

Mineral Industry Surveys

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MANGANESE IN OCTOBER 2016

Preliminary data for October 2016 indicated that domestic consumption of manganese ore containing more than 20% manganese, exclusive of that consumed at iron and steel plants, was 33,100 metric tons (t) (gross weight). This was a 23% increase compared with the amount consumed in September 2016 (27,000 t). Manganese ore consumption during the first 10 months of 2016 was 302,000 t, 20% less than the revised amount consumed during the same period of 2015 (376,000 t) (fig. 1). Industry stocks of ore at the end of October 2016 were 122,000 t, 15% less than that at the end of September 2016 (144,000 t).

On a gross-weight basis, U.S. imports of manganese ore in October 2016 were 9,150 t, 74% less than that imported in September 2016 (34,700 t) (fig. 1, table 5). Manganese ore imports were 38% less during the first 10 months of 2016 (207,000 t) compared with the revised amount (334,000 t) during the same period in 2015.

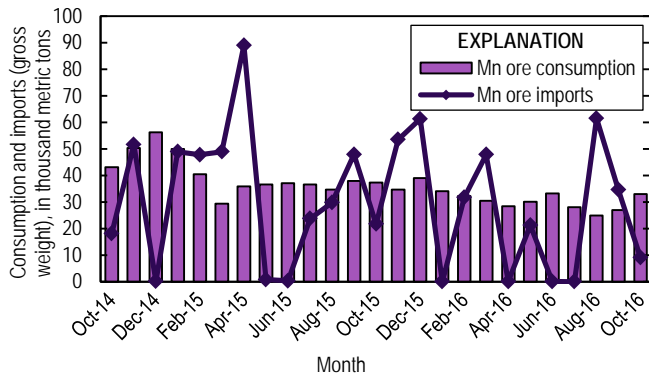


Figure 1. Monthly domestic consumption and imports of manganese (Mn) ore from October 2014 through October 2016. Sources: U.S. Census Bureau and U.S. Geological Survey.

In October 2016, the average monthly spot-market prices for manganese ore deliveries to China continued to increase. The average spot prices were 6.03 dollars per metric ton unit,

36%–39% grade; 6.24 dollars per metric ton unit, 44% grade; and 6.34 dollars per metric ton unit, 46% grade (fig. 2, table 1). These prices were higher than those in September 2016—48% for the 36%–39% grade, 39% for the 44% grade, and 34% higher for the 46% grade. They were also significantly higher than those at the beginning of 2016—249% for the 36%–39% grade, 239% for the 44% grade, and 227% higher for the 46% grade. The increase in manganese ore export prices were a result of reductions in supply from mining companies outside of China amid a period of increasing need by the country’s manganese alloy producers (Argus Media Group-Metal Pages, 2016).

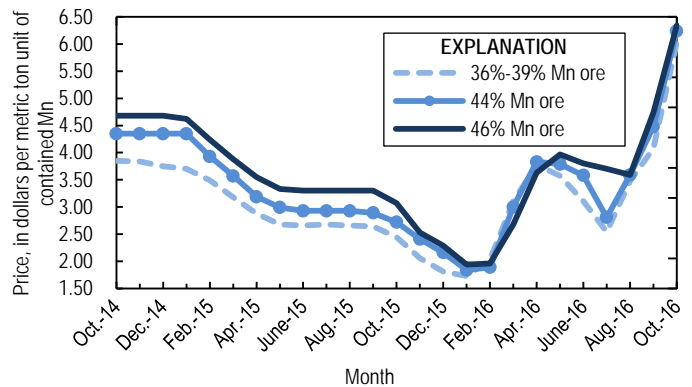


Figure 2. Average monthly spot prices for manganese (Mn) ore delivered to China from October 2014 through October 2016. CRU Ryan’s Notes.

Reference Cited

Argus Media Group-Metal Pages, 2016, South32, UMK up Mn ore October export prices: Argus Media Group-Metal Pages, September 26. (Accessed January 30, 2017, via <http://www.metal-pages.com>.)

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TABLE 1
 PRICES FOR MANGANESE FERROALLOYS, METAL, AND ORE IN OCTOBER 2016

		Low	Average	High
Manganese ferroalloys:¹				
High-carbon ferromanganese, 75% manganese	dollars per long ton of contained manganese	830.00	852.50	880.00
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	76.00	76.50	77.00
Silicomanganese, 65% manganese	do.	42.00	43.88	46.00
Manganese metal, 99.9% manganese flake ²	cents per pound	93.00	95.50	98.00
Manganese ore:^{3,4}				
36%–39% manganese	dollars per metric ton unit contained manganese	5.40	6.03	7.00
44% manganese	do.	5.80	6.24	7.20
46% manganese	do.	5.90	6.34	7.45

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 46 when the manganese content is 46%.

