

Mineral Industry Surveys

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MANGANESE IN DECEMBER 2000

In December, reported consumption of manganese ore containing 35% or more manganese, exclusive of that at iron and steel plants, was 30,400 metric tons (t), which was a decrease of about 4% compared with that for the previous month, according to the U.S. Geological Survey. December's consumption was the lowest of the year, and produced a year-to-date total of 441,000 t that was only 4,000 t less than the comparable figure for 1999. The figures for December increase to 32,800 t and 479,000 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 230,000 t, which includes an estimate for annual respondents on the basis of 1999 data. This was a decrease of about 4% compared with the corresponding figure for stocks at the end of November, but still about 20% greater than the corresponding figure as estimated for yearend 1999.

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

Foreign trade data for December will appear in a subsequent report. The data for November tabulated in this report indicate that the quantity of manganese metal, unwrought, imported through November now exceeds that for all of 1999. **Note:** For early availability, the trade data appearing in this report were placed on MINES FaxBack in preliminary form as of January 29. The FaxBack document number for the preliminary December trade data will be 420212.

Effective upon publication of Presidential Proclamation 7388 on December 21, the Generalized System of Preferences (GSP) Program was modified so as to grant duty-free status to certain products from sub-Saharan African countries. High-carbon ferromanganese was among the products to which this form of GSP treatment now applied (President of the United States of America, 2000). Electrolytic manganese metal also had been a candidate for GSP treatment, but it was not included (Ryan's Notes, 2000).

The Defense National Stockpile Center (DNSC) of the Defense Logistics Agency, U.S. Department of Defense, reported no cash disposals of manganese materials from the National Defense

Stockpile in December. This was the second consecutive month in which there were no disposals. Cumulative disposals of manganese Government stockpile excesses reported by the DNSC in 2000 were, in tons, 37,987 for stockpile-grade metallurgical-grade ore, 5,988 for natural battery-grade ore, 6,565 for chemical-grade ore, 90,719 for high-carbon ferromanganese, and 146 for electrolytic metal.

In Gabon, Compagnie Minière de l'Ogooué S.A. (Comilog), a subsidiary of France's Eramet, inaugurated on December 30 its new plant for sintering manganese ore produced at the Moanda Mine. By means of this plant, low-grade ore with a manganese content of 40% is to be upgraded to a sinter with a manganese content of [56]%. The sinter plant's annual capacity is 600,000 t. Once this output level is reached, three-fourths of the sinter is to be shipped to the Boulogne-sur-Mer plant of Société du Ferromanganèse de Paris-Outreau (SFPO) in France for smelting, and the balance is to be sold externally (TEX Report, 2000). **Later action:** The sinter plant's actual startup was in January 2001 (TEX Report, 2001).

In Mexico, the high price of natural gas caused Cia. Minera Autlán to shut down indefinitely the natural gas-fired kiln being used to nodulize carbonate ore being mined in Hidalgo State. Ferroalloy operations were to be kept going using uncalcined ore plus imported ore (Ryan's Notes, 2000). **Later action:** The nodulizing kiln was to be reopened following the Government's decision to subsidize natural gas prices. As of late January 2001, ferroalloy production had not been affected (Ryan's Notes, 2001).

Tetra Technologies, Inc., of The Woodlands, TX, and Eramet announced on December 18 that Industrias Sulfamex, S.A. de C.V., had been purchased by Comilog U.S., a holding company subsidiary of Eramet. Located in Tampico, Mexico, Sulfamex is the largest North American producer of agricultural grade manganese sulfate. Sulfamex also is a producer of manganous oxide, which like manganese sulfate is used as a micronutrient in animal feed and plant fertilizer. Sulfamex's annual capacities are 27,000 t for manganese sulfate and 24,000 t for manganous oxide (Chemetals Inc., 2000).

References Cited

Chemetals Inc., 2000, Comilog U.S. buys manganese sulfate business: Baltimore, MD, press release, December 18, 1 p.

President of the United States of America, 2000, Proclamation 7388 of December 18, 2000—To modify duty-free treatment under the Generalized System of Preferences for sub-Saharan African countries and for other purposes: Federal Register, v. 65, no. 246, December 21, p. 80723-80732.

