

# Mineral Industry Surveys

**For information, contact:**

Emily K. Schnebele, Acting Manganese Commodity Specialist  
 National Minerals Information Center  
 U.S. Geological Survey  
 989 National Center  
 Reston, VA 20192  
 Telephone: (703) 648-4945, Fax: (703) 648-7757  
 Email: eschnebele@usgs.gov

Benjamin N. Bryden (Data)  
 Telephone: (703) 648-7953  
 Fax: (703) 648-7975  
 Email: bbryden@usgs.gov

**Internet:** <https://www.usgs.gov/centers/national-minerals-information>.

## MANGANESE IN NOVEMBER 2021

On a gross-weight basis, U.S. imports of manganese ore in November 2021 were 45,100 metric tons (t), slightly less than the amount in October 2021 (fig. 1, table 5). The only source of manganese ore, >20% – <47% grade, was South Africa and the leading source for >47% grade was Gabon. Total imports of manganese ore for the first 11 months of 2021 were 37% more than those during the same period in 2020.

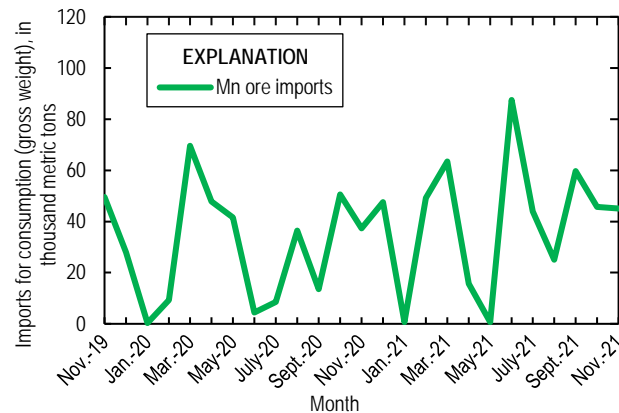


Figure 1. Monthly imports of manganese (Mn) ore from November 2019 through November 2021. Source: U.S. Census Bureau.

**Prices**

In November 2021, the average spot prices for manganese ore deliveries to China were \$4.84 per metric ton unit, 36%–38% grade, and \$5.72 per metric ton unit, 44% grade, 3% and 5% more, respectively, than the October 2021 prices (fig. 2, table 1).

Compared with the monthly average prices in November 2020, the 36%–38%-grade price was 27% more and the 44%-grade price was 40% more.

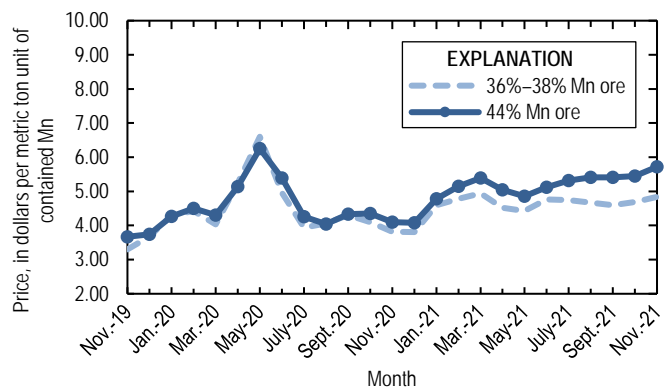


Figure 2. Average monthly spot prices for manganese (Mn) ore delivered to China from November 2019 through November 2021. Source: CRU Group.

List services and web feed subscribers are the first to receive notification of USGS minerals information publications and data releases. For information on how to subscribe, go to <https://www.usgs.gov/centers/national-minerals-information-center/minerals-information-publication-list-services>.

TABLE 1  
PRICES FOR MANGANESE FERROALLOYS, METAL, AND ORE IN NOVEMBER 2021

		Low	Average	High
<b>Manganese ferroalloys:<sup>1</sup></b>				
High-carbon ferromanganese, 76% manganese	dollars per long ton of contained manganese	2,500.00	2,550.00	2,600.00
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	243.75	248.13	252.50
Silicomanganese, 65% manganese	do.	125.00	127.50	130.00
Manganese metal, 99.7% manganese flake <sup>2</sup>	cents per pound	450.00	466.94	475.00
<b>Manganese ore:<sup>3,4</sup></b>				
36%-38% manganese	dollars per metric ton unit contained manganese	4.70	4.84	4.90
44% manganese	do.	5.40	5.72	5.85

do. Ditto.

