

Mineral Industry Surveys

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MANGANESE IN OCTOBER 2023

On a gross-weight basis, U.S. imports of manganese ore in October 2023 increased by 35% to 40,500 metric tons (t) from 29,900 t in September 2023 (fig. 1, table 5). In October 2023, the leading source of manganese ore imports for >20% – <47% grade was South Africa and for >47% grade was Gabon. Total imports of manganese ore for the first ten months of 2023 were 63% less than that during the same period in 2022. Decreases in manganese imports, compared with those in 2022, were likely related to decreases in steel consumption in residential construction, a primary end use for manganese (U.S. Census Bureau, 2023).

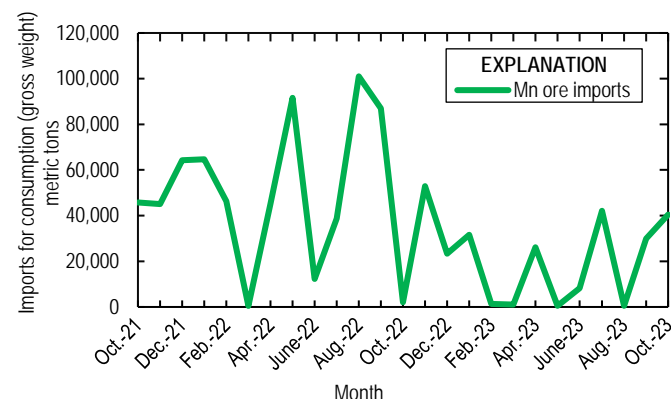


Figure 1. Monthly imports of manganese (Mn) ore from October 2021 through October 2023. Source: U.S. Census Bureau.

Prices

In October 2023, the average spot prices of manganese ore deliveries to China were \$3.59 per metric ton unit for 36%–38% grade and \$4.39 per metric ton unit for 44% grade, unchanged and essentially unchanged, respectively, from the September 2023 prices (fig. 2, table 1). Compared with the monthly average prices in October 2022, the 36%–38% grade was 11% less and 44% grade price was unchanged.

Industry News

Operations were suspended at the JSC Nikopol Ferroalloy Plant (Ukraine) until spring 2024 owing to Russian shelling,

which generally intensifies in the winter (GMK Center, 2023). Additionally, operations at Pokrovskiy HZK, Ukraine's leading manganese ore producer, were suspended indefinitely owing to rising costs of logistics amid the ongoing conflict with Russia (Ukrainian Journal, 2023).

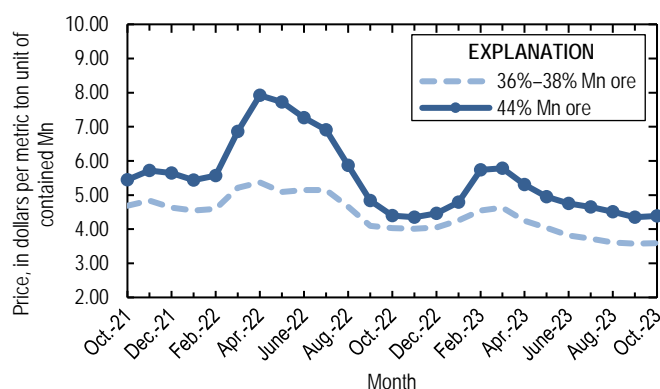


Figure 2. Average monthly spot prices for manganese (Mn) ore delivered to China from October 2021 through October 2023. Source: CRU Group.