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
2015:						
October	8,660 ^r	29,500 ^r	38,100 ^r	37 ^r	2,990 ^r	3,030
January–October ³	167,000 ^r	414,000 ^r	581,000 ^r	739 ^r	27,600 ^r	28,400
2016:						
January	252	53,700	53,900	39	4,170	4,210
February	17,200	34,700	51,900	59	4,360	4,420
March	25,700	23,800	49,500	83	3,500	3,580
April	292	23,400	23,700	13	4,180	4,190
May	10,800	28,600	39,400	86	2,850	2,930
June	324	47,700	48,000	80	3,900	3,980
July	318	30,100	30,400	47	3,300	3,350
August	28,100	26,700	54,900	58	3,220	3,280
September	19,100	40,500	59,600	47	2,490	2,540
October	3,800	15,100	18,900	50	3,140	3,190
January–October ³	106,000	324,000	430,000	562	35,100	35,700

^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.

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

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN OCTOBER 2016¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–October ²		
				Gross weight	Mn content	Customs value ³
Australia	--	--	--	44,300	29,300	\$31,400,000
Brazil	1,490	973	\$1,040,000	7,040	4,690	4,540,000
Gabon	--	--	--	312	221	201,000
Georgia	612	438	407,000	71,300	51,200	53,500,000
India	--	--	--	1,200	726	1,360,000
Mexico	3,450	2,250	2,340,000	22,200	14,200	13,600,000
Norway	79	49	130,000	18,900	12,300	15,500,000
Russia	--	--	--	14	7	20,400
South Africa	--	--	--	57,300	37,600	39,500,000
Spain	621	407	522,000	4,190	2,740	3,450,000
Total	6,250	4,110	4,440,000	227,000	153,000	163,000,000

-- 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 2016¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	January–October ²		
				Gross weight	Mn content	Customs value ³
Low carbon:						
Belgium	35	33	\$54,900	59	56	\$110,000
China	1,230	1,140	1,940,000	8,550	7,970	13,700,000
Germany	82	75	184,000	544	490	1,280,000
India	--	--	--	566	457	717,000
Korea, Republic of	--	--	--	2,350	2,050	3,320,000
Mexico	--	--	--	554	446	672,000
Norway	2,400	1,940	2,930,000	24,500	19,800	29,100,000
South Africa	--	--	--	50	46	82,000
Total	3,740	3,190	5,120,000	37,200	31,300	48,900,000
Medium carbon, 1%–2% C:						
Australia	--	--	--	6,860	5,440	5,670,000
Brazil	--	--	--	78	61	81,900
China	100	79	163,000	160	125	285,000
Germany	--	--	--	8	6	15,400
India	--	--	--	285	230	342,000
Korea, Republic of	--	--	--	25,300	20,600	30,000,000
Mexico	1,410	1,140	1,620,000	7,850	6,280	9,160,000
Norway	400	326	412,000	5,140	4,180	5,390,000
South Africa	--	--	--	7,180	5,780	10,100,000
Turkey	--	--	--	79	60	143,000
Total	1,910	1,540	2,200,000	52,900	42,700	61,200,000
Medium carbon, 2%–4% C:						
China	--	--	--	323	254	160,000
South Africa	--	--	--	51	40	160,000
Total	--	--	--	374	294	320,000
High carbon:						
Australia	--	--	--	43,700	31,700	31,000,000
Brazil	--	--	--	536	408	538,000
Canada	23	15	25,800	137	94	196,000
China	--	--	--	10	8	14,400
Georgia	--	--	--	5,440	4,110	4,070,000
India	--	--	--	283	214	224,000
Korea, Republic of	--	--	--	3,420	2,310	3,110,000
Norway	1,000	723	634,000	8,800	6,340	5,910,000
Russia	--	--	--	1,980	1,310	1,620,000
Singapore	--	--	--	7	6	10,400
South Africa	988	758	1,220,000	35,000	24,400	26,800,000
Spain	--	--	--	312	238	207,000
Ukraine	2,840	2,840	1,540,000	8,310	6,200	4,610,000
Total	4,850	4,340	3,420,000	108,000	77,400	78,400,000
Grand total	10,500	9,070	10,700,000	198,000	152,000	189,000,000

-- 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 2016¹

(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:						
China	43	4	\$5,520	100	31	\$9,440
Mexico	8,650	3,240	1,280,000	8,650	3,240	1,280,000
South Africa	--	--	--	33,000	12,300	2,820,000
Total	8,700	3,240	1,280,000	41,800	15,600	4,100,000
47% or more manganese:						
Australia	--	--	--	7,130	3,510	1,200,000
Belgium	--	--	--	37	22	173,000
Brazil	--	--	--	369	186	199,000
Gabon	--	--	--	145,000	77,600	22,400,000
Korea, Republic of	351	238	231,000	351	238	231,000
Mexico	--	--	--	10,900	5,580	1,400,000
Morocco	--	--	--	154	87	202,000
South Africa	100	49	40,600	786	384	265,000
Total	451	287	272,000	165,000	87,600	26,100,000
Grand total	9,150	3,530	1,550,000	207,000	103,000	30,200,000

-- 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 2016¹

(Metric tons, gross weight)