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

<sup>2</sup>CRU 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.

<sup>3</sup>CRU Group, cost, insurance, and freight, China. Average prices are the average of the month high and low range.

<sup>4</sup>To 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 MANGANESE<sup>1</sup>

(Metric tons)

	Imports for consumption			Exports		
	Ore and dioxide	Ferroalloy and metal	Total	Ore	Ferroalloy and metal	Total
<b>2020:</b>						
November	37,900 <sup>r</sup>	46,800 <sup>r</sup>	84,800 <sup>r</sup>	54 <sup>r</sup>	1,110 <sup>r</sup>	1,160 <sup>r</sup>
January–November	324,000 <sup>r</sup>	459,000 <sup>r</sup>	783,000 <sup>r</sup>	834 <sup>r</sup>	11,400 <sup>r</sup>	12,200 <sup>r</sup>
<b>2021:</b>						
January	989	24,600	25,500	83	2,930	3,020
February	49,400	71,300	121,000	77	2,670	2,750
March	64,200	65,800	130,000	50	1,940	1,990
April	16,700	22,800	39,500	52	1,260	1,310
May	1,000	58,600	59,600	412	1,650	2,060
June	88,800	74,800	164,000	68	1,690	1,760
July	44,300	32,200	76,500	87	1,590	1,670
August	25,400	62,400	87,800	176	1,330	1,500
September	60,800	58,400	119,000	41	1,120	1,160
October	46,400	67,700	114,000	--	1,100	1,100
November	45,900	56,200	102,000	48	1,430	1,480
January–November	444,000	595,000	1,040,000	1,090	18,700	19,800

<sup>r</sup>Revised. -- Zero.

<sup>1</sup>Data 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 NOVEMBER 2021<sup>1,2,3</sup>

(Metric tons, unless otherwise specified)

Country or locality	Gross weight	Mn content	Value	January–November <sup>4</sup>		
				Gross weight	Mn content	Value
Australia	--	--	--	45,600	30,000	\$66,700,000
Brazil	--	--	--	913	603	983,000
Georgia	1,010	717	\$1,900,000	74,300	54,800	95,800,000
India	--	--	--	500	276	720,000
Malaysia	6,620	4,690	13,000,000	26,300	17,700	34,500,000
Mexico	2,730	1,790	4,050,000	12,100	7,890	15,400,000
Norway	2,930	1,800	7,310,000	26,800	16,600	45,000,000
Russia	--	--	--	8,890	1,610	16,900,000
South Africa	107	72	192,000	63,800	41,400	65,000,000
Spain	--	--	--	314	187	463,000
Other [2 countries and (or) localities]	11	7	14,000	31	20	39,400
Total	13,400	9,080	26,500,000	260,000	171,000	341,000,000

-- Zero.

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

<sup>2</sup>Includes Harmonized Tariff Schedule of the United States code 7202.30.0000.

<sup>3</sup>Presentation of monthly data is based on the January–November quantities (gross weight) of the leading countries.

<sup>4</sup>May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 4  
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN NOVEMBER 2021<sup>1</sup>

(Metric tons, unless otherwise specified)