Ryan's Notes, 2000, Little movement in bulk ferroalloy tags: Ryan's Notes, v. 6, no. 52, December 25, p. 2.

———2001, DLA still attempting to sell HC FeMn: Ryan's Notes, v. 7, no. 4, January 22, p. 3.

TEX Report, 2000, Plant to sinter manganese in Gabon is inaugurated on 30th December: TEX Report, December 13, p. 4.

———2001, Plant to sinter Mn-ore in Gabon commenced its operation: TEX Report, January 26, p. 1.

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/						
November	26,900	37,300	64,300	972	1,620	2,590
January-November	241,000	421,000	662,000	1,990	13,800	15,700
2000:						
January	17,100 4/	27,600 5/	44,700 4/	144	926	1,070
February	25,900 5/	38,100	64,000	202	1,380	1,580
March	16,800 4/	57,500 4/	74,400 4/	383 5/	1,000	1,390
April	19,400 4/	39,800 4/	59,300 4/	164 4/	967 4/	1,130 4/
May	4,020 4/	42,700	46,700 4/	309 4/	543 4/	852 4/
June	21,400 r/ 5/	60,700 4/	82,100 4/	398	484	883
July	60,500 5/	52,400	113,000	228	822	1,050
August	21,200 5/	44,700	65,800	438	652	1,090
September	24,900 r/ 5/	53,500 5/	78,300	168	1,040	1,210
October	4,290 r/ 5/	28,200 5/	32,500	2,240 5/	625	2,860
November	22,500 5/	48,200	70,700	259	698	957
Total	238,000	493,000	731,000	4,930	9,140	14,100

r/ Revised.

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/ Revised by the U.S. Census Bureau.

5/ 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 NOVEMBER 2000 1/

(Metric tons, unless otherwise specified)

Source	Gross weight	Mn content	Customs value	Year to date p/ 2/		
				Gross weight	Mn content	Customs value
Argentina	--	--	--	40	18	\$35,200
Australia	5,750	3,790	\$2,160,000	49,000	33,200	23,100,000
Brazil	--	--	--	15	12	20,400
Bulgaria	--	--	--	2,450	1,590	1,030,000
Canada	58	40	13,500	208	160	50,100
France	--	--	--	1,350	918	636,000
Georgia	--	--	--	2,990	2,170	1,520,000
India	--	--	--	60,500	39,300	26,200,000
Kazakhstan	12,500	8,640	4,530,000	66,400	45,200	28,400,000
Korea, Republic of	--	--	--	2,800	1,850	1,240,000
Mexico	3,180	2,090	1,330,000	45,400	29,700	21,000,000
Norway	2,000	1,210	1,160,000	4,400	2,680	2,780,000
Romania	--	--	--	9,630	6,360	4,170,000
South Africa	6,410	4,300	2,450,000	87,200	58,500	39,900,000
United Kingdom	--	--	--	3,400	2,230	1,610,000
Venezuela	--	--	--	22,800	15,200	10,100,000
Total	29,900	20,100	11,600,000	359,000	239,000	162,000,000
Total, general imports	29,900	20,100	11,600,000	359,000	239,000	162,000,000

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.

Source: U.S. Census Bureau.

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

(Metric tons)

