

# Mineral Industry Surveys

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#### **MANGANESE IN FEBRUARY 2023**

On a gross-weight basis, U.S. imports of manganese ore in February 2023 decreased considerably to 1,360 metric tons (t) from 31,600 t in January 2023 (fig. 1, table 5). In February 2023, South Africa was the sole source of >20% – <47% grade manganese ore and the leading source of >47% grade manganese ore. Total imports of manganese ore for the first two months of 2023 were 70% less than that during the same period in 2022.

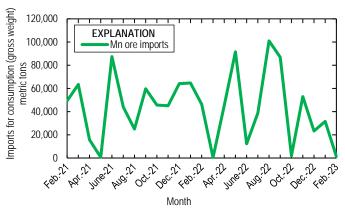


Figure 1. Monthly imports of manganese (Mn) ore from February 2021 through February 2023. Source: U.S. Census Bureau.

#### Prices

In February 2023, the average spot prices for manganese ore deliveries to China were \$4.55 per metric ton unit, 36%–38% grade, and \$5.74 per metric ton unit, 44% grade, 7% more and 20% more, respectively, than the January 2023 prices (fig. 2, table 1). Compared with the monthly average prices in February 2022, the 36%–38%-grade price was essentially unchanged and the 44%-grade price was 3% more.

#### **Industry News**

Prices for manganese ore rose as uncertainty in high-grade ore supply continued (CRU International Ltd., 2023b). The ore shipments from Gabon were limited due to continued repair

work for Trans-Gabon Railway (TGR) after the landslide that damaged railways in late December. In 2023, trains restarted carrying manganese ore with ships expected to reach China late March (CRU International Ltd., 2023a).

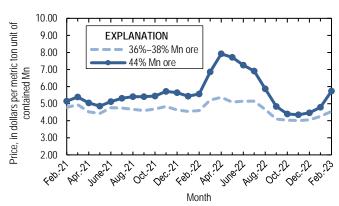


Figure 2. Average monthly spot prices for manganese (Mn) ore delivered to China from February 2021 through February 2023. Source: CRU Group.

#### **References Cited**

CRU Group, 2023a, Manganese ore prices edge down as Gabonese shipments resume: CRU Group, March 2. (Accessed March 24, 2023, via http://www.crugroup.com/.)

CRU Group, 2023b, Port prices for manganese ore rise on continued supply uncertainty: CRU Group, February 3. (Accessed March 12, 2023, via http://www.crugroup.com/.)

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

	Low	Average	High
		-	
dollars per long ton of contained manganese	1,400.00	1,437.50	1,475.00
cents per pound of contained manganese	142.00	144.00	146.00
do.	75.00	77.50	80.00
cents per pound	200.00	212.50	225.00
dollars per metric ton unit contained manganese	4.30	4.55	4.65
do.	4.70	5.74	6.30
	cents per pound of contained manganese do. cents per pound dollars per metric ton unit contained manganese	dollars per long ton of contained manganese  cents per pound of contained manganese  do. 75.00  cents per pound 200.00  dollars per metric ton unit contained manganese 4.30	dollars per long ton of contained manganese         1,400.00         1,437.50           cents per pound of contained manganese         142.00         144.00           do.         75.00         77.50           cents per pound         200.00         212.50           dollars per metric ton unit contained manganese         4.30         4.55

do. Ditto.

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

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

<sup>&</sup>lt;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%.

 $\label{eq:table 2} \textbf{TABLE 2}$  SELECTED U.S. FOREIGN TRADE IN MANGANESE  $^1$ 

#### (Metric tons)

	Imp	orts for consumpt	ion	Exports				
	Ore and	Ore and Ferroalloy			Ferroalloy			
	dioxide	and metal	Total	Ore	and metal	Total		
2022:								
February	46,600	93,900	140,000	86	407	493		
January–February	113,000	142,000	255,000	126	598	724		
2023:								
January	31,700	85,100	117,000	28	551	579		
February	1,500	23,800	25,300		824	824		
January–February	33,200	109,000	142,000	28	1,370	1,400		

<sup>--</sup> Zero.

 $<sup>^{1}\</sup>mathrm{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

 ${\it TABLE~3}$  U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN FEBRUARY 2023  $^{1,\,2}$ 

(Metric tons, unless otherwise specified)

					January–February <sup>3</sup>	3
	Gross	Mn	·	Gross	Mn	_
Country or locality	weight	content	Value	weight	content	Value
Australia				9,120	5,990	\$17,200,000
China				21	13	30,900
Georgia	148	100	\$218,000	498	352	652,000
India				550	325	911,000
Malaysia	983	670	1,610,000	5,740	3,810	9,480,000
Mexico	3,350	2,160	4,170,000	6,760	4,360	8,490,000
Norway	49	30	187,000	117	72	469,000
South Africa				18,200	11,800	20,000,000
Total	4,530	2,960	6,180,000	41,000	26,700	57,200,000

<sup>--</sup> Zero.

