

Mineral Industry Surveys

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MANGANESE IN OCTOBER 2017

Preliminary data for October 2017 indicated that domestic consumption of manganese ore containing more than 20% manganese, exclusive of that consumed at iron and steel plants, was 23,400 metric tons (t) (gross weight). This was slightly less than the amount consumed in September 2017 (23,500 t) (fig. 1). Manganese ore consumption during the first 10 months of 2017 was 305,000 t, which was 8% less the amount consumed during the same period in 2016. Industry stocks of ore at the end of October 2017 were estimated to be 195,000 t, 31% more than the amount at the end of September 2017 (149,000 t).

On a gross-weight basis, U.S. imports of manganese ore in October 2017 were 69,500 t, up from 351 t in September 2017 (fig. 1, table 5).

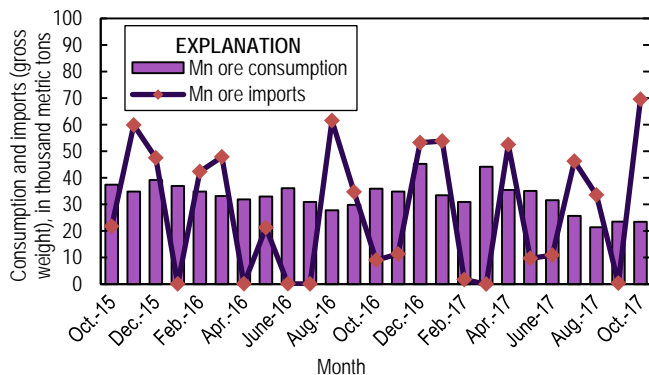


Figure 1. Monthly domestic consumption and imports of manganese (Mn) ore from October 2015 through October 2017. Sources: U.S. Census Bureau and U.S. Geological Survey.

In October 2017, the average monthly spot-market prices for manganese ore deliveries to China increased compared to those

in September 2017. The average spot prices were 5.73 dollars per metric ton unit, 36%–39% grade, and 6.45 dollars per metric ton unit, 44% grade (fig. 2, table 1). Compared to October 2016, they were 5% less for the 36%–39% grade and 3% more for the 44% grade and about 134% and 137% more than those of October 2015, respectively. However, they were 28% and 27% less, respectively, than the 2-year-high prices of December 2016.

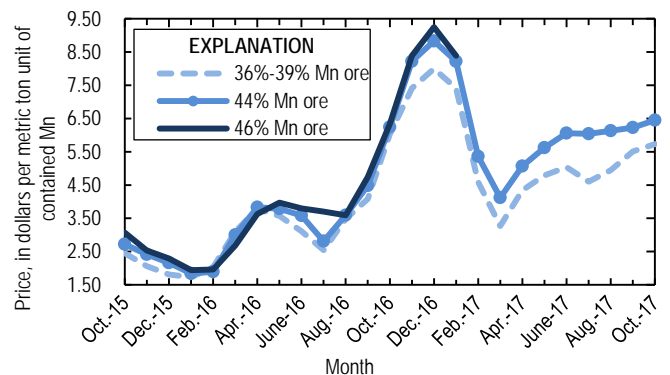


Figure 2. Average monthly spot prices for manganese (Mn) ore delivered to China from October 2015 through October 2017. Source: CRU Group.

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TABLE 1
 PRICES FOR MANGANESE FERROALLOYS, METAL, AND ORE IN OCTOBER 2017

		Low	Average	High
Manganese ferroalloys:¹				
High-carbon ferromanganese, 75% manganese	dollars per long ton of contained manganese	1,550.00	1,575.00	1,600.00
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	110.00	112.50	115.00
Silicomanganese, 65% manganese	do.	62.00	63.50	65.00
Manganese metal, 99.9% manganese flake ²	cents per pound	104.00	106.00	108.00
Manganese ore:^{3,4}				
36%–39% manganese	dollars per metric ton unit contained manganese	5.70	5.73	5.75
44% manganese	do.	6.30	6.45	6.60

do. Ditto.

