

# Mineral Industry Surveys

---

For information, contact:

Thomas S. Jones, Manganese Commodity Specialist  
U.S. Geological Survey  
989 National Center  
Reston, VA 20192  
Telephone: (703) 648-4973, Fax: (703) 648-7757  
E-mail: [tjones@usgs.gov](mailto:tjones@usgs.gov)

Jesse J. Inestroza (Data)  
Telephone: (703) 648-7968  
Fax: (703) 648-7975

MINES FaxBack: (703) 648-4999  
Internet: <http://minerals.usgs.gov/minerals>

## MANGANESE IN NOVEMBER 2000

In November, reported consumption of manganese ore containing 35% or more manganese, exclusive of that at iron and steel plants, was estimated as 31,600 metric tons (t), which was a decrease of about 16% compared with that for the previous month, according to the U.S. Geological Survey. November's consumption was the lowest of the year so far, and brought the year-to-date total to 411,000 t. The figures for November increase to 34,000 t and 446,000 t when estimates for annual respondents are added on the basis of 1999 data. Corresponding industry stocks of ore at the end of the month were 240,000 t, which includes an estimate for annual respondents on the basis of 1999 data. This was a decrease of about 6% compared with the corresponding figure for stocks at the end of October.

Data for domestic consumption and stocks of manganese ferroalloys and metal in 2000 will appear in a subsequent monthly report.

Foreign trade data for November will appear in a subsequent report. The data for October tabulated in this report indicate that the quantity of manganese dioxide imported through October now exceeds that for all of 1999. The same could be said for low-carbon ferromanganese provided that imports of over 5,000 t from Brazil can be verified. Trade volumes for metal were comparatively small; total imports were the least since August 1999 and exports the least in at least 17 years. **Note:** For early

availability, the trade data appearing in this report were placed on MINES FaxBack in preliminary form as of December 29. The FaxBack document number for the preliminary November trade data will be 420211.

The Defense National Stockpile Center of the Defense Logistics Agency, U.S. Department of Defense, reported no cash disposals of manganese materials from the National Defense Stockpile in November. The most recent month in which there also were no disposals was August 2000.

Toxicological Profile for Manganese (Sciences International, Inc., 2000) is an update document that emphasizes the health effects of manganese and related toxicological information. This document, prepared for the U.S. Department of Health and Human Services as an update of the July 1992 Toxicological Profile for manganese, includes a nontechnical public health statement. The latest profile is available from the National Technical Information Service (NTIS) in Virginia, whose telephone number is (800) 553-6847. The NTIS order number is PB2000-108025.

### Reference Cited

Sciences International, Inc., 2000, Toxicological profile for manganese: Atlanta, GA, Agency for Toxic Substances and Disease Registry, September, 465 p., 3 appendices.

TABLE 1  
SELECTED U.S. FOREIGN TRADE IN MANGANESE 1/

(Metric tons, manganese content) 2/

	Imports for consumption			Exports		
	Ore and dioxide	Ferroalloy and metal	Total	Ore	Ferroalloy and metal	Total
1999: 3/						
October	28,400	46,100	74,500	78	878	956
January-October	214,000	384,000	598,000	1,020	12,100	13,200
2000:						
January	17,200 4/	27,600 4/	44,800	144	926	1,070
February	25,900 4/	38,100	64,000	202	1,380	1,580
March	17,700 4/	56,300 4/	74,000	383 4/	1,000	1,390
April	19,500 4/	38,600 4/	58,100	1,140 4/	937	2,080
May	4,130 4/	42,700	46,800	310 4/	541	851
June	21,500 4/	68,700 4/	90,300	398	484	883
July	60,600 4/	52,400	113,000	228	822	1,050
August	21,200 4/	44,700	65,800	438	652	1,090
September	25,100 4/	53,500 4/	78,600	168	1,040	1,210
October	4,410 4/	28,200 4/	32,600	2,240 4/	625	2,860
Total	217,000	451,000	668,000	5,650	8,410	14,100

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

2/ As reported except as estimated for imports of manganese dioxide and manganese waste and scrap and for exports from gross weights.