Source	Gross weight	Mn content	Customs value	Year to date p/ 2/		
				Gross weight	Mn content	Customs value
Low carbon:						
Brazil	--	--	--	6,410	5,140	\$2,920,000
China	--	--	--	1,410	1,250	1,490,000
Italy	--	--	--	5,520	4,700	5,390,000
Japan	36	35	\$44,900	4,610	3,870	3,910,000
Mexico	600	480	494,000	1,550	1,250	1,330,000
Norway	19	16	3,680	50	40	26,500
South Africa	200	188	326,000	2,050	1,920	3,200,000
Ukraine	--	--	--	180	171	203,000
Total, low carbon	856	719	869,000	21,800	18,300	18,500,000
Total, general imports of low carbon	856	719	869,000	21,800	18,300	18,500,000
Medium carbon, 1%-2% C:						
Brazil	--	--	--	108	85	76,800
China	1,500	1,200	960,000	6,230	4,990	3,840,000
France	--	--	--	60	48	37,400
Germany	--	--	--	80	65	52,800
Japan	--	--	--	6,250	5,140	4,100,000
Korea, Republic of	2,850	2,280	1,800,000	8,550	6,840	5,060,000
Mexico	2,640	2,140	1,800,000	20,600	16,600	13,700,000
Norway	1,230	993	568,000	10,500	8,520	6,140,000
South Africa	3,410	2,770	2,330,000	25,300	20,500	15,800,000
Total, m.c., 1%-2% C	11,600	9,380	7,450,000	77,700	62,800	48,900,000
Total, general imports of m.c., 1%-2% C	11,600	9,380	7,450,000	77,700	62,800	48,900,000
Medium carbon, 2%-4% C:						
Brazil	--	--	--	1	(3/)	2,490
South Africa	27	22	29,200	58	46	46,000
Total, m.c., 2%-4% C	27	22	29,200	59	46	48,500
Total, general imports of m.c., 2%-4% C	27	22	29,200	59	46	48,500
High carbon:						
Australia	3,110	2,410	1,100,000	30,400	22,800	11,500,000
Brazil	--	--	--	8,310	6,410	3,370,000
Canada	14	11	10,200	50	39	36,400
France	1,500	1,160	622,000	40,900	32,300	17,800,000
Mexico	--	--	--	1,400	1,100	625,000
South Africa	16,900	13,200	6,520,000	123,000	95,500	46,600,000
Total, high carbon	21,500	16,800	8,250,000	204,000	158,000	80,000,000
Total, general imports of high carbon	21,500	16,800	8,250,000	204,000	158,000	80,000,000
Grand total	34,000	26,900	16,600,000	304,000	239,000	147,000,000
Grand total, general imports	34,000	26,900	16,600,000	304,000	239,000	147,000,000

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/ Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 4
U.S. IMPORTS OF MANGANESE ORE (20% OR MORE Mn) IN NOVEMBER 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
Australia	--	--	11,000	5,770	11,000	5,770
Gabon	--	--	20,500 3/	13,900 3/	20,500	13,900
Mexico	1,150	451	--	--	1,150	451
United Kingdom	--	--	52	48	52	48
Total	1,150	451	31,600	19,700	32,800	20,100
Year to date: p/ 4/						
Australia	--	--	34,800	18,100	34,800	18,100
Brazil	7,030	3,250	--	--	7,030	3,250
Gabon	36,500	15,500	312,000	169,000	348,000	185,000
Mexico	7,900	3,170	--	--	7,900	3,170
Morocco	--	--	40	21	40	21
United Kingdom	--	--	52	48	52	48
Total	51,500	21,900	347,000	187,000	398,000	209,000

p/ Preliminary. -- 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.

4/ May include revisions to previous months' data.

Source: U.S. Census Bureau.

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

(Metric tons, gross weight, unless otherwise specified)

Source	Manganese dioxide				Manganese metal			
	Quantity	Customs value	Year to date		Unwrought		Other	
			Quantity	Customs value	Quantity	Year to date	Quantity	Year to date
Australia	856	\$1,220,000	23,800	\$34,200,000	--	--	--	--
Belgium	55	87,400	737	1,200,000	--	--	--	--
Brazil	--	--	29	31,500	--	--	--	--
Canada	--	--	--	--	--	--	--	12
China	750	1,000,000	1,060	1,320,000	--	3,250	--	92
France	--	--	--	--	--	--	3	85
Germany	--	--	86	448,000	282	1,640	8	43
Ghana	--	--	3	4,530	--	--	--	--
Greece	293	385,000	1,580	2,060,000	--	--	--	--
Hong Kong	--	--	131	234,000	--	--	--	--
India	--	--	--	--	--	--	20	60
Ireland	890	1,230,000	8,860	12,200,000	--	--	--	--
Italy	--	--	--	--	--	--	--	1
Japan	--	--	41	61,800	--	--	--	5
Mexico	--	--	--	--	--	--	--	20
Netherlands	--	--	40	53,800	--	106	1	80
Peru	--	--	--	--	--	--	--	4
South Africa	1,060	1,490,000	11,400	16,100,000	787	8,210	--	--
Spain	--	--	--	--	--	38	--	--
Switzerland	--	--	79	80,200	--	--	--	--
Taiwan	--	--	--	--	--	--	--	18
Ukraine	--	--	--	--	--	20	--	189
United Kingdom	91	119,000	208	292,000	19	627	1	4
Venezuela	--	--	--	--	--	--	--	36
Total	4,000	5,540,000	48,000	68,200,000	1,090	13,900	33	649
Total, general imports	4,000	5,540,000	48,100	68,300,000	1,090	14,400	33	649

