

Mineral Industry Surveys

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MANGANESE IN JULY 2000

In July, reported consumption of manganese ore containing 35% or more manganese, exclusive of that at iron and steel plants, was 38,000 metric tons (t), which was a marginal increase compared with that for the previous month, according to the U.S. Geological Survey. This brought the revised year-to-date total to 268,000 t. The figures for July increase to 40,400 t and 293,000 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 256,000 t, which includes an estimate for annual respondents on the basis of 1999 data. This was an increase of about 13% compared with the revised corresponding figure of 225,000 t for stocks at the end of June.

Data for domestic consumption and stocks of manganese ferroalloys and metal in 1999 will appear in a subsequent monthly

Foreign trade data for July will appear in a subsequent report. The data for June tabulated in this report indicate that the monthly quantity of manganese units imported as ferromanganese was the greatest since February 1999. Imports of silicomanganese may have been the greatest ever, pending verification of questionable data for Australia. Exports of silicomanganese were the least since October 1990, which contributed to the lowest total for units of manganese exported as ferroalloy plus metal since August 1987. **Note:** For early availability, the trade data appearing in this report are being placed on MINES FaxBack in preliminary form. The data for June were placed on FaxBack as of August 22. The FaxBack document number for the July trade data will be 420207.

The Defense National Stockpile Center of the Defense Logistics Agency, U.S. Department of Defense, reported for July cash disposals of manganese materials from the National Defense Stockpile that consisted of 4,011 t of chemical-grade ore, -23,151 t of metallurgical-grade ore, and 147 t of electrolytic metal. The disposal of chemical-grade ore resulted from modification of an existing contract, the reversion of metallurgical-grade ore resulted from a default on a contract that was terminated, and the disposal of metal was all to Chem-Met Int., Clinton, MD.

Eramet Marietta Inc. announced that it would close by yearend

the facilities at its Marietta, OH, plant for producing manganese metal. Excess global capacity and resultant declining prices were factors in the decision. Metal production has been a minor part of the plant's overall production program that includes an annual output of about 170,000 tons of manganese ferroalloys. Briquetting operations for production of aluminum hardeners will continue, with manganese for manganese-aluminum briquettes to come from elsewhere (Platt's Metals Week, 2000c). Kerr-McGee Chemical LLC's plant at Hamilton, MS, has been the only other domestic producer of manganese metal.

Carus Chemical Company, Peru, IL, completed on its purchase of the permanganate business of Spain's Industrial Química del Nalón (IQN). The acquisition became a European subsidiary of Carus named Carus Nalon S.L., whose plant in Spain is at Trubia on the north coast near Oviedo. Permanganate has been accounting for only a small part of total revenues for IQN, which has been the only current producer of potassium permanganate in the Economic European Community (Carus Chemical Company, 2000). Carus is the only domestic producer of permanganate.

In France, one of the blast furnaces for production of highcarbon ferromanganese was shut down at the coastal Boulogne-sur-Mer plant of Société du Ferromanganèse de Paris-Outreau (SFPO), an Eramet subsidiary. During the shutdown, which was projected to end as of January 2001, this furnace was to be refurbished so that it could accept sintered ore to be produced in Gabon from manganese ore from Eramet's Moanda Mine. Also, a dry filtration system for improving environmental control is to be installed. The 6-month shutdown will remove 50,000 tons of ferromanganese from the market and keep SFPO's 2000 output at the 300,000-ton level (Platt's Metals Week, 2000a, b).

In the Donetsk region of eastern Ukraine, blast furnace production of silicomanganese was reported to have taken place using a recommissioned furnace at the Kramatorsk Works (Interfax Mining & Metals Report, 2000). Usually high-carbon ferromanganese is the only manganese ferroalloy produced from a blast furnace.

References Cited

- Carus Chemical Company, 2000, Carus finalizes acquisition of Spanish permanganate business: Peru, IL, Carus Chemical Company press release, July 31, 1 p.
- Interfax Mining & Metals Report, 2000, Ukraine works produces blast-furnace silicon manganese: Interfax Mining & Metals Report, v. 9, issue 30, July 21-27,
- p. 23.
- Platt's Metals Week, 2000a, Comilog shuts furnace for maintenance: Platt's Metals Week, v. 71, no. 29, July 17, p. 9.
 - ——2000b, Comilog shuts manganese furnace: Platt's Metals Week, v. 71, no. 11, March 13, p. 4.
- 2000c, Eramet shuts US manganese metal production: Platt's Metals Week, v. 71, no. 30, July 24, p. 6-7.

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

(Metric tons, manganese content) 2/

	Impo	rts for consumption	Exports					
	Ore and	Ore and Ferroalloy			Ferroalloy			
	dioxide	and metal	Total	Ore	and metal	Total		
1999: 3/								
June	34,300	47,800	82,100	46	1,270	1,320		
January-June	142,000	241,000	382,000	388	8,400	8,790		
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		
Total	106,000	272,000	378,000	2,580	5,270	7,850		

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

Source: U.S. Census Bureau.