 $<sup>^{1}\</sup>mathrm{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

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

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

 ${\it TABLE~4} \\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~FERROMANGANESE~IN~FEBRUARY~2023}^1$ 

(Metric tons, unless otherwise specified)

						January-Febru	ary <sup>2</sup>
Type and country		Gross	Mn		Gross	Mn	
or locality	HTS <sup>3</sup> code	weight	content	Value	weight	content	Value
Low carbon, less than 1% C:	7202.19.1000						
Canada					13	11	\$50,200
Japan		40	32	\$96,600	120	97	290,000
Mexico		659	535	1,180,000	914	741	1,690,000
Norway		4,420	3,600	8,980,000	4,760	3,870	9,840,000
South Africa		1,070	907	2,760,000	1,430	1,220	3,650,000
Turkey					1	1	3,620
Vietnam	<del></del>	40	38	93,600	80	75	187,000
Total	<del></del>	6,230	5,110	13,100,000	7,320	6,010	15,700,000
Medium carbon, 1%–2% C:	7202.19.5000						
India					300	240	668,000
Malaysia					2,000	1,460	2,730,000
Mexico		115	90	313,000	285	220	717,000
Norway		4,500	3,660	7,250,000	4,900	3,990	7,970,000
South Africa					3,250	2,580	8,780,000
Total	<del></del>	4,620	3,750	7,560,000	10,700	8,480	20,900,000
Medium carbon, 2%–4% C, China:	7202.11.1000				27	21	27,700
High carbon, over 4% C:	7202.11.5000						
Australia					5,210	3,990	5,500,000
Brazil	<del></del>	67	50	106,000	83	61	149,000
India	<del></del>	302	230	441,000	10,000	7,570	10,900,000
Malaysia	<del></del>				14,300	10,800	24,400,000
South Africa	<del></del>	650	496	1,130,000	4,550	3,450	9,090,000
Total	<u>—</u>	1,020	776	1,680,000	34,200	25,900	50,100,000
Grand total	<del></del>	11,900	9,630	22,300,000	52,300	40,400	86,700,000

<sup>--</sup> Zero.

 $<sup>^{1}\</sup>mbox{Data}$  rounded to no more than three significant digits; may not add to totals shown.

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

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

TABLE 5 U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn) IN FEBRUARY 2023  $^{\rm I}$ 

(Metric tons, unless otherwise specified)

					J	January–February <sup>2</sup>		
		Gross	Mn		Gross	Mn		
Type and country or locality	HTS <sup>3</sup> code	weight	content	Value	weight	content	Value	
More than 20%, but less than 47% manganese:	2602.00.0040							
Mexico	_				2,720	1,010	\$522,000	
South Africa	_	510	238	\$155,000	810	377	241,000	
Total	_	510	238	155,000	3,530	1,390	763,000	
47% or more manganese:	2602.00.0060	'						
Brazil	_	54	26	93,400	108	52	187,000	
Gabon	_				28,500	18,800	6,020,000	
South Africa	_	800	400	201,000	800	400	201,000	
Total	_	854	426	294,000	29,400	19,200	6,410,000	
Grand total	_	1,360	663	449,000	32,900	20,600	7,180,000	

<sup>--</sup> Zero.

 $<sup>^{1}\</sup>mbox{Data}$  rounded to no more than three significant digits; may not add to totals shown.

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

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

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

(Metric tons, unless otherwise specified)

			January–February <sup>3</sup>			
	Gross		Gross			
Country or locality	weight	Value	weight	Value		
Belgium	14	\$24,000	14	\$24,000		
Brazil	21	36,100	75	96,300		
Colombia	18	41,100	18	41,100		
Indonesia	18	45,500	18	45,500		
Japan	37	91,100	55	137,000		
Spain		49,800	58	98,400		
Total	137	288,000	238	442,000		

<sup>--</sup> Zero

 $<sup>^{1}\</sup>mbox{Data}$  rounded to no more than three significant digits; may not add to totals shown.

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

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

## ${\small \mbox{TABLE 7}} \\ {\small \mbox{U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL}} \\ {\small \mbox{IN FEBRUARY 2023}}^{1}$

(Metric tons, unless otherwise specified)

				January–Fo	ebruary <sup>2</sup>
		Gross	_	Gross	
Type and country or locality	HTS <sup>3</sup> code	weight	Value	weight	Value
Unwrought flake:	8111.00.4700				
China		1,010	\$2,180,000	3,210	\$7,510,000
Indonesia				300	684,000
Japan		9	651,000	9	1,330,000
Mexico		25	151,000	25	151,000
South Africa		178	858,000	440	2,110,000
Total		1,220	3,840,000	3,980	11,800,000
Unwrought powder:	8111.00.4910				
China		20	50,000	20	50,000
South Africa		175	954,000	256	1,480,000
Total		195	1,000,000	276	1,530,000
Unwrought, other:	8111.00.4990				
Canada				40	133,000
China		5,700	13,100,000	10,800	25,100,000
Germany		27	60,900	131	295,000
Indonesia				27	57,100
South Africa		240	899,000	342	1,580,000
Total		5,960	14,100,000	11,300	27,100,000
Other manganese, wrought:	8111.00.6000				
China		(4)	14,200	(4)	14,200
Mexico		4	77,800	8	99,200
Sweden		13	233,000	17	297,000
Total		17	325,000	25	411,000
Metallic waste and scrap, Canada	8111.00.3000			9	30,900
Grand total		7,400	19,300,000	15,600	40,900,000

<sup>--</sup> Zero

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

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

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

<sup>&</sup>lt;sup>4</sup>Less than ½ unit.

