

# 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/nmic>

## MANGANESE IN OCTOBER 2021

On a gross-weight basis, U.S. imports of manganese ore in October 2021 were 45,700 metric tons (t), 23% less than the amount in September 2021 (fig. 1, table 5). The leading source of manganese ore, >20% – <47% grade, was South Africa and for >47% grade was Gabon. Total imports of manganese ore for the first 10 months of 2021 were 39% more than those during the same period in 2020.

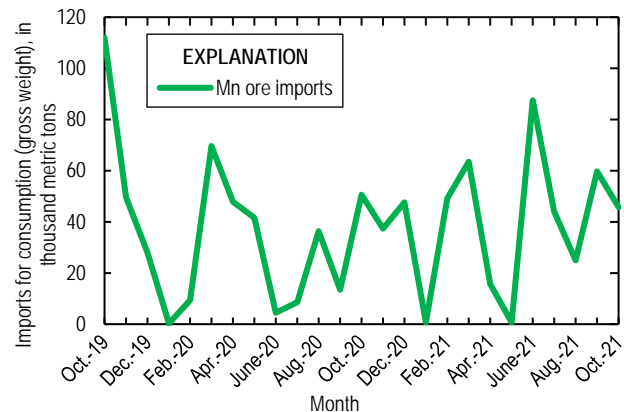


Figure 1. Monthly imports of manganese (Mn) ore from October 2019 through October 2021. Source: U.S. Census Bureau.

**Prices**

In October 2021, the average spot prices for manganese ore deliveries to China were \$4.69 per metric ton unit, 36%–38% grade, and \$5.45 per metric ton unit, 44% grade, both slightly more than the September 2021 prices (fig. 2, table 1). Compared

with the monthly average prices in October 2020, the 36%–38%-grade price was 14% more and the 44%-grade price was 25% more.

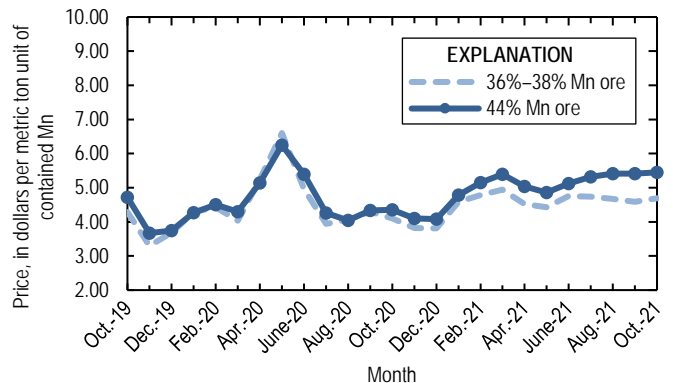


Figure 2. Average monthly spot prices for manganese (Mn) ore delivered to China from October 2019 through October 2021. Source: CRU Group.

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

		Low	Average	High
<b>Manganese ferroalloys:<sup>1</sup></b>				
High-carbon ferromanganese, 76% manganese	dollars per long ton of contained manganese	2,487.50	2,531.25	2,575.00
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	193.75	196.88	200.00
Silicomanganese, 65% manganese	do.	120.75	124.13	127.50
Manganese metal, 99.7% manganese flake <sup>2</sup>	cents per pound	330.00	385.94	450.00
<b>Manganese ore:<sup>3,4</sup></b>				
36%-38% manganese	dollars per metric ton unit contained manganese	4.60	4.69	4.75
44% manganese	do.	5.40	5.45	5.50

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
2020:						
October	50,800 <sup>r</sup>	39,500 <sup>r</sup>	90,300 <sup>r</sup>	40 <sup>r</sup>	1,100 <sup>r</sup>	1,140 <sup>r</sup>
January–October	286,000 <sup>r</sup>	413,000 <sup>r</sup>	699,000 <sup>r</sup>	780 <sup>r</sup>	10,300 <sup>r</sup>	11,000 <sup>r</sup>
2021:						
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
January–October	398,000	538,000	936,000	1,050	17,300	18,300

<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 OCTOBER 2021<sup>1, 2, 3</sup>

(Metric tons, unless otherwise specified)

Country or locality	Gross weight	Mn content	Value	January–October <sup>4</sup>		
				Gross weight	Mn content	Value
Australia	8,000	5,250	\$17,400,000	45,600	30,000	\$66,700,000
Brazil	--	--	--	913	603	983,000
Georgia	13,600	10,100	22,800,000	73,300	54,000	93,900,000
India	--	--	--	500	276	720,000
Malaysia	694	453	691,000	19,700	13,000	21,500,000
Mexico	850	550	1,180,000	9,410	6,100	11,300,000
Norway	1,320	828	2,610,000	23,900	14,800	37,700,000
Russia	6,200	1,140	13,500,000	8,890	1,610	16,900,000
South Africa	10,800	7,020	11,900,000	63,700	41,300	64,800,000
Spain	--	--	--	314	187	463,000
Other (1 country or locality)	--	--	--	20	13	25,400
Total	41,500	25,300	70,000,000	246,000	162,000	315,000,000