Type and country or locality	HTS <sup>3</sup> code	Gross weight	Mn content	Value	January–November <sup>2</sup>		
					Gross weight	Mn content	Value
Low carbon, less than 1% C:	7202.19.1000						
Canada		--	--	--	2	2	\$3,260
India		--	--	--	1	1	2,400
Japan		20	16	\$64,500	888	715	1,630,000
Mexico		--	--	--	433	349	569,000
Norway		4,800	3,890	15,900,000	38,300	31,100	81,500,000
South Africa		57	51	103,000	536	478	864,000
Spain		--	--	--	1	1	2,190
Switzerland		1	1	2,420	1	1	2,420
Total		4,880	3,960	16,100,000	40,200	32,700	84,500,000
Medium carbon, 1%–2% C:	7202.19.5000						
Australia		--	--	--	9,510	7,240	13,400,000
China		--	--	--	20	16	50,600
India		--	--	--	756	575	752,000
Japan		--	--	--	96	77	149,000
Korea, Republic of		--	--	--	15,700	12,600	26,900,000
Mexico		--	--	--	1,610	1,220	2,900,000
Norway		1,000	810	2,880,000	4,500	3,670	7,960,000
South Africa		--	--	--	24,500	19,600	43,100,000
Total		1,000	810	2,880,000	56,700	45,000	95,200,000
High carbon, over 4% C: <sup>4</sup>	7202.11.5000						
Australia		--	--	--	37,200	28,400	53,900,000
France		--	--	--	1,460	1,120	2,130,000
India		8,500	6,440	11,100,000	40,600	30,500	48,500,000
Korea, Republic of		--	--	--	13,000	10,000	16,200,000
Malaysia		14,300	10,900	22,000,000	62,200	47,200	65,400,000
Norway		--	--	--	500	395	371,000
Russia		7,890	6,050	14,500,000	15,500	10,900	23,100,000
South Africa		645	490	672,000	22,100	16,800	26,500,000
Switzerland		--	--	--	2,310	1,760	2,170,000
Zambia		94	73	133,000	1,030	798	1,270,000
Other [4 countries and (or) localities]		32	24	31,700	890	663	1,530,000
Total		31,500	23,900	48,400,000	197,000	149,000	241,000,000
Grand total		37,300	28,700	67,300,000	294,000	226,000	421,000,000

-- Zero.

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

<sup>2</sup>May include revisions to previously published data.

<sup>3</sup>Harmonized Tariff Schedule of the United States.

<sup>4</sup>Presentation of monthly data is based on the January–November 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 NOVEMBER 2021<sup>1</sup>

(Metric tons, unless otherwise specified)

Type and country or locality	HTS <sup>3</sup> code	Gross weight	Mn content	Value	January–November <sup>2</sup>		
					Gross weight	Mn content	Value
More than 20%, but less than 47% manganese:	2602.00.0040						
Gabon		--	--	--	4,500	2,070	\$1,320,000
Mexico		--	--	--	45,600	17,400	7,670,000
South Africa		351	164	\$95,300	74,400	29,700	10,800,000
Total		351	164	95,300	124,000	49,100	19,800,000
47% or more manganese:	2602.00.0060						
Brazil		--	--	--	193	97	135,000
Canada		--	--	--	18	17	3,500
France		--	--	--	1	1	2,020,000
Gabon		44,300	38,200	7,580,000	303,000	178,000	61,600,000
Mexico		57	39	57,200	247	169	251,000
Morocco		--	--	--	2,210	1,210	950,000
South Africa		400	194	152,000	6,300	3,120	1,860,000
Total		44,800	38,500	7,790,000	312,000	182,000	66,900,000
Grand total		45,100	38,600	7,880,000	437,000	231,000	86,700,000

-- Zero.

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

<sup>2</sup>May include revisions to previously published data.

<sup>3</sup>Harmonized Tariff Schedule of the United States.

Source: U.S. Census Bureau.

TABLE 6  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE IN NOVEMBER 2021<sup>1,2,3</sup>

(Metric tons, unless otherwise specified)

Country or locality	Gross weight	Value	January–November <sup>4</sup>	
			Gross weight	Value
Belgium	--	--	37	\$144,000
Brazil	--	--	170	201,000
Canada	--	--	26	41,300
China	18	\$80,900	100	319,000
Greece	611	1,550,000	3,510	8,090,000
Japan	154	342,000	2,660	5,910,000
Mexico	--	--	84	143,000
Morocco	--	--	51	79,000
South Africa	--	--	323	748,000
Spain	--	--	192	396,000
Other [2 countries and (or) localities]	--	--	28	114,000
<b>Total</b>	<b>783</b>	<b>1,970,000</b>	<b>7,190</b>	<b>16,200,000</b>

-- Zero.

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

<sup>2</sup>Includes Harmonized Tariff Schedule of the United States code 2820.10.0000.

<sup>3</sup>Presentation of monthly data is based on the January–November quantities (gross weight) of the leading countries.

