

# 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 DECEMBER 2020

On a gross-weight basis, U.S. imports of manganese ore in December 2020 were 47,600 metric tons (t), an increase from 37,300 t in November 2020 (fig. 1, table 5). Total imports of manganese ore during 2020 were 367,000 t, 15% less than those in 2019 (434,000 t).

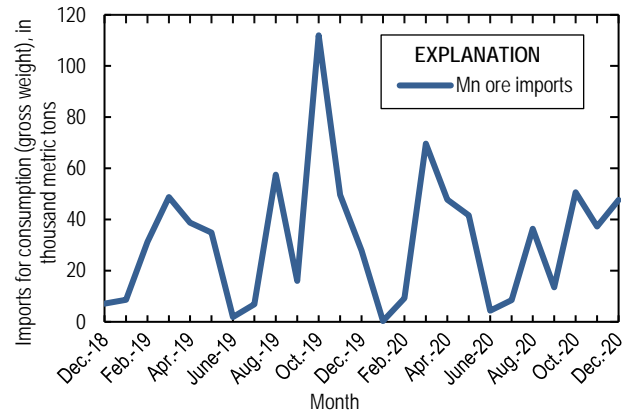


Figure 1. Monthly imports of manganese (Mn) ore from December 2018 through December 2020. Source: U.S. Census Bureau.

In December 2020, the average spot prices for manganese ore deliveries to China were \$3.81 per metric ton unit, 36%–38% grade, and \$4.08 per metric ton unit, 44% grade, essentially unchanged from November 2020 prices (fig. 2, table 1). Compared with the monthly average prices in December 2019,

the 36%–38% grade price was 4% more and the 44% grade price was 9% more.

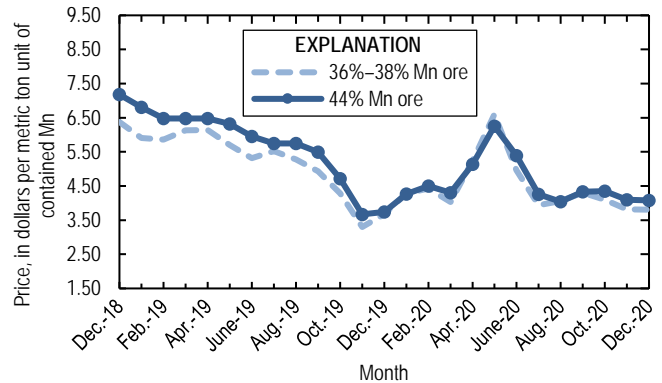


Figure 2. Average monthly spot prices for manganese (Mn) ore delivered to China from December 2018 through December 2020. Source: CRU Group.

*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/nmic/minerals-information-publication-list-services>.*

TABLE 1  
PRICES FOR MANGANESE FERROALLOYS, METAL, AND ORE IN DECEMBER 2020

		Low	Average	High
<b>Manganese ferroalloys:<sup>1</sup></b>				
High-carbon ferromanganese, 76% manganese	dollars per long ton of contained manganese	1,330.00	1,346.00	1,362.00
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	89.80	92.40	95.00
Silicomanganese, 65% manganese	do.	53.10	53.85	54.60
Manganese metal, 99.7% manganese flake <sup>2</sup>	cents per pound	91.00	109.45	120.00
<b>Manganese ore:<sup>3,4</sup></b>				
36%–38% manganese	dollars per metric ton unit contained manganese	3.72	3.81	3.86
44% manganese	do.	4.00	4.08	4.15

do. Ditto.

<sup>1</sup>S&P Global Platts; 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, manganese content)<sup>2</sup>

	Imports for consumption			Exports		
	Ore and dioxide	Ferroalloy and metal	Total	Ore	Ferroalloy and metal	Total
2019:						
December	14,000	33,200	47,200	10	600	610
January–December	244,000	533,000 <sup>r</sup>	776,000 <sup>r</sup>	505	15,300	15,800
2020:						
January	460	51,800	52,300	20	670	690
February	1,530	38,000	39,500	8	980	990
March	32,300	50,500	82,700	40	940	980
April	27,800	25,600	53,400	49	860	910
May	21,000	46,400	67,400	121	310	430
June	2,310	15,000	17,300	18	720	740
July	2,060	6,110	8,170	38	1,750	1,790
August	18,500	12,300	30,800	43	1,130	1,170
September	10,500	25,500	36,000	34	760	790 <sup>r</sup>
October	32,100	29,700	61,800	20	900	920
November	19,900	35,300	55,100	27	1,000	1,030
December	20,600	41,500	62,100	62	1,410	1,470
January–December	189,000	378,000	567,000	480	11,400	11,900

<sup>r</sup>Revised.