3/ Data may include revisions by the U.S. Census Bureau.

4/ All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 2  
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN OCTOBER 2000 1/

(Metric tons, unless otherwise specified)

Source	Gross weight	Mn content	Customs value	Year to date		
				Gross weight	Mn content	Customs value
Argentina	--	--	--	40	18	\$35,200
Australia	2,910	1,940	\$1,270,000	43,300	37,500	21,000,000
Brazil	--	--	--	15	12	20,400
Bulgaria	--	--	--	2,450	1,590	1,030,000
Canada	73 2/	69 2/	18,000 2/	149	120	36,600
France	--	--	--	1,350	918	636,000
Georgia	--	--	--	2,990	2,170	1,520,000
India	12,300	7,940	5,390,000	60,500	39,300	26,200,000
Kazakhstan	--	--	--	53,900	36,500	23,900,000
Korea, Republic of	--	--	--	2,800	1,850	1,240,000
Mexico	--	--	--	42,200	26,400	19,700,000
Norway	--	--	--	2,400	1,460	1,620,000
Romania	5,600	3,720	2,340,000	9,630	6,360	4,170,000
South Africa	--	--	--	80,800	53,000	37,500,000
United Kingdom 2/	--	--	--	3,400	2,230	1,610,000
Venezuela	2,700	1,770	983,000	22,800	15,200	10,100,000
Total	23,600	15,400	10,000,000	329,000	225,000	150,000,000
Total, general imports	23,600	15,400	10,000,000	329,000	225,000	150,000,000

-- Zero.

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

2/ All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 3  
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN OCTOBER 2000 1/

(Metric tons)

Source	Gross weight	Mn content	Customs value	Year to date p/ 2/		
				Gross weight	Mn content	Customs value
<b>Low carbon:</b>						
Brazil	5,410 3/	4,330 3/	\$2,270,000 3/	6,410	5,140	\$2,920,000
China	333	299	333,000	1,410	1,280	1,490,000
Italy	320	266	269,000	5,520	4,700	5,390,000
Japan	113	95	188,000	4,570	3,840	3,870,000
Mexico	--	--	--	947	765	832,000
Norway	--	--	--	30	24	22,800
South Africa	420	392	605,000	1,850	1,730	2,870,000
Ukraine	--	--	--	240	228	275,000
Total, low carbon	6,600	5,380	3,670,000	21,000	17,700	17,700,000
Total, general imports of low carbon	6,600	5,380	3,670,000	21,000	17,700	17,700,000
<b>Medium carbon, 1%-2% C:</b>						
Brazil	--	--	--	108	85	76,800
China	--	--	--	4,720	3,790	2,880,000
France	--	--	--	60	48	37,400
Germany	--	--	--	80	65	52,800
Japan	--	--	--	6,250	5,140	4,100,000
Korea, Republic of	--	--	--	5,700	4,560	3,260,000
Mexico	39	29	32,200	18,000	14,500	11,900,000
Norway	--	--	--	9,260	7,530	5,570,000
South Africa	1,300	1,040	906,000	21,900	17,700	13,500,000
Total, m.c., 1%-2% C	1,340	1,070	938,000	66,100	53,400	41,400,000
Total, general imports of m.c., 1%-2% C	1,340	1,070	938,000	66,100	53,400	41,400,000
<b>Medium carbon, 2%-4% C:</b>						
Brazil	--	--	--	1	(4/)	2,490
South Africa	--	--	--	30	24	16,800
Total, m.c., 2%-4% C	--	--	--	31	24	19,300
Total, general imports of m.c., 2%-4% C	--	--	--	31	24	19,300
<b>High carbon:</b>						
Australia	1,010	777	430,000	27,300	20,400	10,400,000
Brazil	--	--	--	8,310	6,410	3,370,000
Canada	--	--	--	36	28	26,200
France	--	--	--	39,400	31,200	17,200,000
Mexico	--	--	--	1,400	1,100	625,000
South Africa	5,970	4,570	2,140,000	106,000	82,300	40,100,000
Total, high carbon	6,980	5,350	2,570,000	183,000	141,000	71,700,000
Total, general imports of high carbon	6,980	5,350	2,570,000	183,000	141,000	71,700,000
Grand total	14,900	11,800	7,170,000	270,000	213,000	131,000,000
Grand total, general imports	14,900	11,800	7,170,000	270,000	213,000	131,000,000

p/ Preliminary. -- Zero.

