

Mineral Industry Surveys

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MANGANESE IN SEPTEMBER 2023

On a gross-weight basis, U.S. imports of manganese ore in September 2023 increased to 29,900 metric tons (t) from 475 t in August 2023 (fig. 1, table 5). In September 2023, the sole source of manganese ore imports for >20% – <47% grade was South Africa and the leading source for >47% grade was Gabon. Total imports of manganese ore for the first nine months of 2023 were 71% less than that during the same period in 2022. The decrease in imports compared with those in 2022 was attributed to overall decrease in construction on which consumed steel, where manganese is mostly used (U.S. Census Bureau, 2023).

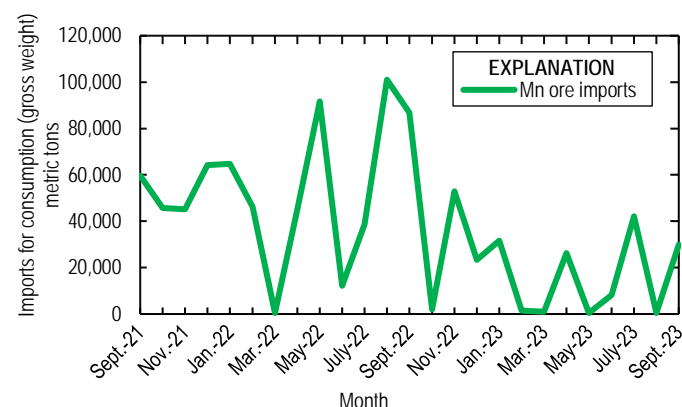


Figure 1. Monthly imports of manganese (Mn) ore from September 2021 through September 2023. Source: U.S. Census Bureau.

Prices

In September 2023, the average spot prices of manganese ore deliveries to China were \$3.58 per metric ton unit for 36%–38% grade and \$4.35 per metric ton unit for 44% grade, essentially unchanged and 4% less, respectively, than the August 2023 prices (fig. 2, table 1). Compared with the monthly average prices in September 2022, the 36%–38% grade was 13% less and 44% grade price was 10% less.

Industry News

South Africa, a global leader in manganese ore production, experienced a rail infrastructure disruption at the port of Gqeberha owing to a heavy storm (Schulz, 2023). This disruption will likely have minimal impact on manganese ore price and export volume due to trucking picking up additional volumes of ore.

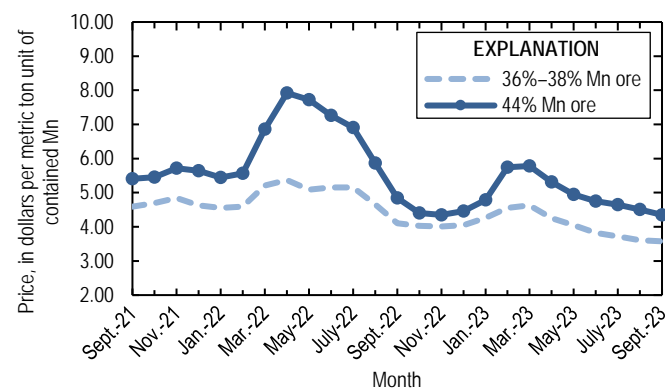


Figure 2. Average monthly spot prices for manganese (Mn) ore delivered to China from September 2021 through September 2023. Source: CRU Group.

References Cited

- Schulz, Tanisha, 2023, More logistics disruptions for South Africa's manganese exports: Cape Town, South Africa, Project Blue, September 24. (Accessed November 17, 2023, via <https://projectblue.com/blue/news-analysis/613/more-logistics-disruptions-for-south-africa-manganese-exports>.)
- U.S. Census Bureau, 2023, Business and industry—New residential construction. (Accessed November 20, 2023, via <https://www.census.gov/econ/currentdata>.)

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TABLE 1
PRICES FOR MANGANESE FERROALLOYS, METAL, AND ORE IN SEPTEMBER 2023

		Low	Average	High
<u>Manganese ferroalloys:¹</u>				
High-carbon ferromanganese, 76% manganese	dollars per long ton of contained manganese	1,150.00	1,225.00	1,300.00
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	110.00	111.00	112.00
Silicomanganese, 65% manganese	do.	58.75	59.25	59.75
Manganese metal, 99.7% manganese flake ²	cents per pound	125.00	136.88	150.00
<u>Manganese ore:^{3, 4}</u>				
36%–38% manganese	dollars per metric ton unit contained manganese	3.55	3.58	3.60
44% manganese	do.	4.30	4.35	4.40

do. Ditto.

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

²CRU Group United States transaction prices, electrolytic manganese metal flake, 99.7% manganese, ex-works. Average prices are the average of the month high and low range.