<sup>4</sup>May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 7  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN NOVEMBER 2021<sup>1</sup>

(Metric tons, unless otherwise specified)

Type and country or locality	HTS <sup>3</sup> code	Gross weight	Value	January–November <sup>2</sup>	
				Gross weight	Value
<b>Unwrought flake:</b>	8111.00.4700				
China		100	\$489,000	3,200	\$6,880,000
Gabon		--	--	4	9,700
Japan		(4)	435,000	11	3,170,000
Mexico		--	--	26	91,500
South Africa		1,340	6,170,000	6,480	18,600,000
United Kingdom		25	71,000	25	71,000
<b>Total</b>		<b>1,470</b>	<b>7,160,000</b>	<b>9,750</b>	<b>28,800,000</b>
<b>Unwrought powder:</b>	8111.00.4910				
China		--	--	193	316,000
Mexico		9	79,800	19	119,000
South Africa		61	153,000	1,440	3,540,000
United Kingdom		--	--	(4)	4,000
<b>Total</b>		<b>70</b>	<b>232,000</b>	<b>1,650</b>	<b>3,980,000</b>
<b>Unwrought, other:</b>	8111.00.4990				
China		3,740	10,300,000	24,900	54,300,000
Germany		106	455,000	1,320	3,150,000
South Africa		41	112,000	407	1,020,000
Spain		--	--	7	10,300
<b>Total</b>		<b>3,880</b>	<b>10,900,000</b>	<b>26,600</b>	<b>58,500,000</b>
<b>Other manganese, wrought:</b>	8111.00.6000				
Canada		--	--	(4)	7,540
China		--	--	13	60,600
France		--	--	(4)	3,090
Germany		--	--	134	1,940,000
Japan		(4)	12,900	(4)	33,000
Mexico		--	--	226	1,050,000
Sweden		13	214,000	40	647,000
United Kingdom		--	--	(4)	9,720
<b>Total</b>		<b>13</b>	<b>227,000</b>	<b>414</b>	<b>3,740,000</b>
<b>Metallic waste and scrap</b>	8111.00.3000				
Canada		--	--	387	159,000
Japan		--	--	8	48,000
<b>Total</b>		<b>--</b>	<b>--</b>	<b>395</b>	<b>207,000</b>
<b>Grand total</b>		<b>5,440</b>	<b>18,500,000</b>	<b>38,800</b>	<b>95,200,000</b>

-- Zero.

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

<sup>2</sup>May include revisions to previously published data.

<sup>3</sup>Harmonized Tariff Schedule of the United States.

<sup>4</sup>Less 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 NOVEMBER 2021<sup>1</sup>

(Metric tons, unless otherwise specified)

Type and country or locality	HTS <sup>3</sup> code	Gross weight	Value	January–November <sup>2</sup>	
				Gross weight	Value
<b>Ore and concentrates with 20% or more manganese:</b>	<b>2602.00.0000</b>				
Belgium		--	--	20	\$57,100
Canada		41	\$39,200	603	400,000
Dominican Republic		--	--	29	21,500
India		--	--	97	91,200
Korea, Republic of		7	3,410	7	3,410
Mexico		--	--	279	137,000
Netherlands		--	--	14	52,500
Singapore		--	--	20	8,570
United Kingdom		--	--	25	15,000
<b>Total</b>		<b>48</b>	<b>42,600</b>	<b>1,090</b>	<b>786,000</b>
<b>Ferromanganese:</b>	<b>7202.19.0000</b>				
<b>2% or less carbon:</b>					
Argentina		--	--	218	427,000
Canada		100	244,000	4,280	7,790,000
Chile		--	--	20	33,900
Jamaica		--	--	24	44,900
Mexico		140	267,000	144	273,000
Romania		--	--	2	4,490
Uruguay		--	--	5	8,620
<b>Total</b>		<b>240</b>	<b>511,000</b>	<b>4,690</b>	<b>8,580,000</b>
<b>More than 2% carbon:</b>	<b>7202.11.0000</b>				
Brazil		--	--	48	134,000
Canada		27	71,800	4,070	4,740,000
Chile		--	--	10	28,000
China		--	--	15	42,200
Finland		--	--	2	6,930
Indonesia		--	--	3	9,200
Jamaica		--	--	16	44,900
Mexico		--	--	90	233,000
Peru		--	--	38	115,000
Taiwan		--	--	4	9,900
Other [2 countries and (or) localities]		--	--	3	6,990
<b>Total</b>		<b>27</b>	<b>71,800</b>	<b>4,300</b>	<b>5,370,000</b>
<b>Ferrosilicon manganese</b>	<b>7202.30.0000</b>				
Canada		716	1,520,000	4,000	6,410,000
Colombia		--	--	203	299,000
Honduras		--	--	2	5,100
Japan		--	--	(4)	4,100
Mexico		--	--	62	146,000
Peru		--	--	190	279,000
<b>Total</b>		<b>716</b>	<b>1,520,000</b>	<b>4,450</b>	<b>7,150,000</b>
<b>Metal, including alloys and waste and scrap:<sup>5,6</sup></b>	<b>8111.00.0000</b>				
Canada		1	18,100	508	1,950,000
Dominican Republic		--	--	48	130,000
Germany		--	--	82	413,000
Japan		--	--	103	372,000
Korea, Republic of		--	--	25	9,140
Malaysia		444	328,000	4,090	2,340,000
Mexico		2	32,700	37	304,000
Netherlands		--	--	165	1,030,000
Turkey		--	--	29	10,600
Vietnam		--	--	100	80,000
Other [16 countries and (or) localities]		--	--	79	1,390,000
<b>Total</b>		<b>448</b>	<b>379,000</b>	<b>5,270</b>	<b>8,030,000</b>
<b>Grand total</b>		<b>1,480</b>	<b>2,520,000</b>	<b>19,800</b>	<b>29,900,000</b>

