

Mineral Industry Surveys

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MANGANESE IN OCTOBER 2006

On a gross-weight basis, consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 33,000 metric tons (t) in October 2006, 2% lower than that of September 2006, according to the U.S. Geological Survey. Corresponding industry stocks of ore at the end of the month were 183,000 t, which was a 10% decrease from those at the end of September 2006. These data include estimates for annual respondents on the basis of 2005 data.

The following comparisons of trade data were made on the basis of manganese content (table 1). The data for September 2006 tabulated in this report indicate that the total exports of 689 t were 21% less than those of the prior month, owing primarily to decreases in exports of silicomanganese. Manganese imports were 67,400 t, which was an increase of 12% compared with those of August 2006. This increase was primarily attributable to increases in manganese ore imports.

Ferroalloy Prices, manganese content

	High-carbon ferromanganese ¹ (dollars per gross ton)	Medium-carbon ferromanganese ¹ (cents per pound)	Silicomanganese ¹ (cents per pound)	Manganese metal ² (cents per pound)
October 5	925.00-945.00	73.00-75.00	39.00-41.00	74.00-75.00
October 12	910.00-940.00	73.00-75.00	39.00-41.00	74.00-75.00
October 19	880.00-910.00	73.00-75.00	39.00-41.00	74.00-75.00
October 26	880.00-890.00	72.00-75.00	39.00-41.00	74.00-75.00

Ore Prices, dollars per metric ton unit, manganese content³

	44% Manganese Ore ²	48% Manganese Ore ²
October 5	2.00-2.10	2.35-2.45
October 12	2.05-2.15	2.40-2.45
October 19	2.05-2.15	2.40-2.45
October 26	2.05-2.15	2.40-2.45

¹Source: Platts Metals Week, dealer import price.

²Source: Ryan's Notes, North American transaction price.

³To determine dollars per metric ton, multiply the manganese content percentage by the price.

TABLE 1
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
2005:						
September	41,800	31,700	73,600	564	909 ^r	1,470
January-September	232,000	342,000 ^r	573,000	4,470 ^r	10,200	14,700
2006:						
January	20,300	25,600	45,900	46	1,710	1,760
February	27,500	52,800	80,200	87	1,170	1,260
March	4,970	47,400	52,300	63	1,660	1,720
April	30,300	34,800	65,200	25	661	686
May	7,140	46,300	53,400	40	609	648
June	26,800	52,600	79,400	101	753	853
July	39,300	44,400	83,700	95	11,200	11,300
August	5,710	54,400	60,100	36	838	874
September	18,000	49,400	67,400	201	488	689
Total	180,000	408,000	588,000	693	19,100	19,800

^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 2
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN SEPTEMBER 2006¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ²	Year to date		
				Gross weight	Mn content	Customs value ²
Australia	8,520	5,750	\$6,110,000	22,000	14,700	\$14,800,000
Austria	--	--	--	1,100	668	406,000
Canada	--	--	--	741	525	452,000
France	--	--	--	11	7	3,620
Georgia	4,470	3,410 ³	2,950,000	38,200	27,700	25,100,000
Korea, Republic of	--	--	--	13,000	8,330	9,920,000
Mexico	1,700	1,120	1,180,000	13,300	8,730	9,230,000
Netherlands	--	--	--	42	25	48,100
Norway	4,620	2,830	5,510,000	57,200	35,500	50,200,000
Russia	--	--	--	3,960	2,030	2,920,000
Saudi Arabia	--	--	--	7,510	4,820	4,370,000
South Africa	9,180	6,090	7,010,000	119,000	78,400	79,400,000
Total	28,500	19,200	22,800,000	277,000	181,000	197,000,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs 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.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN SEPTEMBER 2006¹

(Metric tons)