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

2/ May include revisions to previous months' data.

3/ All or part of these data have been referred to the U.S. Census Bureau for verification.

4/ Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 4  
U.S. IMPORTS OF MANGANESE ORE (20% OR MORE Mn) IN OCTOBER 2000 1/ 2/

(Metric tons)

Source	20% - 47% Mn		47% or more Mn		Total	
	Gross weight	Mn content	Gross weight	Mn content	Gross weight	Mn content
Gabon	--	--	3,600	1,870	3,600	1,870
India	20 3/	124 3/	--	--	20	124
Mexico	185	83	--	--	185	83
Morocco	--	--	20	11	20	11
Total	205	206	3,620	1,880	3,830	2,090
Year to date:						
Australia	--	--	23,700	12,300	23,700	12,300
Belgium	18	6	--	--	18	6
Brazil	7,030	3,250	--	--	7,030	3,250
Gabon	36,500	15,500	291,000	155,000	328,000	171,000
India	144	917	--	--	144	917
Mexico	6,760	3,600	--	--	6,760	3,600
Morocco	--	--	40	21	40	21
Total	50,500	23,200	315,000	168,000	366,000	191,000

-- Zero.

1/ Quantities for general imports and imports for consumption are identical.

2/ Data are rounded to no more than three significant digits; may not add to totals shown.

3/ All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 5  
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE AND MANGANESE METAL IN OCTOBER 2000 1/

(Metric tons, gross weight, unless otherwise specified)

Source	Manganese dioxide				Manganese metal			
	Year to date		Year to date		Unwrought		Other	
	Quantity	Customs value	Quantity	Customs value	Quantity	Year to date	Quantity	Year to date
Australia	1,690	\$2,400,000	22,900	\$32,900,000	--	--	--	--
Belgium	73	104,000	683	1,110,000	--	--	--	--
Brazil	--	--	29	31,500	--	--	--	--
Canada	--	--	--	--	--	--	--	12
China	34	35,300	308	313,000	--	3,250	--	92
France	--	--	--	--	--	--	3	83
Germany	2	10,600	86	448,000	231	1,360	--	35
Ghana	--	--	3	4,530	--	--	--	--
Greece	146	193,000	1,290	1,670,000	--	--	--	--
Hong Kong	--	--	131	234,000	--	--	--	--
India	--	--	--	--	--	--	--	41
Ireland	703	1,020,000	7,970	10,900,000	--	--	--	--
Italy	--	--	--	--	--	--	--	1
Japan	40	57,900	41	61,800	--	--	--	5
Mexico	--	--	--	--	--	--	--	20
Netherlands	--	--	40	53,800	--	106	5	78
Peru	--	--	--	--	--	--	--	4
South Africa	1,180	1,660,000	10,400	14,600,000	483	7,420	--	--
Spain	--	--	--	--	38	38	--	--
Switzerland	--	--	79	80,200	--	--	--	--
Taiwan	--	--	--	--	--	--	--	18
Ukraine	--	--	--	--	--	20	129	129
United Kingdom	--	--	117	174,000	76	608	--	3
Venezuela	--	--	--	--	--	--	--	36
Total	3,870	5,480,000	44,000	62,600,000	828	12,800	137	556
Total, general imports	3,870	5,480,000	44,100	62,700,000	828	13,300	137	556

-- Zero.

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

Note: Imports for consumption of metallic manganese waste and scrap totaled 45 tons, all of which was from Canada, to give a year-to-date total of 245 tons.