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- Ukrainian Journal, 2023, Pokrovsky manganese ore producer suspends operation amid cost rises: Kyiv, Ukraine, Ukrainian Journal, November 1. (Accessed November 24, 2023, via www.ukrainianjournal.com/index.php?w=article&id=37468.)
- 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 OCTOBER 2023

		Low	Average	High
<u>Manganese ferroalloys:¹</u>				
High-carbon ferromanganese, 76% manganese	dollars per long ton of contained manganese	1,150.00	1,187.50	1,225.00
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	110.00	111.00	112.00
Silicomanganese, 65% manganese	do.	58.00	58.50	59.00
Manganese metal, 99.7% manganese flake ²	cents per pound	116.00	134.00	145.00
<u>Manganese ore:^{3,4}</u>				
36%–38% manganese	dollars per metric ton unit contained manganese	3.55	3.59	3.62
44% manganese	do.	4.30	4.39	4.45

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:						
October	2,060	40,200	42,200	58	792	850
January–October	493,000	630,000 ^r	1,120,000 ^r	506	7,660 ^r	8,170 ^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
October	40,900	84,800	126,000	105	611	716
January–October	185,000	540,000	725,000	1,200	7,140	8,350

^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 OCTOBER 2023^{1,2}

(Metric tons, unless otherwise specified)

Country or locality ⁴	Gross weight	Mn content	Value	January–October ³		
				Gross weight	Mn content	Value
Australia	7,820	5,190	\$8,100,000	50,400	31,800	\$64,700,000
Georgia	17,500	12,100	21,000,000	36,300	25,200	44,400,000
India	--	--	--	2,650	1,550	4,330,000
Malaysia	3,380	2,310	3,790,000	18,800	12,500	24,800,000
Mexico	282	182	365,000	30,500	19,500	34,800,000
Norway	779	477	1,440,000	8,480	5,300	14,800,000
South Africa	--	--	--	78,000	50,600	85,800,000
Spain	--	--	--	160	104	226,000
Vietnam	--	--	--	50	33	56,000
Zambia	100	65	104,000	200	131	208,000
Other [2 countries and (or) localities]	--	--	--	26	16	49,500
Total	29,900	20,300	34,800,000	226,000	147,000	274,000,000

-- 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–October quantities (gross weight) of the leading countries.

Source: U.S. Census Bureau.

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

(Metric tons, unless otherwise specified)

Type and country or locality	HTS ³ code	Gross weight	Mn content	Value	January–October ²		
					Gross weight	Mn content	Value
Low carbon, less than 1% C: ⁴	7202.19.1000						
Canada		--	--	--	13	11	\$50,200
India		20	16	\$29,500	63	51	93,400
Japan		80	65	124,000	840	685	1,530,000
Korea, Republic of		1,900	1,630	3,750,000	7,290	6,330	16,700,000
Mexico		--	--	--	3,800	3,070	6,780,000
Norway		788	634	1,190,000	23,300	18,800	40,500,000
South Africa		57	49	182,000	2,050	1,730	5,880,000
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		2,840	2,390	5,280,000	37,500	30,800	71,900,000
Medium carbon, 1%–2% C:	7202.19.5000						
China		--	--	--	3	2	9,310
India		--	--	--	430	344	864,000
Korea, Republic of		3,500	2,800	4,360,000	16,000	12,800	24,800,000
Malaysia		245	196	243,000	2,340	1,730	3,160,000
Mexico		29	22	60,800	1,500	1,160	3,340,000
Norway		807	659	1,020,000	24,900	20,200	37,200,000
South Africa		--	--	--	13,700	10,900	26,600,000
Thailand		--	--	--	130	104	469,000
Total		4,580	3,680	5,690,000	58,900	47,300	96,500,000
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		15,600	11,900	13,600,000	42,900	32,800	42,100,000
Brazil		--	--	--	433	318	532,000
Georgia		--	--	--	324	235	292,000
India		8,480	5,610	8,500,000	26,500	17,300	27,600,000
Korea, Republic of		2,000	1,520	2,200,000	4,000	3,040	4,370,000
Malaysia		18,000	13,700	18,200,000	82,100	62,200	101,000,000
South Africa		207	154	181,000	13,000	9,970	21,000,000
Spain		20	15	58,800	79	59	265,000
United Arab Emirates		--	--	--	151	114	161,000
Zambia		--	--	--	1,210	912	1,290,000
Other [3 countries and (or) localities]		--	--	--	109	69	299,000
Total		44,300	32,800	42,700,000	171,000	127,000	199,000,000
Grand total		51,700	38,900	53,700,000	267,000	205,000	367,000,000