-- 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 208 tons, all of which was from Canada, to give a year-to-date total of 453 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/	
	November	Year to date p/ 3/	November	Year to date	November	Year to date	November	Year to date p/ 3/
Australia	7	179	--	--	--	--	--	--
Austria	--	--	--	--	--	--	19	58
Belgium	--	--	--	--	--	--	--	39
Brazil	--	67	--	--	--	4	--	--
Canada	392	4,010	37	4,270	130	1,340	65	697
Chile	--	--	--	--	--	--	--	4
Colombia	--	--	--	--	--	--	--	8
Czech Republic	--	16	--	--	--	--	--	--
Egypt	--	5	--	--	--	--	--	--
Finland	--	--	--	--	--	--	--	67
France	--	82	--	--	--	4	5	10
Germany	93	589	--	--	--	--	--	--
Hong Kong	--	54	--	--	--	--	--	3
India	14	14	--	--	--	--	--	--
Italy	--	350	--	--	--	--	--	28
Japan	11	80	--	--	--	--	102	696
Korea, Republic of	--	8	--	--	--	--	14	27
Mexico	--	142	5	140	--	365	3	206
Netherlands	--	24	--	--	--	13	--	55
Norway	--	333	--	--	--	--	--	--
Panama	--	--	--	18	--	--	--	--
Peru	--	--	--	--	--	--	--	1
Singapore	--	24	--	--	--	--	--	--
Spain	--	--	--	--	8	8	--	--
Sweden	--	--	--	--	--	--	--	19
Switzerland	--	52	--	--	--	--	--	--
Taiwan	--	11	--	--	--	--	--	48
United Kingdom	--	3,800	--	--	--	--	--	17
Venezuela	--	17	--	--	--	--	--	--
Total	517	9,860	41	4,430	138	1,730	208	1,980

p/ Preliminary. -- 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/ May include revisions to previous months' data.

Note: Exports of ferromanganese with more than 2% carbon totaled 464 tons, of which 462 tons went to Canada and 2 tons went to France, to give a year-to-date total of 3,180 tons.

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

Class	Gross weight (metric tons)	Value 3/ (thousands)	Principal sources and destinations: gross weight (metric tons); value 3/ (thousands)	Year to date p/ 2/		Principal sources and destinations: gross weight (metric tons); value 3/ (thousands)
				Gross weight (metric tons)	Value 3/ (thousands)	
Imports for consumption:						
Manganese oxides other than dioxide	213	\$281	Mexico 80; \$25	1,420	\$1,930	Mexico 625; \$200
Sulfates, basket category, including manganese sulfate	1,830	1,470	Mexico 801; \$530	36,300	20,000	Mexico 16,200; \$8,170
Potassium permanganate	125	267	Czech Republic 84; \$158	1,390	2,700	Czech Republic 730; \$1,400
Manganites, manganates, and other permanganates	1,370	308	China 1,350; \$186	1,420	590	China 1,370; \$201
Exports:						
Manganese dioxide	316	521	Canada 133; \$48	3,170	4,530	Canada 1,550; \$687
Manganese oxides other than dioxide	674	952	Canada 217; \$83	7,800	9,460	Canada 3,090; \$1,220
Sulfates, basket category, including manganese sulfate	1,710	721	Canada 1,360; \$339	19,000	9,490	Canada 15,900; \$4,600
Potassium permanganate	265	529	Spain 121; \$221	1,530	3,040	Spain 356; \$568
Manganites, manganates, and other permanganates	59	436	United Kingdom 22; \$149	305	1,810	Taiwan 86; \$611

p/ Preliminary.

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

2/ May include revisions to previous months' data.

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

Source: U.S. Census Bureau.