Source	Gross weight	Mn content	Customs value ²	Year to date		
				Gross weight	Mn content	Customs value ²
Low carbon:						
Canada	--	--	--	42	37	\$57,700
China	659	586	\$837,000	12,600	10,700	15,200,000
Japan	--	--	--	3,500	2,810	3,690,000
Korea, Republic of	1,500	1,260	1,660,000	9,310	7,670	9,420,000
Mexico	200	160	209,000	5,340	4,300	5,510,000
Norway	--	--	--	1,080	869	1,350,000
South Africa	160	147	242,000	2,400	2,200	3,500,000
Total, low carbon	2,520	2,150	2,950,000	34,300	28,600	38,700,000
Medium carbon, (m.c.) 1%-2% C:						
Brazil	--	--	--	1,540	1,230	1,480,000
Canada	6	5	7,750	143	114	163,000
China	1,190	957	1,230,000	5,820	4,710	5,450,000
Korea, Republic of	4,100	3,330	3,970,000	15,700	12,700	14,000,000
Mexico	437	351	357,000	10,600	8,500	7,820,000
Nauru	--	--	--	36	30	43,900
Norway	359	300	414,000	2,720	2,230	3,180,000
South Africa	1,910	1,540	1,910,000	25,700	20,900	21,100,000
Total, m.c., 1%-2% C	8,000	6,480	7,890,000	62,300	50,400	53,200,000
Medium carbon, 2%-4% C:						
Brazil	--	--	--	19	14	19,300
Georgia	--	--	--	1,470	1,160	637,000
Total, m.c., 2%-4% C	--	--	--	1,490	1,170	657,000
High carbon:						
Australia	--	--	--	4,000	3,090	2,240,000
Brazil	--	--	--	7,690	6,020	4,490,000
Canada	--	--	--	97	58	61,200
China	4,160	3,140	3,050,000	10,800	8,230	7,510,000
France	--	--	--	1,500	1,170	764,000
Hong Kong	500	375	327,000	500	375	327,000
Korea, Republic of	4,300	3,260	3,160,000	11,700	8,890	8,040,000
Mexico	--	--	--	26	20	29,300
Norway	--	--	--	21	18	25,400
Poland	--	--	--	592	465	567,000
South Africa	14,900	11,500	11,300,000	118,000	91,000	70,000,000
Ukraine	--	--	--	1,120	873	678,000
Total, high carbon	23,900	18,300	17,900,000	156,000	120,000	94,700,000
Grand total	34,400	26,900	28,700,000	254,000	200,000	187,000,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs 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 MANGANESE ORE (20% OR MORE Mn) IN SEPTEMBER 2006^{1,2}

(Metric tons)

Source	Gross weight	Mn content	Customs value ³	Year to date		
				Gross weight	Mn content	Customs value ³
More than 20%, but less than 47% manganese:						
Brazil	--	--	--	1,730	784	\$227,000
Canada	--	--	--	6,510	1,850	309,000
China	--	--	--	1,380	435	74,000
Mexico	--	--	--	2,950	1,030	353,000
South Africa	--	--	--	34,100	13,000	2,540,000
Total	--	--	--	46,700	17,100	3,500,000
47% or more manganese:						
Australia	--	--	--	25,000	12,800	3,900,000
Belgium	--	--	--	231	166	193,000
Brazil	--	--	--	6,900	4,630	1,150,000
China	--	--	--	4,300	2,260	502,000
Gabon	30,600	15,500	\$4,290,000	213,000	109,000	23,800,000
Morocco	--	--	--	38	29	15,000
South Africa	--	--	--	35,700	17,300	3,360,000
Total	30,600	15,500	4,290,000	285,000	146,000	32,900,000
Grand total	30,600	15,500	4,290,000	332,000	163,000	36,500,000

-- Zero.

¹Quantities for general imports and imports for consumption are identical.

²Data are rounded to no more than three significant digits; may not add to totals shown.

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 DIOXIDE IN SEPTEMBER 2006¹

(Metric tons, gross weight)

Source	Quantity	Customs value ²	Year to date	
			Quantity	Customs value ²
Australia	1,420	\$1,970,000	8,430	\$11,700,000
Belgium	--	--	532	1,210,000
Brazil	18	29,800	300	272,000
China	1,750	1,810,000	12,400	13,100,000
Colombia	--	--	8	14,400
France	--	--	3	29,400
Germany	13	73,000	38	205,000
Indonesia	--	--	40	74,500
Japan	887	1,240,000	5,690	7,910,000
Mexico	--	--	150	183,000
Netherlands	--	--	1	4,290
United Kingdom	--	--	(3)	13,400
Total	4,090	5,120,000	27,600	34,800,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs 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.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN SEPTEMBER 2006¹

(Metric tons)

Source	Gross weight	Customs value ²	Year to date	
			Gross weight	Customs value ²
Unwrought flake:				
China	2,320	\$3,130,000	14,500	\$18,500,000
Hong Kong	--	--	18	23,800
South Africa	57	89,700	2,840	4,600,000
Total	2,380	3,220,000	17,400	23,200,000
Unwrought powder:				
China	--	--	1,280	1,610,000
South Africa	314	546,000	2,770	4,990,000
Total	314	546,000	4,050	6,600,000
Unwrought, other:				
Brazil	36	76,600	36	76,600
China	105	189,000	974	1,640,000
Germany	63	114,000	462	854,000
Russia	21	76,100	21	76,100
South Africa	--	--	700	1,200,000
Spain	37	59,400	476	793,000
Total	262	515,000	2,670	4,650,000
Other manganese, wrought:				
Brazil	--	--	463	601,000
China	164	189,000	650	814,000
France	--	--	11	109,000
Jamaica	--	--	(3)	3,000
Mexico	41	69,400	101	162,000
Netherlands	--	--	15	30,800
United Kingdom	18	41,500	19	46,700
Total	223	300,000	1,260	1,770,000
Grand total	3,180	4,580,000	40,000	54,700,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs 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.