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

<sup>2</sup>As reported except as estimated from gross weights for imports of manganese dioxide and manganese metals and for exports of manganese ores and concentrates and manganese waste and scrap.

Source: U.S. Census Bureau.

TABLE 3  
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN DECEMBER 2020<sup>1,2</sup>

(Metric tons, unless otherwise specified)

Source	Gross weight	Mn content	Value	January–December <sup>3</sup>		
				Gross weight	Mn content	Value
Australia	8,800	5,780	\$8,650,000	65,100	43,000	\$63,200,000
Brazil	--	--	--	1,150	749	978,000
Georgia	15,600	11,500	14,700,000	82,400	59,800	88,600,000
India	--	--	--	49	29	53,500
Kazakhstan	--	--	--	24	16	20,700
Korea, Republic of	--	--	--	220	153	227,000
Malaysia	--	--	--	10,600	6,920	9,140,000
Mexico	2,850	1,880	2,580,000	15,300	10,100	14,000,000
Norway	3,210	1,950	3,830,000	17,200	8,840	20,300,000
Oman	--	--	--	1,390	912	1,320,000
Russia	8,410	1,450	7,850,000	11,300	2,660	10,700,000
Saudi Arabia	--	--	--	5,600	4,390	4,700,000
South Africa	7,800	5,040	7,020,000	58,500	36,500	54,800,000
Total	46,700	27,600	44,600,000	269,000	174,000	268,000,000

-- 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>May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 4  
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN DECEMBER 2020<sup>1</sup>

(Metric tons, unless otherwise specified)

Type and country or locality	HTS <sup>4</sup> code	Gross weight	Mn content	Value	January–December <sup>2, 3</sup>		
					Gross weight	Mn content	Value
Low carbon, less than 1% C:	7202.19.1000						
China		94	76	\$158,000	516	419	\$874,000
Germany		--	--	--	4	4	10,600
Iceland		--	--	--	45	36	75,800
Japan		24	19	33,100	758	608	1,120,000
Korea, Republic of		--	--	--	5,010	4,610	9,000,000
Mexico		--	--	--	318	253	461,000
Norway		4,200	3,430	5,690,000	28,600	23,100	40,400,000
South Africa		77	74	132,000	2,250	1,940	3,340,000
Total		4,390	3,600	6,010,000	37,500	31,000	55,300,000
Medium carbon, 1%–2% C:	7202.19.5000						
Australia		--	--	--	10,400	7,940	9,550,000
Brazil		--	--	--	540	430	497,000
India		--	--	--	301	241	419,000
Japan		199	160	242,000	298	240	362,000
Korea, Republic of		1,500	1,200	1,760,000	19,200	15,300	24,200,000
Mexico		--	--	--	1,220	931	1,900,000
Norway		1,000	817	1,130,000	4,700	3,800	5,590,000
South Africa		1,380	1,100	1,720,000	16,600	13,300	23,000,000
Total		4,080	3,280	4,850,000	53,200	42,200	65,500,000
High carbon, over 4% C:	7202.11.5000						
Australia		--	--	--	30,800	23,500	27,700,000
Brazil		126	94	112,000	1,980	1,450	1,670,000
France		--	--	--	748	571	857,000
India		--	--	--	2,290	1,730	2,030,000
Korea, Republic of		1,000	760	936,000	4,090	3,050	3,540,000
Malaysia		--	--	--	47,100	35,800	37,400,000
Norway		25	20	18,400	450	351	331,000
Russia		497	381	419,000	26,100	19,800	22,700,000
South Africa		11	7	17,900	18,500	13,900	17,900,000
Zambia		--	--	--	430	230	339,000
Other [4 countries and (or) localities]		--	--	--	135	98	181,000
Total		1,660	1,260	1,500,000	133,000	100,000	115,000,000
Grand total		10,100	8,140	12,400,000	223,000	174,000	235,000,000

-- Zero.

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

<sup>2</sup>Presentation of monthly data is based on the January–December (gross weight) quantities of the leading countries.

<sup>3</sup>May include revisions to previously published data.

<sup>4</sup>Harmonized Tariff Schedule of the United States.

Source: U.S. Census Bureau.

