3,840	8,610,000
Mexico	--	--	(4)	2,210
Morocco	--	--	19	86,600
Spain	--	--	60	102,000
Ukraine	--	--	23	38,700
Total	312	689,000	4,140	9,270,000

-- 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 SEPTEMBER 2018¹

(Metric tons)

Source	Gross weight	Customs value ³	January–September ²	
			Gross weight	Customs value ³
Unwrought flake:				
China	299	\$704,000	3,680	\$6,420,000
Hong Kong	60	172,000	102	263,000
Japan	(4)	272,000	153	2,030,000
Netherlands	--	--	1	2,900
South Africa	300	678,000	3,180	7,310,000
Vietnam	--	--	100	221,000
Total	659	1,830,000	7,220	16,200,000
Unwrought powder:				
China	--	--	97	216,000
Mexico	40	123,000	178	590,000
South Africa	121	329,000	984	2,670,000
Total	161	452,000	1,260	3,470,000
Unwrought, other:				
China	1,090	2,650,000	10,400	20,500,000
Germany	144	335,000	1,040	2,220,000
New Zealand	--	--	(4)	2,040
Poland	--	--	(4)	6,310
South Africa	82	196,000	635	1,470,000
Spain	--	--	3	4,280
Total	1,310	3,180,000	12,100	24,200,000
Other manganese, wrought:				
China	4	2,880	23	52,800
France	--	--	(4)	2,150
Germany	18	211,000	244	2,800,000
India	--	--	(4)	5,640
Japan	(4)	20,600	(4)	163,000
Malaysia	--	--	(4)	3,040
Mexico	20	71,400	94	275,000
Poland	--	--	(4)	9,250
Sweden	--	--	9	85,600
Total	43	306,000	370	3,400,000
Metallic waste and scrap, Canada	--	--	285	94,500
Grand total	2,180	5,760,000	21,200	47,400,000

-- 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.

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 SEPTEMBER 2018^{1,2}

Source	Gross weight (metric tons)	F.a.s. ⁴ value (thousands)	January–September ³	
			Gross weight (metric tons)	F.a.s. ⁴ value (thousands)
Ore and concentrates with 20% or more manganese:				
Belgium	--	--	38	\$152
Canada	53	\$56	294	287
Mexico	--	--	2,330	1,930
Netherlands	16	74	166	768
Taiwan	(6)	6	(6)	6
Total	69	136	2,830	3,140
Ferromanganese:				
2% or less carbon:				
Canada	20	33	719	1,240
China	3	7	3	7
Mexico	--	--	41	110
Taiwan	12	22	21	40
Other [2 countries and (or) localities]	--	--	6	19
Total	35	62	791	1,410
More than 2% carbon:				
Canada	582	739	5,940	8,250
Costa Rica	--	--	4	18
Mexico	--	--	105	100
United Kingdom	13	37	23	65
Other [4 countries and (or) localities]	--	--	7	20
Total	596	777	6,070	8,450
Silicomanganese:				
Canada	435	594	3,030	4,300
Mexico	--	--	2	3
Total	435	594	3,030	4,310
Metal, including alloys and waste and scrap:⁵				
Canada	--	--	12	47
China	--	--	5	75
France	--	--	9	36
India	--	--	218	241
Japan	--	--	83	303
Malaysia	250	86	2,290	1,230
Mexico	--	--	151	1,160
Norway	--	--	10	472
Pakistan	40	10	40	10
South Africa	--	--	216	184
Venezuela	--	--	7	6
Other [8 countries and (or) localities]	(6)	5	5	91
Total	290	101	3,040	3,850
Grand total	1,390	1,610	15,800	21,200

-- Zero.

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

⁶Less than ½ unit.

Source: U.S. Census Bureau.

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

Class	Gross weight (metric tons)	Value ³ (thousands)	Principal sources and destinations: gross weight (metric tons); value ³ (thousands)	January–September 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	2,300	\$2,110	South Africa 1,330; \$1,350	25,700	\$21,200	South Africa 12,300; \$7,890
Manganites, manganates, and other permanganates	(4)	3	Canada (4); \$3	20	51	Hong Kong 20; \$42
Potassium permanganate	125	330	India 125; \$330	1,130	2,970	India 1,110; \$2,900
Sodium permanganate	110	257	China 110; \$257	1,170	2,640	China 1,160; \$2,590
Sulfates, basket category, including manganese sulfate	10,000	7,340	China 6,360; \$3,830	51,900	42,700	China 21,800; \$16,600
Exports:						
Manganese dioxide	724	747	Canada 520; \$401	5,760	8,240	Canada 3,710; \$3,220
Manganese oxides other than dioxide	674	1,180	Russia 160; \$229	4,890	8,890	Poland 812; \$1,110
Manganites, manganates, and other permanganates	9	31	Canada 9; \$18	176	632	Mexico 134; \$536
Potassium permanganate	375	1,040	Belgium 180; \$438	2,540	7,310	Belgium 1,130; \$2,750
Sodium permanganate	77	187	Belgium 38; \$81	650	2,180	Belgium 210; \$423
Sulfates, basket category, including manganese sulfate	1,760	2,230	Canada 1,420; \$1,060	15,400	23,700	Canada 11,200; \$8,750

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.

Source: U.S. Census Bureau.