³CRU Group, cost, insurance, and freight, China. Average prices are the average of the month high and low 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)					
	Imports for consumption			Exports		
	Ore and dioxide	Ferroalloy and metal	Total	Ore	Ferroalloy and metal	Total
2022:						
September	87,100	82,300 ^r	169,000 ^r	37	637	674
January–September	491,000	590,000 ^r	1,080,000	449	6,870 ^r	7,320 ^r
2023:						
January	31,700	85,100	117,000	28	551	579
February	1,500	23,800	25,300	--	824	824
March	1,120	64,500	65,700	109	1,240	1,350
April	26,300	45,400	71,700	300	424	724
May	878	37,500	38,400	83	807	891
June	8,230	44,700	53,000	24	558	582
July	42,800	52,300	95,100	--	394	394
August	890	49,600	50,500	46	569	615
September	30,400	52,200	82,600	509	1,170	1,680
January–September	144,000	455,000	599,000	1,100	6,530	7,630

^rRevised. -- Zero.

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

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN SEPTEMBER 2023^{1,2}

(Metric tons, unless otherwise specified)

Country or locality ⁴	Gross weight	Mn content	Value	January–September ³		
				Gross weight	Mn content	Value
Australia	7,520	4,950	\$8,440,000	42,600	26,600	\$56,500,000
Georgia	--	--	--	18,800	13,100	23,400,000
India	500	292	672,000	2,650	1,550	4,330,000
Malaysia	1,060	714	1,250,000	15,400	10,200	21,000,000
Mexico	2,900	1,860	3,150,000	30,200	19,400	34,400,000
Norway	536	330	1,060,000	7,700	4,820	13,400,000
South Africa	16,900	11,000	18,600,000	78,000	50,600	85,800,000
Spain	--	--	--	160	104	226,000
Vietnam	--	--	--	50	33	56,000
Zambia	100	66	104,000	100	66	104,000
Other [2 countries and (or) localities]	5	3	18,600	26	16	49,500
Total	29,500	19,200	33,300,000	196,000	127,000	239,000,000

-- Zero.

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

²Includes Harmonized Tariff Schedule of the United States code 7202.30.0000.

³May include revisions to previously published data.

⁴Presentation of monthly data is based on the January–September quantities (gross weight) of the leading countries.

Source: U.S. Census Bureau.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN SEPTEMBER 2023¹

(Metric tons, unless otherwise specified)

Type and country or locality	HTS ³ code	Gross weight	Mn content	Value	January–September ²		
					Gross weight	Mn content	Value
Low carbon, less than 1% C: ⁴	7202.19.1000						
Canada		--	--	--	13	11	\$50,200
India		43	34	\$63,900	43	34	63,900
Japan		80	65	127,000	760	620	1,410,000
Korea, South		500	460	1,320,000	5,390	4,710	12,900,000
Mexico		100	80	168,000	3,800	3,070	6,780,000
Norway		2,600	2,110	3,890,000	22,500	18,200	39,300,000
South Africa		155	128	415,000	1,990	1,680	5,700,000
Spain		--	--	--	43	35	209,000
Taiwan		--	--	--	3	3	11,500
Vietnam		--	--	--	80	75	187,000
Other [1 country and (or) locality]		--	--	--	1	1	3,620
Total		3,480	2,870	5,990,000	34,600	28,400	66,600,000
Medium carbon, 1%–2% C:	7202.19.5000						
China		--	--	--	3	2	9,310
India		--	--	--	430	344	864,000
Korea, Republic of		2,500	2,000	3,850,000	12,500	10,000	20,400,000
Malaysia		--	--	--	2,100	1,530	2,920,000
Mexico		121	95	272,000	1,470	1,140	3,280,000
Norway		1,900	1,540	2,500,000	24,100	19,600	36,200,000
South Africa		5,850	4,680	8,300,000	13,700	10,900	26,600,000
Thailand		--	--	--	130	104	469,000
Total		10,400	8,310	14,900,000	54,400	43,600	90,800,000
Medium carbon, 2%–4% C:	7202.11.1000						
China		--	--	--	27	21	27,700
India		--	--	--	108	82	106,000
Total		--	--	--	135	103	134,000
High carbon, over 4% C: ⁴	7202.11.5000						
Australia		--	--	--	27,300	21,000	28,600,000
Brazil		102	75	107,000	433	318	532,000
Canada		17	11	52,100	70	49	194,000
Georgia		--	--	--	324	235	292,000
India		294	221	260,000	18,000	11,700	19,100,000
Korea, South		500	380	535,000	2,000	1,520	2,180,000
Malaysia		808	616	816,000	64,100	48,600	82,400,000
South Africa		1,370	1,050	1,560,000	12,800	9,820	20,800,000
United Arab Emirates		--	--	--	151	114	161,000
Zambia		--	--	--	1,210	912	1,290,000
Other [3 countries and (or) localities]		17	4	51,800	99	64	311,000
Total		3,110	2,360	3,380,000	127,000	94,300	156,000,000
Grand total		17,000	13,500	24,300,000	216,000	166,000	313,000,000

-- Zero.