Source: U.S. Census Bureau.

TABLE 6  
U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE,  
SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN 2000 1/

(Metric tons, gross weight)

	Manganese ore		Ferromanganese, 2% or less C		Silicomanganese		Manganese metal 2/	
	October	Year to date	October	Year to date	October	Year to date	October	Year to date
Australia	--	172	--	--	--	--	--	--
Austria	--	--	--	--	--	--	--	39
Belgium	--	--	--	--	--	--	--	39
Brazil	--	67	--	--	--	4	--	--
Canada	334	3,620	127	4,230	81	1,210	19	633
Chile	--	--	--	--	--	--	--	4
Colombia	--	--	--	--	--	--	--	8
Czech Republic	--	16	--	--	--	--	--	--
Egypt	--	5	--	--	--	--	--	--
Finland	--	--	--	--	--	--	--	67
France	--	82	--	--	--	4	--	5
Germany	95	1,520	--	--	--	--	--	--
Hong Kong	--	54	--	--	--	--	--	3
Italy	50	350	--	--	--	--	--	28
Japan	--	70	--	--	--	--	57	593
Korea, Republic of	--	8	--	--	--	--	1	13
Mexico	--	1,080	--	136	33	365	(3/)	171
Netherlands	--	24	--	--	5	13	--	55
Norway	194	333	--	--	--	--	--	--
Panama	--	--	--	18	--	--	--	--
Peru	--	--	--	--	--	--	--	1
Singapore	--	24	--	--	--	--	--	--
Sweden	--	--	--	--	--	--	19	19
Switzerland	--	52	--	--	--	--	--	--
Taiwan	--	11	--	--	--	--	--	48
United Kingdom	3,800 4/	3,800	--	--	--	--	--	17
Venezuela	--	17	--	--	--	--	--	--
Total	4,470	11,300	127	4,390	119	1,600	96	1,740

-- Zero.

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

2/ Includes manganese-aluminum, some other alloys, and waste and scrap.

3/ Less than 1/2 unit.

4/ All or part of these data have been referred to the U.S. Census Bureau for verification.

Note: Exports of ferromanganese with more than 2% carbon totaled 443 tons, all of which went to Canada, to give a year-to-date total of 2,720 tons.

Source: U.S. Census Bureau.

TABLE 7  
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN OCTOBER 2000, BY CLASS 1/

Class	Gross weight (metric tons)	Value 2/ (thousands)	Principal sources and destinations: gross weight (metric tons); value 2/ (thousands)	Year to date		
				Gross weight (metric tons)	Value 2/ (thousands)	Principal sources and destinations: gross weight (metric tons); value 2/ (thousands)
<b>Imports for consumption:</b>						
Manganese oxides other than dioxide	94	\$105	Mexico 60; \$19	1,210	\$1,650	Mexico 545; \$175
Sulfates, basket category, including manganese sulfate	5,990	2,620	Mexico 2,580; \$1,140	34,400	18,600	Mexico 15,400; \$7,640
Potassium permanganate	81	160	Czech Republic 63; \$125	1,270	2,430	Czech Republic 646; \$1,250
Manganites, manganates, and other permanganates	17	22	China 15; \$15	53	282	Germany 36; \$257
<b>Exports:</b>						
Manganese dioxide	269	580	Belgium 95; \$319	2,840	3,950	Canada 1,420; \$639
Manganese oxides other than dioxide	457	389	Canada 245; \$94	7,110	8,490	Canada 2,870; \$1,130
Sulfates, basket category, including manganese sulfate	1,800	691	Canada 1,670; \$423	17,200	8,770	Canada 14,500; \$4,250
Potassium permanganate	93	203	Germany 30; \$52	1,260	2,510	Germany 239; \$465
Manganites, manganates, and other permanganates	45	309	Japan 37; \$256	246	1,370	Taiwan 66; \$468

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

2/ For imports, Customs value; for exports, f.a.s. value.

Source: U.S. Census Bureau.