³Less than ½ unit.

Note: Imports for consumption of metallic manganese waste and scrap totaled 141 tons, all of which was from Canada, to give a year-to-date total of 749 tons.

Source: U.S. Census Bureau.

TABLE 7
U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE,
SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN SEPTEMBER 2006¹

(Metric tons, gross weight)

	Manganese ore		Ferromanganese, 2% or less C		Silicomanganese		Manganese metal ²	
	September	Year to date	September	Year to date	September	Year to date	September	Year to date
Argentina	--	--	--	--	--	--	--	3
Australia	--	--	--	--	--	14	5	8
Belgium	--	--	--	--	--	--	97	1,120
Brazil	--	--	--	--	--	40	--	24
Canada	323	1,080	21	4,080	--	333	67	475
Chile	--	--	--	--	--	--	--	14
China	--	35	--	--	--	--	71	71
Colombia	--	--	--	--	--	--	--	7
Dominican Republic	--	9	--	--	--	--	--	--
France	--	--	--	--	--	--	112	338
Germany	20	93	--	--	--	--	--	146
Hong Kong	--	--	--	--	--	--	--	50
India	--	--	--	--	--	--	27	48
Indonesia	--	23	--	--	--	72	--	8
Japan	51	103	--	--	--	--	18	653
Korea, Republic of	--	--	--	--	--	--	--	41
Malaysia	--	--	--	--	--	--	--	8
Mexico	--	--	--	25	--	129	1	19
Netherlands	--	--	--	100	--	13	--	--
Poland	--	21	--	--	--	--	--	--
Portugal	--	--	--	--	--	--	--	2
South Africa	--	--	--	--	--	--	2	2
Sweden	--	19	--	--	--	--	10	37
Switzerland	--	--	--	--	--	--	35	35
Trinidad and Tobago	--	--	--	--	--	--	--	1
United Kingdom	7	7	--	--	--	--	--	15
Total	402	1,390	21	4,210	--	601	445	3,120

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes manganese-aluminum, some other alloys, and waste and scrap.

Note: Exports of ferromanganese with more than 2% carbon totaled 33 tons, of which 25 tons went to Canada and 8 tons went to Mexico, to give a year-to-date total of 15,500 tons.

Source: U.S. Census Bureau.

TABLE 8
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN SEPTEMBER 2006, BY CLASS¹

Class	Gross weight (metric tons)	Value ² (thousands)	Principal sources and destinations: gross weight (metric tons); value ² (thousands)	Year to date		
				Gross weight (metric tons)	Value ² (thousands)	Principal sources and destinations: gross weight (metric tons); value ² (thousands)
Imports for consumption:						
Manganese oxides other than dioxide	806	\$576	China 277; \$349	6,010	\$5,600	China 2,930; \$3,830
Manganites, manganates, and other permanganates	--	--	--	16	34	Japan 16; \$34
Potassium permanganate	75	173	Czech Republic 46; \$107	884	1,990	Czech Republic 409; \$888
Sodium permanganate	--	--	--	27	27	China 27; \$27
Sulfates, basket category, including manganese sulfate	5,380	3,800	Mexico 2,720; \$1,340	34,800	20,500	China 16,400; \$7,510
Exports:						
Manganese dioxide	454	457	Canada 294; \$176	4,130	4,010	Canada 2,260; \$1,350
Manganese oxides other than dioxide	2,070	1,220	Canada 1,700; \$619	18,600	9,460	Canada 15,700; \$5,700
Manganites, manganates, and other permanganates	--	--	--	42	98	Canada 42; \$98
Potassium permanganate	167	439	Canada 42; \$114	1,860	4,590	Spain 695; \$1,510
Sodium permanganate	107	248	China 67; \$166	1,070	3,130	Spain 418; \$1,530
Sulfates, basket category, including manganese sulfate	2,100	1,510	Canada 1,560; \$793	17,800	12,700	Canada 13,400; \$6,830

-- Zero.

¹Data are rounded to no more than three significant digits.

²For imports, Customs value; for exports, free alongside ship value.

Source: U.S. Census Bureau.