-- Zero.

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

<sup>2</sup>May include revisions to previously published data.

<sup>3</sup>Harmonized Tariff Schedule of the United States.

<sup>4</sup>Less than ½ unit.

<sup>5</sup>Presentation of monthly data is based on the January–November quantities (gross weight) of the leading countries.

<sup>6</sup>Includes manganese-aluminum, other alloys, and waste and scrap.

TABLE 9  
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN NOVEMBER 2021<sup>1</sup>

Compound	HTS <sup>3</sup> code	Gross weight (metric tons)	Value (thousands)	Principal sources and destinations: gross weight (metric tons); value (thousands)	January–November <sup>2</sup>		
					Gross weight (metric tons)	Value (thousands)	Principal sources and destinations: gross weight (metric tons); value (thousands)
<b>Imports for consumption:</b>							
Manganese oxides other than dioxide	2820.90.0000	606	\$565	South Africa 499; \$474.	22,300	\$14,100	India 7,490; \$5,100.
Manganites, manganates, and other permanganates	2841.69.0090	(4)	5	China (all).	71	422	India 39; \$92.
Potassium permanganate	2841.61.0000	35	99	India (all).	793	1,780	India 732; \$1,640.
Sodium permanganate	2841.69.0010	205	462	India 153; \$358.	1,310	2,490	India 708; \$1,500.
Other sulfates, including manganese sulfate	2833.29.5100	6,070	4,330	China 3,620; \$2,270.	67,500	51,500	China 22,600; \$14,300.
<b>Exports:</b>							
Manganese dioxide	2820.10.0000	1,160	1,400	Canada 845; \$607.	9,100	10,700	Canada 5,890; \$4,280.
Manganese oxides other than dioxide	2820.90.0000	406	801	United Arab Emirates 154; \$333.	5,400	10,900	United Arab Emirates 1,810; \$3,100.
Manganites, manganates, and other permanganates	2841.69.0090	2	8	Canada 2; \$3.	149	442	Canada 145; \$312.
Potassium permanganate	2841.61.0000	312	894	Belgium 220; \$563.	3,160	9,130	Belgium 1,720; \$4,360.
Sodium permanganate	2841.69.0010	24	108	Belgium 18; \$46.	563	1,620	Belgium 361; \$840.
Other sulfates, including manganese sulfate	2833.29.9100	2,000	4,430	Canada 1,300; \$1,650.	18,700	42,500	Canada 11,300; \$11,300.

<sup>1</sup>Data are rounded to no more than three significant digits.

<sup>2</sup>May include revisions to previously published data.

<sup>3</sup>Harmonized Tariff Schedule of the United States.

<sup>4</sup>Less than ½ unit.

Source: U.S. Census Bureau.