-- 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–October 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 OCTOBER 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–October <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		196	158	\$460,000	868	699	1,570,000
Mexico		116	95	155,000	433	349	569,000
Norway		2,050	1,670	5,720,000	33,500	27,200	65,600,000
South Africa		44	42	83,300	479	428	761,000
Spain		1	1	2,190	1	1	2,190
Total		2,410	1,970	6,420,000	35,300	28,700	68,500,000
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		2,000	1,600	4,220,000	15,700	12,600	26,900,000
Mexico		83	67	128,000	1,610	1,220	2,900,000
Norway		--	--	--	3,500	2,860	5,080,000
South Africa		4,520	3,610	10,000,000	24,500	19,600	43,100,000
Total		6,610	5,270	14,400,000	55,700	44,200	92,400,000
High carbon, over 4% C: <sup>4</sup>	7202.11.5000						
Australia		8,110	6,240	16,400,000	37,200	28,400	53,900,000
France		238	181	324,000	1,460	1,120	2,130,000
India		135	103	168,000	32,100	24,100	37,500,000
Korea, Republic of		1,000	760	1,360,000	13,000	10,000	16,200,000
Malaysia		48	37	77,600	47,900	36,300	43,300,000
Norway		--	--	--	500	395	371,000
Russia		--	--	--	7,580	4,890	8,690,000
South Africa		4,090	3,120	6,490,000	21,400	16,300	25,900,000
Switzerland		--	--	--	2,310	1,760	2,170,000
Zambia		99	77	142,000	939	725	1,140,000
Other [4 countries and (or) localities]		20	12	41,700	858	639	1,500,000
Total		13,700	10,500	25,000,000	165,000	125,000	193,000,000
Grand total		22,800	17,800	45,800,000	256,000	198,000	354,000,000

-- 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–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 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–October <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		132	61	\$34,900	74,000	29,500	10,700,000
Total		132	61	34,900	124,000	48,900	19,700,000
47% or more manganese:	2602.00.0060						
Brazil		--	--	--	193	97	135,000
Canada		18	17	3,500	18	17	3,500
France		--	--	--	1	1	2,020,000
Gabon		45,300	23,900	9,250,000	259,000	139,000	54,100,000
Mexico		95	65	95,300	190	130	194,000
Morocco		--	--	--	2,210	1,210	950,000
South Africa		200	97	76,000	5,900	2,920	1,710,000
Total		45,600	24,100	9,420,000	267,000	144,000	59,100,000
Grand total		45,700	24,100	9,460,000	392,000	193,000	78,800,000

-- 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 OCTOBER 2021<sup>1,2,3</sup>

(Metric tons, unless otherwise specified)

Country or locality	Gross weight	Value	January–October <sup>4</sup>	
			Gross weight	Value
Belgium	--	--	37	\$144,000
Brazil	18	\$20,100	170	201,000
Canada	--	--	26	41,300
China	4	13,500	82	238,000
Greece	462	1,060,000	2,900	6,550,000
Japan	175	392,000	2,510	5,570,000
Mexico	21	36,000	84	143,000
Morocco	--	--	51	79,000
South Africa	19	45,600	323	748,000
Spain	--	--	192	396,000
Other [2 countries and (or) localities]	--	--	28	114,000
<b>Total</b>	<b>698</b>	<b>1,560,000</b>	<b>6,410</b>	<b>14,200,000</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–October 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 OCTOBER 2021<sup>1</sup>

(Metric tons, unless otherwise specified)

Type and country or locality	HTS <sup>3</sup> code	Gross weight	Value	January–October <sup>2</sup>	
				Gross weight	Value
Unwrought flake:	8111.00.4700				
China		324	\$1,410,000	3,100	\$6,390,000
Gabon		--	--	4	9,700
Japan		8	396,000	10	2,740,000
Mexico		--	--	26	91,500
South Africa		631	1,500,000	5,140	12,400,000
Total		964	3,310,000	8,280	21,600,000
Unwrought powder:	8111.00.4910				
China		--	--	193	316,000
Mexico		3	19,100	10	39,500
South Africa		59	136,000	1,370	3,390,000
United Kingdom		--	--	(4)	4,000
Total		62	155,000	1,580	3,740,000
Unwrought, other:	8111.00.4990				
China		2,030	4,580,000	21,200	44,000,000
Germany		172	522,000	1,220	2,690,000
South Africa		61	141,000	366	905,000
Spain		--	--	7	10,300
Total		2,270	5,250,000	22,800	47,600,000
Other manganese, wrought:	8111.00.6000				
Canada		--	--	(4)	7,540
China		(4)	2,750	13	60,600
France		--	--	(4)	3,090
Germany		8	123,000	134	1,940,000
Japan		--	--	(4)	20,200
Mexico		20	133,000	226	1,050,000
Sweden		12	187,000	28	432,000
United Kingdom		--	--	(4)	9,720
Total		40	445,000	401	3,520,000
Metallic waste and scrap	8111.00.3000				
Canada		71	29,000	387	159,000
Japan		--	--	8	48,000
Total		71	29,000	395	207,000
Grand total		3,400	9,180,000	33,400	76,700,000

-- 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.