Source	Quantity	Customs value ³	January–October ²	
			Quantity	Customs value ³
Belgium	--	--	45	\$111,000
Brazil	21	\$22,900	64	95,800
China	--	--	65	116,000
France	--	--	18	33,300
Germany	--	--	10	51,300
India	16	27,700	75	139,000
Japan	405	852,000	3,990	8,590,000
Netherlands	--	--	11	19,400
Singapore	--	--	90	153,000
Ukraine	9	15,200	28	47,400
United Kingdom	--	--	(4)	2,070
Total	451	917,000	4,390	9,360,000

-- 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 OCTOBER 2016¹

(Metric tons)

Source	Gross weight	Customs value ³	January–October ²	
			Gross weight	Customs value ³
Unwrought flake:				
China	453	\$737,000	2,490	\$5,670,000
Gabon	--	--	97	157,000
Japan	62	211,000	373	1,260,000
Mexico	--	--	39	129,000
South Africa	409	855,000	5,480	10,400,000
Total	923	1,800,000	8,480	17,600,000
Unwrought powder:				
China	--	--	245	516,000
Mexico	31	108,000	200	653,000
New Zealand	--	--	3	2,500
South Africa	80	215,000	1,890	5,100,000
Total	111	323,000	2,340	6,270,000
Unwrought, other:				
Belgium	--	--	22	40,400
China	671	1,220,000	6,960	12,700,000
Germany	75	149,000	697	1,270,000
Poland	--	--	(4)	8,640
South Africa	41	83,200	482	994,000
Spain	--	--	177	374,000
United Kingdom	--	--	38	65,500
Total	787	1,450,000	8,370	15,500,000
Other manganese, wrought:				
China	--	--	109	182,000
France	1	16,000	4	63,700
Germany	18	187,000	141	1,420,000
Japan	--	--	(4)	34,000
Mexico	--	--	14	49,200
South Africa	--	--	10	25,200
Total	19	203,000	278	1,770,000
Metallic waste and scrap, Canada	69	17,700	410	120,000
Grand total	1,910	3,800,000	19,900	41,300,000

-- 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 OF DESTINATION IN OCTOBER 2016^{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:				
Canada	85	\$66	821	\$694
China	--	--	33	32
France	12	10	12	10
Guatemala	--	--	11	29
Mexico	2	6	25	79
Netherlands	--	--	174	733
Poland	--	--	18	12
United Kingdom	--	--	20	17
Other (3 countries)	--	--	5	25
Total	99	81	1,120	1,630
Ferromanganese:				
2% or less carbon:				
Brazil	--	--	7	14
Canada	444	586	4,410	5,850
Colombia	--	--	2	4
Jamaica	--	--	22	42
Mexico	--	--	217	558
Suriname	--	--	51	96
Vietnam	--	--	6	10
Total	444	586	4,720	6,570
More than 2% carbon:				
Canada	1,600	1,220	19,100	15,100
Chile	--	--	20	57
Colombia	--	--	61	171
Korea, Republic of	--	--	6	23
Mexico	107	75	210	199
United Arab Emirates	--	--	8	23
Other (6 countries)	(5)	15	11	48
Total	1,710	1,310	19,400	15,600
Silicomanganese:				
Canada	1,700	1,670	12,800	12,400
Georgia	63	90	85	120
Mexico	--	--	419	572
Other (2 countries)	41	71	5	8
Total	1,810	1,830	13,400	13,100
Metal, including alloys and waste and scrap:⁶				
Canada	18	40	191	310
China	10	154	426	1,740
Japan	13	52	111	383
Malaysia	9	35	2,970	1,080
Mexico	47	151	2,860	8,740
United Kingdom	1	6	107	492
Vietnam	59	11	281	57
Other (17 countries)	93	102	301	1,220
Total	251	551	7,250	14,000
Grand total	4,310	4,360	45,800	50,900

-- 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 2016, 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	1,800	\$1,410	Korea, Republic of 968; \$840	16,300	\$11,600	Korea, Republic of 5,600; \$6,100
Manganites, manganates, and other permanganates						
Permanganates	2	11	India 2; \$3	12	44	Canada 10; \$41
Potassium permanganate	54	135	India 54; \$135	571	1,450	India 562; \$1,420
Sodium permanganate	193	445	China 175; \$402	1,010	2,360	China 914; \$2,100
Sulfates, basket category, including manganese sulfate	5,470	3,620	China 1,900; \$1,200	48,500	41,000	Mexico 17,800; \$15,600
Exports:						
Manganese dioxide	634	861	Canada 349; \$231	5,620	8,130	Canada 3,640; \$3,240
Manganese oxides other than dioxide	388	789	Poland 103; \$137	4,740	9,250	Canada 915; \$1,210
Manganites, manganates, and other permanganates	16	39	Canada 16; \$31	92	232	Canada 88; \$176
Potassium permanganate	396	1,120	Belgium 307; \$716	2,660	7,540	Belgium 1,460; \$3,350
Sodium permanganate	81	231	Mexico 56; \$170	655	2,770	Mexico 267; \$789
Sulfates, basket category, including manganese sulfate	1,700	1,950	Canada 1,330; \$822	19,200	16,800	Canada 15,300; \$7,530

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.

Source: U.S. Census Bureau.