TABLE 5  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn)  
IN DECEMBER 2020<sup>1</sup>

(Metric tons, unless otherwise specified)

Type and country or locality	HTS <sup>3</sup> code	Gross weight	Mn content	Value	January–December <sup>2</sup>		
					Gross weight	Mn content	Value
More than 20%, but less than 47% manganese:	2602.00.0040						
Mexico		15,100	5,770	\$1,850,000	50,500	15,900	\$9,300,000
South Africa		22,400	9,170	3,770,000	76,700	30,900	11,800,000
Spain		--	--	--	20	9	7,420
Total		37,400	14,900	5,610,000	127,000	46,700	21,100,000
47% or more manganese:	2602.00.0060						
Belgium		--	--	--	18	9	21,300
Brazil		--	--	--	553	273	328,000
France		--	--	--	17	8	21,300
Gabon		--	--	--	217,000	123,000	56,900,000
Mexico		10,000	5,100	1,510,000	20,000	14,100	4,820,000
Morocco		--	--	--	1,200	762	511,000
South Africa		200	97	76,000	1,200	582	499,000
Ukraine		--	--	--	31	15	2,510,000
Total		10,200	5,200	1,590,000	240,000	139,000	65,600,000
Grand total		47,600	20,100	7,200,000	367,000	186,000	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 DECEMBER 2020<sup>1,2</sup>

(Metric tons, unless otherwise specified)

Country or locality	Gross weight	Value	January–December <sup>3</sup>	
			Gross weight	Value
Belgium	--	--	48	\$226,000
Brazil	18	\$20,100	157	198,000
Canada	--	--	5	20,700
China	--	--	1	6,480
Germany	--	--	14	75,100
Greece	165	374,000	413	955,000
India	--	--	47	86,000
Japan	530	1,100,000	4,230	9,440,000
Mexico	--	--	63	107,000
Morocco	25	42,500	274	465,000
Spain	20	33,900	202	343,000
Total	758	1,570,000	5,450	11,900,000

-- 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>May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 7  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL  
IN DECEMBER 2020<sup>1</sup>

(Metric tons, unless otherwise specified)

Type and country or locality	HTS <sup>3</sup> code	Gross weight	Value	January–December <sup>2</sup>	
				Gross weight	Value
Unwrought flake:	8111.00.4700				
China		200	\$281,000	2,380	\$3,980,000
Japan		(4)	252,000	2	2,150,000
Singapore		--	--	48	73,200
South Africa		670	1,190,000	4,810	8,890,000
Total		870	1,720,000	7,240	15,100,000
Unwrought powder:	8111.00.4910				
China		--	--	194	328,000
Germany		--	--	(4)	6,100
Mexico		--	--	86	317,000
South Africa		20	61,200	944	2,390,000
Total		20	61,200	1,220	3,040,000
Unwrought, other:	8111.00.4990				
Belgium		--	--	56	106,000
China		4,610	6,920,000	18,100	28,000,000
Germany		87	165,000	767	1,510,000
Luxembourg		--	--	306	526,000
Poland		(4)	6,150	(4)	12,300
South Africa		91	203,000	891	1,810,000
Spain		--	--	33	54,600
Total		4,780	7,300,000	20,200	32,000,000
Other manganese, wrought:	8111.00.6000				
China		--	--	486	936,000
Germany		22	305,000	166	2,260,000
Italy		(4)	2,220	(4)	2,220
Japan		--	--	(4)	25,000
Luxembourg		--	--	44	175,000
Mexico		9	35,900	325	816,000
Sweden		5	71,200	45	609,000
United Kingdom		--	--	(4)	4,730
Total		36	415,000	1,070	4,830,000
Metallic waste and scrap:	8111.00.3000				
Canada		106	31,000	555	161,000
Japan		--	--	(4)	6,850
Mexico		--	--	2	5,060
Total		106	31,000	557	173,000
Grand total		5,820	9,520,000	30,300	55,100,000

-- 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 DECEMBER 2020<sup>1</sup>

(Metric tons, unless otherwise specified)