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

²CRU Ryan's Notes 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 Ryan's Notes, 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
2016:						
October	3,730 ^r	15,100	18,800 ^r	43 ^r	376 ^r	419 ^r
January–October	111,000 ^r	321,000 ^r	432,000 ^r	230 ^r	11,100 ^r	11,300 ^r
2017:						
January	27,700	33,200	60,900	9	901	910
February	1,120	20,500	21,600	15	2,020	2,040
March	477	21,600	22,100	28	2,160	2,180
April	42,300	59,500	102,000	10	1,990	2,000
May	5,030	53,300	58,400	43	1,240	1,280
June	10,300	44,800	55,100	139	905	1,040
July	27,800	57,300	85,100	120	411	531
August	18,100	46,900	65,000	145	1,430	1,580
September	610	49,700	50,300	5	1,080	1,090
October	31,200	63,900	95,200	25	1,890	1,920
January–October	165,000	451,000	615,000	540	14,000	14,600

^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 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 OCTOBER 2017¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–October ²		
				Gross weight	Mn content	Customs value ³
Australia	--	--	--	50,900	33,800	\$67,500,000
Brazil	--	--	--	2,130	1,400	2,240,000
Canada	--	--	--	76	36	48,600
France	--	--	--	2,300	1,390	3,680,000
Georgia	22,500	16,900	\$24,700,000	89,400	66,200	88,600,000
India	1,590	937	2,650,000	5,630	3,330	8,430,000
Italy	--	--	--	189	112	257,000
Malaysia	3,000	1,980	3,350,000	10,100	6,680	11,800,000
Mexico	4,240	2,780	5,140,000	25,000	15,800	25,800,000
Norway	2,360	1,410	3,610,000	15,300	9,230	23,200,000
Russia	--	--	--	18,100	12,300	22,500,000
Saudi Arabia	5,430	3,530	5,990,000	14,700	9,310	16,300,000
South Africa	6,500	4,230	7,150,000	67,700	44,000	70,200,000
Spain	--	--	--	14,700	9,630	19,300,000
Total	45,600	31,800	52,600,000	316,000	213,000	360,000,000

-- 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 OCTOBER 2017¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–October ²		
				Gross weight	Mn content	Customs value ³
Low carbon:						
Belgium	--	--	--	24	23	\$56,900
China	4	3	\$7,840	7,890	7,350	15,400,000
France	--	--	--	3,300	2,680	5,410,000
Germany	50	47	120,000	305	286	751,000
Japan	--	--	--	15	12	34,800
Korea, Republic of	234	216	444,000	7,800	6,930	15,400,000
Mexico	498	406	752,000	2,150	1,750	2,860,000
Norway	5,020	4,060	8,730,000	27,100	22,000	46,400,000
Russia	--	--	--	24	23	56,900
Saudi Arabia	--	--	--	5	4	8,590
South Africa	54	50	99,100	216	201	403,000
Total	5,860	4,790	10,200,000	48,800	41,200	86,800,000
Medium carbon, 1%–2% C:						
China	--	--	--	45	34	115,000
France	--	--	--	400	324	625,000
Germany	--	--	--	1	1	2,180
Korea, Republic of	513	410	777,000	16,900	13,500	25,500,000
Mexico	1,170	937	1,750,000	2,720	2,110	4,760,000
Norway	4,900	4,000	7,680,000	18,600	15,100	29,200,000
South Africa	--	--	--	17,100	13,800	29,700,000
Total	6,590	5,350	10,200,000	55,800	44,900	90,000,000
High carbon:						
Australia	--	--	--	51,500	36,100	60,700,000
Brazil	753	576	883,000	3,870	2,950	4,330,000
Canada	19	12	33,000	174	116	266,000
Georgia	--	--	--	2,400	1,860	2,230,000
Germany	--	--	--	3	2	3,710
India	2,180	1,610	2,800,000	2,180	1,610	2,800,000
Malaysia	2,610	1,990	3,090,000	8,880	6,700	11,500,000
Mexico	--	--	--	264	188	217,000
Netherlands	--	--	--	344	265	373,000
Norway	916	712	1,070,000	1,640	1,280	1,780,000
Russia	330	254	335,000	5,980	4,570	5,770,000
Saudi Arabia	5,300	3,970	6,560,000	5,460	4,090	6,810,000
South Africa	4,510	3,480	6,650,000	56,300	42,900	74,000,000
Spain	5,310	4,030	6,620,000	17,600	13,400	20,800,000
Ukraine	3,010	2,280	3,000,000	14,000	10,700	14,900,000
United Kingdom	--	--	--	3	2	3,980
Total	24,900	18,900	31,000,000	171,000	127,000	206,000,000
Grand total	37,400	29,100	51,400,000	275,000	213,000	383,000,000