## TABLE 8 U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE, SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OR LOCALITY OF DESTINATION IN FEBRUARY $2023^1$

(Metric tons, unless otherwise specified)

				January–Feb	oruary <sup>2</sup>
		Gross	_	Gross	-
Type and country or locality	Schedule B code	weight	Value	weight	Value
Ore and concentrates with 20% or more manganese:	2602.00.0000				
Guyana	_			4	\$23,500
Ireland	<del></del>			2	9,900
Korea, Republic of	_			22	131,000
Total	_			28	164,000
Ferromanganese:	7202.19.0000				
2% or less carbon:	<del></del>				
Canada	<del></del>	58	156,000	160	493,000
United Kingdom	<del></del>	4	7,270	4	7,270
Total	<del></del>	62	163,000	164	500,000
More than 2% carbon:	7202.11.0000				
Canada	<del></del>	19	53,800	118	306,000
Mexico		2	8,720	2	8,720
Total		21	62,500	120	315,000
Ferrosilicon manganese, Canada	7202.30.0000	289	459,000	527	856,000
Metal, including alloys and waste and scrap: <sup>3,4</sup>	8111.00.0000				
Canada	<del></del>	29	205,000	29	205,000
China		11	263,000	19	500,000
Costa Rica	<del></del>	27	10,000	27	19,500
France		4	47,900	5	92,400
India	<del></del>	51	62,500	51	62,500
Japan		1	31,900	25	297,000
Malaysia		336	236,000	476	332,000
Mexico		6	38,400	42	163,000
Norway		3	19,300	3	19,300
Peru	<del></del>	2	22,200	2	22,200
Other [5 countries and (or) localities]	_	2	105,000	3	157,000
Total	<del></del>	472	1,040,000	684	1,870,000
Grand total	<del></del>	844	1,730,000	1,520	3,710,000

<sup>--</sup> Zero

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

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

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

<sup>&</sup>lt;sup>4</sup>Includes manganese-aluminum, other alloys, and waste and scrap.

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

·	·			·		January–February <sup>2</sup>		
				Principal sources and destinations:			Principal sources and destinations:	
		Gross weight	Value	gross weight (metric tons);	Gross weight	Value	gross weight (metric tons);	
Compound	HTS <sup>3</sup> or Schedule B code <sup>4</sup>	(metric tons)	(thousands)	value (thousands)	(metric tons)	(thousands)	value (thousands)	
imports for consumption:								
Manganese dioxide	2820.10.0000	137	\$288	Japan 37; \$91.	238	\$442	Brazil 75; \$96.	
Manganese oxides other than dioxide	2820.90.0000	1,490	987	Gabon 463; \$286.	2,670	1,630	South Africa 725; \$198.	
Potassium permanganate	2841.61.0000			XX.	17	28	Malaysia (all).	
Sodium permanganate	2841.69.0010	130	363	India (all).	174	478	India (all).	
Other sulfates, including manganese sulfate	2833.29.5100	4,020	4,600	Mexico 1,950; \$1,720.	7,240	8,140	Mexico 3,750; \$3,510.	
Exports:								
Manganese dioxide	2820.10.0000	558	708	Canada 392; \$306.	1,090	1,320	Canada 763; \$608.	
Manganese oxides other than dioxide	2820.90.0000	349	923	Mexico 85; \$267.	851	1,970	United Arab Emirates 190; \$272.	
Manganites, manganates, and other permanganates	2841.69.0090	1	37	Mexico (all).	3	85	Canada 2; \$3.	
Potassium permanganate	2841.61.0000	30	158	Brazil 18; \$65.	145	576	Belgium 55; \$174.	
Sodium permanganate	2841.69.0010	(5)	18	Brazil (5); \$4.	(5)	47	Brazil (5); \$4.	
Other sulfates, including manganese sulfate	2833.29.9100	1,290	2,150	Canada 843; \$863.	2,460	4,950	Canada 1,570; \$1,730.	

XX Not applicable. -- Zero.

<sup>&</sup>lt;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>&</sup>lt;sup>4</sup>Imports for consumption are represented by HTS codes. Exports are represented by Schedule B codes.

<sup>&</sup>lt;sup>5</sup>Less than ½ unit.