Type and country or locality	HTS <sup>4</sup> code	Gross weight	Value	January–December <sup>2,3</sup>	
				Gross weight	Value
<b>Ore and concentrates with 20% or more manganese:</b>	<b>2602.00.0000</b>				
Belgium		20	\$57,100	325	\$507,000
Canada		21	24,500	298	292,000
India		--	--	40	34,300
Ireland		--	--	16	31,800
Japan		--	--	40	70,600
Korea, Republic of		--	--	17	15,900
Mexico		42	25,800	73	57,900
Netherlands		--	--	64	241,000
United Arab Emirates		40	40,900	40	40,900
United Kingdom		--	--	40	25,300
Other [1 country and (or) locality]		--	--	6	27,800
<b>Total</b>		<b>123</b>	<b>148,000</b>	<b>957</b>	<b>1,340,000</b>
<b>Ferromanganese:</b>	<b>7202.19.0000</b>				
<b>2% or less carbon:</b>					
Bangladesh		18	35,000	18	35,000
Canada		33	46,700	1,110	1,540,000
Dominican Republic		--	--	10	24,900
Israel		--	--	40	75,400
Mexico		--	--	2	4,210
South Africa		--	--	8	14,400
<b>Total</b>		<b>52</b>	<b>81,700</b>	<b>1,180</b>	<b>1,700,000</b>
<b>More than 2% carbon:</b>	<b>7202.11.0000</b>				
Canada		876	1,030,000	3,530	3,920,000
Costa Rica		--	--	3	12,300
India		--	--	59	78,000
<b>Total</b>		<b>876</b>	<b>1,030,000</b>	<b>3,590</b>	<b>4,010,000</b>
<b>Ferrosilicon manganese:</b>	<b>7202.30.0000</b>				
Canada		611	715,000	2,060	2,470,000
Mexico		--	--	78	146,000
Turkey		--	--	1	3,360
<b>Total</b>		<b>611</b>	<b>715,000</b>	<b>2,140</b>	<b>2,620,000</b>
<b>Metal, including alloys and waste and scrap:<sup>5</sup></b>	<b>8111.00.0000</b>				
Australia		1	29,100	50	84,000
Brazil		--	--	17	881,000
Canada		--	--	51	205,000
France		--	--	18	6,530
Germany		--	--	76	127,000
India		--	--	594	226,000
Japan		21	7,700	113	312,000
Malaysia		255	87,900	5,060	2,260,000
South Africa		--	--	39	197,000
Turkey		--	--	191	70,600
Other [12 countries and (or) localities]		1	34,900	68	794,000
<b>Total</b>		<b>278</b>	<b>160,000</b>	<b>6,280</b>	<b>5,160,000</b>
<b>Grand total</b>		<b>1,940</b>	<b>2,130,000</b>	<b>14,200</b>	<b>14,800,000</b>

-- Zero.

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

<sup>2</sup>Presentation of monthly data is based on the January–December quantities (gross weight) of the leading countries.

<sup>3</sup>May include revisions to previously published data.

<sup>4</sup>Harmonized Tariff Schedule of the United States.

<sup>5</sup>Includes manganese-aluminum, other alloys, and waste and scrap.

Source: U.S. Census Bureau.

TABLE 9  
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS  
IN DECEMBER 2020<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–December <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	1,390	\$1,050	Korea, Republic of 670; \$544.	18,400	\$11,400	South Africa 8,840; \$4,000.
Manganites, manganates, and other permanganates	2841.69.0090	(4)	9	China (4); \$9.	110	575	China 38; \$77.
Potassium permanganate	2841.61.0000	19	39	India 19; \$39.	728	1,790	India 709; \$1,680.
Sodium permanganate	2841.69.0010	226	396	China 207; \$356.	1,330	2,350	China 1,260; \$2,190.
Other sulfates, including manganese sulfate	2833.29.5100	6,730	5,670	Mexico 2,420; \$1,660.	78,900	56,400	Mexico 25,100; \$17,400.
<b>Exports:</b>							
Manganese dioxide	2820.10.0000	776	893	Canada 551; \$386.	6,860	8,510	Canada 4,410; \$3,500.
Manganese oxides other than dioxide	2820.90.0000	468	832	United Arab Emirates 152; \$217.	5,230	10,200	United Arab Emirates 1,220; \$1,770.
Manganites, manganates, and other permanganates	2841.69.0090	13	26	Canada 13; \$26.	182	382	Canada 142; \$282.
Potassium permanganate	2841.61.0000	302	849	Belgium 163; \$396.	3,070	8,540	Belgium 1,330; \$3,190.
Sodium permanganate	2841.69.0010	10	32	Korea, Republic of 10; \$32.	438	1,260	Belgium 305; \$646.
Other sulfates, including manganese sulfate	2833.29.9100	1,630	2,800	Canada 979; \$578.	21,200	34,800	Canada 14,400; \$10,400.

<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.