-- 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 OCTOBER 2017¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–October ²		
				Gross weight	Mn content	Customs value ³
More than 20%, but less than 47% manganese:						
Cote d'Ivoire	--	--	--	332	133	\$19,800
Gabon	13,100	5,640	\$2,390,000	13,100	5,640	2,390,000
Mexico	--	--	--	13,200	5,100	2,480,000
South Africa	22,000	8,140	4,040,000	33,000	13,200	6,250,000
Total	35,100	13,800	6,420,000	59,600	24,100	11,100,000
47% or more manganese:						
Australia	--	--	--	17,400	8,340	4,950,000
Brazil	--	--	--	572	314	375,000
Gabon	27,400	13,700	7,180,000	190,000	123,000	45,700,000
Georgia	--	--	--	122	88	138,000
Korea, Republic of	--	--	--	20	14	12,800
Mexico	7,000	3,310	1,740,000	8,410	4,020	2,260,000
Morocco	--	--	--	149	100	204,000
South Africa	34	17	8,160	2,130	1,040	673,000
Total	34,400	17,000	8,930,000	219,000	137,000	54,300,000
Grand total	69,500	30,800	15,400,000	278,000	161,000	65,500,000

-- 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 OCTOBER 2017¹

(Metric tons, gross weight)

Source	Quantity	Customs value ³	January–October ²	
			Quantity	Customs value ³
Belgium	6	\$34,600	74	\$266,000
Brazil	11	18,000	52	77,500
Canada	--	--	3	3,380
China	--	--	64	109,000
Germany	42	72,000	89	176,000
India	--	--	35	64,600
Japan	669	1,450,000	5,950	12,600,000
Morocco	--	--	19	86,600
Netherlands	--	--	22	38,100
Singapore	--	--	79	107,000
Spain	--	--	12	20,500
Ukraine	7	11,700	60	102,000
Total	735	1,590,000	6,450	13,600,000

-- 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 7
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN OCTOBER 2017¹

(Metric tons)

Source	Gross weight	Customs value ³	January–October ²	
			Gross weight	Customs value ³
Unwrought flake:				
China	1,660	\$2,520,000	6,440	\$11,000,000
Gabon	--	--	200	356,000
Hong Kong	--	--	50	96,300
Japan	59	284,000	379	2,050,000
Mexico	--	--	50	148,000
South Africa	270	620,000	4,970	11,800,000
Total	1,980	3,420,000	12,100	25,500,000
Unwrought powder:				
China	20	33,800	199	391,000
Mexico	--	--	194	654,000
South Africa	183	505,000	1,440	3,960,000
Total	203	539,000	1,840	5,000,000
Unwrought, other:				
Belgium	--	--	38	78,900
China	568	1,130,000	8,060	15,200,000
Germany	118	243,000	1,350	2,800,000
Japan	--	--	(4)	2,210
Portugal	--	--	(4)	5,100
Russia	--	--	24	50,100
South Africa	108	238,000	601	1,280,000
Spain	--	--	46	90,500
Total	793	1,610,000	10,100	19,500,000
Other manganese, wrought:				
Canada	--	--	22	6,520
Germany	51	584,000	205	2,230,000
India	--	--	(4)	2,110
Japan	--	--	4	30,400
Malaysia	--	--	(4)	3,650
Mexico	36	93,600	117	314,000
South Africa	--	--	10	19,400
Total	87	677,000	357	2,610,000
Metallic waste and scrap:				
Canada	27	7,500	740	195,000
China	--	--	36	60,100
Mexico	--	--	3	3,210
United Kingdom	--	--	2	5,530
Total	27	7,500	780	264,000
Grand total	3,090	6,260,000	25,200	52,800,000