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

²May include revisions to previously published data.

³Harmonized Tariff Schedule of the United States.

⁴Presentation of monthly data is based on the January–September quantities (gross weight) of the leading countries.

Source: U.S. Census Bureau.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn)
IN SEPTEMBER 2023¹

(Metric tons, unless otherwise specified)

Type and country or locality	HTS ³ code	Gross weight	Mn content	Value	January–September ²		
					Gross weight	Mn content	Value
More than 20%, but less than 47% manganese:	2602.00.0040						
Belgium		--	--	--	116	46	\$53,500
Mexico		--	--	--	2,870	1,080	601,000
South Africa		400	171	\$103,000	2,770	1,230	839,000
Total		400	171	103,000	5,750	2,360	1,490,000
47% or more manganese:	2602.00.0060						
Brazil		27	13	39,600	155	75	243,000
China		--	--	--	(4)	(4)	15,100
France		17	8	25,200	17	8	25,200
Gabon		29,400	14,800	6,740,000	133,000	79,300	30,500,000
India		--	--	--	41	19	51,500
Mexico		--	--	--	700	456	573,000
South Africa		100	68	31,300	1,700	868	411,000
Total		29,500	14,900	6,830,000	136,000	80,700	31,800,000
Grand total		29,900	15,100	6,930,000	141,000	83,000	33,300,000

-- Zero.

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

²May include revisions to previously published data.

³Harmonized Tariff Schedule of the United States.

⁴Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE
IN SEPTEMBER 2023^{1, 2}

(Metric tons, unless otherwise specified)

Country or locality ⁴	Gross weight	Value	January–September ³	
			Gross weight	Value
Belgium	--	--	83	\$142,000
Brazil	54	\$68,500	253	336,000
Colombia	156	398,000	511	1,240,000
Germany	16	31,600	28	67,100
Greece	198	512,000	990	2,710,000
India	--	--	14	27,100
Indonesia	--	--	18	45,500
Japan	37	88,500	356	820,000
Mexico	--	--	37	62,200
Spain	--	--	58	98,400
Other [2 countries and (or) localities]	--	--	11	11,100
Total	460	1,100,000	2,360	5,550,000

-- Zero.

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

²Includes Harmonized Tariff Schedule of the United States code 2820.10.0000.

³May include revisions to previously published data.

⁴Presentation of monthly data is based on the January–September quantities (gross weight) of the leading countries.

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL
IN SEPTEMBER 2023¹

(Metric tons, unless otherwise specified)

Type and country or locality	HTS ³ code	Gross weight	Value	January–September ²	
				Gross weight	Value
Unwrought flake:	8111.00.4700				
China		3,120	\$6,540,000	11,300	\$25,200,000
Indonesia		--	--	989	2,100,000
Japan		8	600,000	56	4,030,000
Mexico		--	--	81	492,000
South Africa		546	1,350,000	3,230	12,500,000
Total		3,680	8,480,000	15,600	44,400,000
Unwrought powder:	8111.00.4910				
China		--	--	99	197,000
Mexico		--	--	1	5,440
South Africa		79	343,000	1,050	5,470,000
Total		79	343,000	1,150	5,670,000
Unwrought, other:	8111.00.4990				
Belgium		--	--	5	18,300
Canada		--	--	40	137,000
China		1,930	4,190,000	25,900	59,600,000
Germany		--	--	139	328,000
Indonesia		--	--	108	228,000
Poland		--	--	(4)	3,200
South Africa		--	--	482	2,280,000
Total		1,930	4,190,000	26,600	62,600,000
Other manganese, wrought:	8111.00.6000				
China		--	--	4	60,200
Germany		--	--	(4)	21,600
India		--	--	1	27,600
Japan		1	14,500	3	75,100
Mexico		--	--	151	821,000
Sweden		--	--	30	545,000
Total		1	14,500	189	1,550,000
Metallic waste and scrap:	8111.00.3000				
Canada		34	14,600	137	105,000
China		--	--	20	46,400
Total		34	14,600	157	151,000
Grand total		5,720	13,000,000	43,700	114,000,000

-- Zero.

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

²May include revisions to previously published data.