<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 OCTOBER 2021<sup>1</sup>

(Metric tons, unless otherwise specified)

Type and country or locality	HTS <sup>3</sup> code	Gross weight	Value	January–October <sup>2</sup>	
				Gross weight	Value
Ore and concentrates with 20% or more manganese:	2602.00.0000				
Belgium		--	--	20	\$57,100
Canada		--	--	562	361,000
Dominican Republic		--	--	29	21,500
India		--	--	97	91,200
Mexico		--	--	279	137,000
Netherlands		--	--	14	52,500
Singapore		--	--	20	8,570
United Kingdom		--	--	25	15,000
Total		--	--	1,050	744,000
Ferromanganese:	7202.19.0000				
2% or less carbon:					
Argentina		--	--	218	427,000
Canada		22	\$57,200	4,180	7,540,000
Chile		--	--	20	33,900
Jamaica		24	44,900	24	44,900
Mexico		--	--	3	6,230
Romania		--	--	2	4,490
Uruguay		--	--	5	8,620
Total		46	102,000	4,450	8,070,000
More than 2% carbon:	7202.11.0000				
Brazil		48	134,000	48	134,000
Canada		27	87,600	4,050	4,670,000
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
Total		75	222,000	4,280	5,300,000
Ferrosilicon manganese	7202.30.0000				
Canada		412	966,000	3,280	4,890,000
Colombia		--	--	203	299,000
Honduras		--	--	2	5,100
Japan		(4)	4,100	(4)	4,100
Mexico		--	--	62	146,000
Peru		--	--	190	279,000
Total		413	970,000	3,740	5,630,000
Metal, including alloys and waste and scrap: <sup>5,6</sup>	8111.00.0000				
Canada		5	10,900	507	1,930,000
Dominican Republic		--	--	48	130,000
Germany		--	--	82	413,000
Japan		--	--	103	372,000
Korea, Republic of		--	--	25	9,140
Malaysia		546	265,000	3,650	2,010,000
Mexico		11	88,700	35	272,000
Netherlands		--	--	165	1,030,000
Turkey		--	--	29	10,600
Vietnam		--	--	100	80,000
Other [16 countries and (or) localities]		1	9,120	79	1,390,000
Total		562	374,000	4,820	7,650,000
Grand total		1,100	1,670,000	18,300	27,400,000

-- 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>Less than ½ unit.

<sup>5</sup>Presentation of monthly data is based on the January–October 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 OCTOBER 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–October <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	1,600	\$1,210	South Africa 999; \$769.	21,700	\$13,600	India 7,480; \$5,090.
Manganites, manganates, and other permanganates	2841.69.0090	--	--	XX	70	417	India 39; \$92.
Potassium permanganate	2841.61.0000	--	--	XX	758	1,680	India 697; \$1,540.
Sodium permanganate	2841.69.0010	218	463	India 146; \$309.	1,100	2,020	India 555; \$1,140.
Other sulfates, including manganese sulfate	2833.29.5100	5,850	4,580	Mexico 2,400; \$1,980.	61,500	47,200	Mexico 20,220; \$15,200.
<b>Exports:</b>							
Manganese dioxide	2820.10.0000	1,050	1,220	Canada 565; \$489.	7,940	9,260	Canada 5,050; \$3,670.
Manganese oxides other than dioxide	2820.90.0000	490	857	United Arab Emirates 116; \$279.	5,000	10,100	United Arab Emirates 1,660; \$2,770.
Manganites, manganates, and other permanganates	2841.69.0090	1	3	Canada 1; \$3.	147	435	Canada 144; \$309.
Potassium permanganate	2841.61.0000	300	835	Belgium 198; \$517.	2,840	8,240	Belgium 1,500; \$3,800.
Sodium permanganate	2841.69.0010	169	400	Belgium 132; \$316.	539	1,520	Belgium 343; \$793.
Other sulfates, including manganese sulfate	2833.29.9100	1,960	4,620	Canada 1,420; \$2,080.	16,700	38,100	Canada 9,990; \$9,640.

-- Zero. XX Not applicable.

<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.

Source: U.S. Census Bureau.