-- 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 LOCALITY OF DESTINATION IN OCTOBER 2017^{1,2}

Source	Gross weight (metric tons)	F.a.s. ⁴ value (thousands)	January–October ³	
			Gross weight (metric tons)	F.a.s. ⁴ value (thousands)
Ore and concentrates with 20% or more manganese:				
Belgium	19	\$87	449	\$458
Canada	--	--	20	19
China	--	--	48	61
Germany	--	--	205	168
Mexico	--	--	39	42
Netherlands	28	120	238	934
Poland	--	--	18	22
Switzerland	4	3	4	3
Taiwan	--	--	(5)	6
United Kingdom	--	--	59	43
Total	50	211	1,080	1,760
Ferromanganese:				
2% or less carbon:				
Canada	880	1,320	4,750	7,490
Chile	--	--	35	66
China	--	--	12	18
Other (7 countries)	18	35	53	108
Total	898	1,350	4,850	7,680
More than 2% carbon:				
Canada	186	288	2,340	3,580
Mexico	60	62	277	326
Singapore	--	--	10	28
United Kingdom	--	--	14	42
Other (8 countries)	--	--	43	126
Total	246	351	2,680	4,100
Silicomanganese:				
Canada	877	1,180	6,980	9,810
Georgia	--	--	128	120
United Kingdom	--	--	4	6
Total	877	1,180	7,110	9,930
Metal, including alloys and waste and scrap:⁶				
Belgium	--	--	16	303
Canada	15	20	40	117
Costa Rica	6	57	13	173
India	256	90	985	643
Japan	7	22	92	316
Malaysia	121	39	1,750	842
Mexico	5	28	182	697
Pakistan	--	--	93	72
Other (16 countries)	--	--	220	1,030
Total	410	257	3,400	4,190
Grand total	2,480	3,350	19,100	27,700

-- Zero.

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

⁵Less than ½ unit.

⁶Includes manganese-aluminum, other alloys, and waste and scrap.

Source: U.S. Census Bureau.

TABLE 9
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS
IN OCTOBER 2017, BY CLASS¹

Class	Gross weight (metric tons)	Value ³ (thousands)	Principal sources and destinations: gross weight (metric tons); value ³ (thousands)	January–October 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	2,390	\$2,070	South Africa 1,250; \$842	20,800	\$15,200	South Africa 11,300; \$5,950
Manganites, manganates, and other permanganates	--	--	--	(4)	12	Canada (4); \$12
Potassium permanganate	162	392	India 147; \$363	739	1,850	India 705; \$1,770
Sodium permanganate	120	258	China 120; \$258	1,140	2,610	China 1,000; \$2,280
Sulfates, basket category, including manganese sulfate	9,760	6,310	China 4,310; \$2,540	55,800	42,700	China 21,700; \$15,600
Exports:						
Manganese dioxide	399	710	Canada 252; \$256	4,540	7,400	Canada 2,280; \$2,080
Manganese oxides other than dioxide	381	616	Canada 80; \$101	5,710	10,400	Canada 1,050; \$1,490
Manganites, manganates, and other permanganates	6	15	Canada 5; \$11	86	370	Canada 82; \$167
Potassium permanganate	674	249	Belgium 399; \$164	7,300	2,680	Belgium 3,570; \$1,490
Sodium permanganate	109	452	Mexico 66; \$333	631	2,030	Belgium 317; \$672
Sulfates, basket category, including manganese sulfate	2,070	1,770	Canada 1,730; \$744	17,600	21,100	Canada 12,300; \$6,330

-- Zero.

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.