³Harmonized Tariff Schedule of 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 SEPTEMBER 2023¹

(Metric tons, unless otherwise specified)

Type and country or locality	Schedule B code	Gross weight	Value	January–September ²	
				Gross weight	Value
Ore and concentrates with 20% or more manganese:	2602.00.0000				
Canada		509	\$149,000	715	\$260,000
Guyana		--	--	4	23,500
Ireland		--	--	5	28,500
Korea, Republic of		--	--	189	573,000
Mexico		--	--	178	100,000
Sweden		--	--	7	3,500
Total		509	149,000	1,100	989,000
Ferromanganese:	7202.19.0000				
2% or less carbon:					
Australia		--	--	1	2,670
Canada		30	73,300	888	2,050,000
France		--	--	7	12,400
Mexico		23	31,200	23	31,200
United Kingdom		--	--	4	7,270
Total		53	104,000	922	2,100,000
More than 2% carbon:	7202.11.0000				
Australia		--	--	9	25,000
Canada		--	--	418	1,050,000
China		--	--	18	51,500
Guyana		--	--	11	31,600
Japan		--	--	1	8,460
Mexico		--	--	2	8,720
Poland		1	8,490	1	17,000
Slovenia		(3)	2,720	2	19,000
Total		1	11,200	463	1,210,000
Ferrosilicon manganese:	7202.30.0000				
Canada		780	1,010,000	2,480	3,550,000
Mexico		--	--	18	25,000
Total		780	1,010,000	2,500	3,580,000
Metal, including alloys and waste and scrap: ^{4,5}	8111.00.0000				
Brazil		--	--	38	14,200
Canada		71	186,000	216	776,000
China		1	63,600	145	1,310,000
Costa Rica		56	20,500	137	78,300
France		1	9,950	39	223,000
Germany		1	65,000	32	139,000
India		--	--	108	82,600
Japan		43	16,000	124	707,000
Malaysia		125	219,000	2,030	1,590,000
Mexico		37	49,100	202	683,000
Other [11 countries and (or) localities]		1	3,570	49	571,000
Total		335	633,000	3,120	6,170,000
Grand total		1,680	1,910,000	8,100	14,000,000

-- Zero.

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

²May include revisions to previously published data.

³Less than ½ unit.

⁴Presentation of monthly data is based on the January–September quantities (gross weight) of the leading countries.

⁵Includes manganese-aluminum, other alloys, and waste and scrap.

Source: U.S. Census Bureau.

TABLE 9
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS
IN SEPTEMBER 2023¹

Compound	HTS ³ or Schedule B code ⁴	Gross weight (metric tons)	Value (thousands)	Principal sources and destinations: gross weight (metric tons); value (thousands)	January–September ²		
					Gross weight (metric tons)	Value (thousands)	Principal sources and destinations: gross weight (metric tons); value (thousands)
Imports for consumption:							
Manganese dioxide	2820.10.0000	460	\$1,100	Greece 198; \$512.	2,360	\$5,550	Greece 990; \$2,710.
Manganese oxides other than dioxide	2820.90.0000	1,300	1,040	Brazil 300; \$221.	15,300	10,600	South Africa 6,060; \$2,970.
Manganites, manganates, and other permanganates	2841.69.0090	1	10	China (all).	6	40	China (all).
Potassium permanganate	2841.61.0000	144	411	India (all).	3,080	10,100	India 3,020; \$9,930.
Sodium permanganate	2841.69.0010	171	486	India (all).	4,570	12,800	China 2,730; \$7,150.
Other sulfates, including manganese sulfate	2833.29.5100	3,580	3,170	Mexico 1,300; \$1,560.	34,100	35,900	Mexico 12,800; \$12,800.
Exports:							
Manganese dioxide	2820.10.0000	729	730	Canada 562; \$391.	5,740	6,260	Canada 3,510; \$2,740.
Manganese oxides other than dioxide	2820.90.0000	619	1,420	United Arab Emirates 285; \$408.	4,540	9,860	United Arab Emirates 1,540; \$2,200.
Manganites, manganates, and other permanganates	2841.69.0090	36	75	Canada (all).	161	455	Canada 127; \$251.
Potassium permanganate	2841.61.0000	209	825	Belgium 126; \$421.	624	2,710	Belgium 181; \$595.
Sodium permanganate	2841.69.0010	96	269	Belgium 95; \$264.	216	706	Belgium 210; \$584.
Other sulfates, including manganese sulfate	2833.29.9100	1,460	2,650	Canada 1,010; \$846.	14,600	24,100	Canada 10,500; \$8,780.

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

²May include revisions to previously published data.

³Harmonized Tariff Schedule of the United States.

⁴Imports for consumption are represented by HTS codes. Exports are represented by Schedule B codes.

Source: U.S. Census Bureau.