-- 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–October 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 OCTOBER 2023¹

(Metric tons, unless otherwise specified)

Type and country or locality	HTS ³ code	Gross weight	Mn content	Value	January–October ²		
					Gross weight	Mn content	Value
More than 20%, but less than 47% manganese:	2602.00.0040						
Belgium		--	--	--	116	46	\$53,500
China		84	39	\$5,760	84	39	5,760
Mexico		--	--	--	2,870	1,080	601,000
South Africa		200	86	52,400	2,970	1,320	892,000
Total		284	124	58,200	6,040	2,480	1,550,000
47% or more manganese:	2602.00.0060						
Brazil		--	--	--	155	75	243,000
China		--	--	--	(4)	(4)	15,100
France		--	--	--	17	8	25,200
Gabon		40,100	20,000	8,080,000	173,000	99,300	38,600,000
India		112	55	126,000	153	75	177,000
Mexico		--	--	--	700	456	573,000
South Africa		--	--	--	1,700	868	411,000
Total		40,200	20,100	8,210,000	176,000	101,000	40,100,000
Grand total		40,500	20,200	8,270,000	182,000	103,000	41,600,000

-- 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 OCTOBER 2023^{1, 2}

(Metric tons, unless otherwise specified)

Country or locality ⁴	Gross weight	Value	January–October ³	
			Gross weight	Value
Belgium	--	--	83	\$142,000
Brazil	19	\$24,300	272	360,000
Colombia	188	443,000	698	1,680,000
Germany	--	--	28	67,100
Greece	198	512,000	1,190	3,220,000
India	--	--	14	27,100
Indonesia	--	--	18	45,500
Japan	18	44,200	374	864,000
Mexico	--	--	37	62,200
Spain	--	--	58	98,400
Other [2 countries and (or) localities]	--	--	11	11,100
Total	423	1,020,000	2,780	6,580,000

-- 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–October quantities (gross weight) of the leading countries.

Source: U.S. Census Bureau.

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

(Metric tons, unless otherwise specified)

Type and country or locality	HTS ³ code	Gross weight	Value	January–October ²	
				Gross weight	Value
Unwrought flake:	8111.00.4700				
China		229	\$425,000	11,500	\$25,700,000
Indonesia		550	887,000	1,540	2,990,000
Japan		11	290,000	67	4,320,000
Mexico		17	76,300	97	568,000
South Africa		771	2,360,000	4,000	14,900,000
Total		1,580	4,040,000	17,200	48,400,000
Unwrought powder:	8111.00.4910				
China		--	--	99	197,000
Mexico		--	--	1	5,440
South Africa		40	201,000	1,090	5,670,000
Total		40	201,000	1,190	5,870,000
Unwrought, other:	8111.00.4990				
Belgium		--	--	5	18,300
Canada		--	--	40	137,000
China		1,530	3,800,000	27,400	63,400,000
Germany		11	33,400	150	361,000
Indonesia		--	--	108	228,000
Poland		--	--	(4)	3,200
South Africa		41	210,000	523	2,490,000
Total		1,580	4,040,000	28,200	66,600,000
Other manganese, wrought:	8111.00.6000				
Canada		2	27,800	2	27,800
China		2	4,500	6	64,700
Germany		(4)	4,870	(4)	26,500
India		1	10,300	1	37,900
Japan		--	--	3	75,100
Mexico		20	128,000	171	949,000
Sweden		--	--	30	545,000
Total		25	175,000	213	1,730,000
Metallic waste and scrap:	8111.00.3000				
Canada		38	16,300	175	121,000
China		--	--	20	46,400
Total		38	16,300	195	167,000
Grand total		3,260	8,480,000	47,000	123,000,000

-- 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 OCTOBER 2023¹

(Metric tons, unless otherwise specified)

Type and country or locality	Schedule B code	Gross weight	Value	January–October ²	
				Gross weight	Value
Ore and concentrates with 20% or more manganese:	2602.00.0000				
Canada		96	\$32,000	812	\$292,000
Guyana		--	--	4	23,500
Ireland		--	--	5	28,500
Korea, Republic of		9	50,900	198	624,000
Mexico		--	--	178	100,000
Sweden		--	--	7	3,500
Total		105	82,900	1,200	1,070,000
Ferromanganese:	7202.19.0000				
2% or less carbon:					
Australia		--	--	1	2,670
Canada		2	3,350	890	2,050,000
France		--	--	7	12,400
Mexico		--	--	23	31,200
United Kingdom		--	--	4	7,270
Total		2	3,350	924	2,100,000
More than 2% carbon:	7202.11.0000				
Australia		--	--	9	25,000
Canada		27	74,300	446	1,120,000
China		--	--	18	51,500
Guyana		--	--	11	31,600
Japan		--	--	1	8,460
Mexico		--	--	2	8,720
Poland		--	--	1	17,000
Slovenia		(3)	2,720	2	21,700
Total		28	77,000	491	1,290,000
Ferrosilicon manganese:	7202.30.0000				
Canada		253	326,000	2,730	3,880,000
Italy		8	10,900	8	10,900
Mexico		1	4,940	19	29,900
Total		263	342,000	2,760	3,920,000
Metal, including alloys and waste and scrap: ^{4, 5}	8111.00.0000				
Brazil		--	--	38	14,200
Canada		7	124,000	223	900,000
China		2	60,300	146	1,370,000
Costa Rica		(3)	9,580	137	87,900
France		1	9,920	40	233,000
Germany		--	--	32	139,000
India		60	29,700	168	112,000
Japan		(3)	13,800	125	721,000
Malaysia		240	117,000	2,270	1,700,000
Mexico		34	45,800	236	729,000
Other [11 countries and (or) localities]		2	105,000	51	675,000
Total		347	515,000	3,460	6,680,000
Grand total		744	1,020,000	8,840	15,100,000

-- 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–October 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 OCTOBER 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–October 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	423	\$1,020	Greece 198; \$512.	2,780	\$6,580	Greece 1,190; \$3,220.
Manganese oxides other than dioxide	2820.90.0000	2,040	1,540	Gabon 989; \$723.	17,300	12,100	South Africa 6,060; \$2,970.
Manganites, manganates, and other permanganates	2841.69.0090	--	--	XX.	6	40	China (all).
Potassium permanganate	2841.61.0000	86	254	India (all).	3,170	10,300	India 3,100; \$10,200.
Sodium permanganate	2841.69.0010	183	450	India 126; \$340.	4,760	13,200	China 2,790; \$7,260.
Other sulfates, including manganese sulfate	2833.29.5100	5,360	4,730	China 2,810; \$1,840.	39,400	40,600	Mexico 14,600; \$15,000.
Exports:							
Manganese dioxide	2820.10.0000	662	602	Canada 328; \$279.	6,400	6,860	Canada 3,840; \$3,020.
Manganese oxides other than dioxide	2820.90.0000	516	924	United Arab Emirates 190; \$272.	5,060	10,800	United Arab Emirates 1,730; \$2,470.
Manganites, manganates, and other permanganates	2841.69.0090	49	117	Canada (all).	209	571	Canada 176; \$367.
Potassium permanganate	2841.61.0000	66	293	Canada 19; \$62.	690	3,010	Belgium 199; \$655.
Sodium permanganate	2841.69.0010	59	167	Belgium 57; \$159.	274	873	Belgium 267; \$743.
Other sulfates, including manganese sulfate	2833.29.9100	2,080	3,270	Canada 1,210; \$757.	16,700	27,400	Canada 11,700; \$9,530.

XX Not applicable. -- Zero.

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.