 ${\it TABLE~2} \\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~SILICOMANGANESE~IN~JUNE~2000~1/} \\$

(Metric tons, unless otherwise specified)

				Year to date		
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value	weight	content	value
Australia	5,530 2/	11,700 2/	\$2,900,000 2/	27,700	26,400	\$13,700,000
Brazil				15	12	20,400
Bulgaria				2,450	1,590	1,030,000
France				1,350	918	636,000
India	15,300	9,690	6,700,000	34,500	22,300	14,800,000
Kazakhstan				27,900	18,900	13,100,000
Mexico	5,080	3,320	2,420,000	29,000	17,700	13,500,000
Norway				1,400	848	953,000
Romania				4,040	2,640	1,830,000
South Africa	14,800	9,810	7,430,000	49,900	32,200	23,400,000
Venezuela	2,600	1,690	1,170,000	13,400	8,980	6,060,000
Total	43,300	36,200	20,600,000	192,000	133,000	89,100,000
Total, general imports	43,300	36,200	20,600,000	192,000	133,000	89,100,000

⁻⁻ Zero.

^{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.

^{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.

TABLE 3 U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN JUNE 2000 $1/\,$

(Metric tons)

					Year to date	
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value	weight	content	value
Low carbon:						
China				959	872	\$1,030,000
Italy	515	437	\$526,000	4,010	3,420	4,040,000
Japan	81	77	98,900	4,330	3,620	3,520,000
Mexico	200	160	167,000	530	428	469,000
Norway				30	24	22,800
South Africa	40	37	63,300	710	667	1,150,000
Ukraine				240	228	275,000
Total, low carbon	836	711	855,000	10,800	9,260	10,500,000
Total, general imports						
of low carbon	836	711	855,000	10,800	9,260	10,500,000
Medium carbon, 1%-2% C:		-	,	-,		.,,
China	108	85	76,800	108	85	76,800
Brazil	80	65	52,800	80	65	52,800
Korea, Republic of	<u></u>	<u></u>		2,850	2,280	1,610,000
Mexico	2,150	1,740	1,500,000	12,600	10,100	8,130,000
Norway	664	541	355,000	4,690	3,810	2,750,000
South Africa	9,540	7,680	5,690,000	16,000	12,900	9,450,000
Total, m.c., 1%-2% C	12,500	10,100	7,670,000	36,300	29,300	22,100,000
Total, general imports	12,000	10,100	7,070,000	20,200	25,500	22,100,000
of m.c., 1%-2% C	12,500	10,100	7,670,000	36,300	29,300	22,100,000
Medium carbon, 2%-4% C:	12,500	10,100	7,070,000	30,300	27,300	22,100,000
South Africa				30	24	16,800
Total, m.c., 2%-4% C				30	24	16,800
Total, general imports				20		10,000
of m.c., 2%-4% C				30	24	16,800
High carbon:						10,000
Australia	6,710	5,110	2,510,000	18,800	14,400	7,060,000
Brazil	2,000	1,540	852,000	4,810	3,700	2,050,000
Canada	2,000	1,540	032,000	36	28	26,200
France	12	9	4,160	26,400	21,000	11,700,000
South Africa	17,600	13,600	6,600,000	68,700	53,300	25,500,000
Total, high carbon	26,300	20,200	9,970,000	119,000	92,400	46,300,000
Total, general imports	20,300	20,200	7,770,000	117,000	72,400	40,300,000
of high carbon	26,300	20,200	9,970,000	119,000	92,400	46,300,000
Grand total	39,700	31,100	18,500,000	166,000	131,000	78,900,000
Grand total Grand imports	39,700	31,100	18,500,000	166,000	131,000	78,900,000
Zara	39,700	31,100	10,300,000	100,000	131,000	/0,900,000

⁻⁻ Zero.

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

 $\label{eq:table 4} TABLE~4$ U.S. IMPORTS OF MANGANESE ORE (20% OR MORE Mn) IN JUNE 2000 1/ 2/

(Metric tons)

	20% - 47%	Mn	47% or more	Mn	Total	
	Gross	Mn	Gross	Mn	Gross	Mn
Source	weight	content	weight	content	weight	content
Gabon			29,900 3/	18,800 3/	29,900	18,800
India	18	112			18	112
Mexico	278	122			278	122
Total	296	234	29,900	18,800	30,200	19,000
Year to date:	-					
Australia			1,290	722	1,290	722
Belgium	18	6			18	6
Brazil	7,030	3,250			7,030	3,250
Gabon	25,400	11,200	135,000	71,400	161,000	82,600
India	70	447			70	447
Mexico	4,790	2,810			4,790	2,810
Morocco			20	11	20	11
Total	37,300	17,700	137,000	72,200	174,000	89,900

⁻⁻ Zero.

Source: U.S. Census Bureau.

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

(Metric tons, gross weight, unless otherwise specified)

		Manganes	se dioxide			Manganes	e metal	
			Year to date		Unw	rought	Other	
		Customs		Customs				
Source	Quantity	value	Quantity	value	Quantity	Year to date	Quantity	Year to date
Australia	1,850	\$2,630,000	14,500	\$21,100,000				
Belgium	108	200,000	402	671,000				
Brazil			9	18,200				
Canada							12	12
China	129	134,000	172	181,000	434	1,860		92
France							15	57
Germany	16	86,200	73	380,000	193	583		12
Greece	65	80,600	457	589,000				
India								1
Ireland	829	1,090,000	4,820	6,530,000				
Japan								5
Netherlands						69	15	47
South Africa	1,200	1,700,000	6,270	8,840,000	727	5,270		
Taiwan								18
Ukraine					20	20		
United Kingdom			111	164,000	38	362		2
Venezuela							18	36
Total	4,210	5,920,000	26,900	38,400,000	1,410	8,160	60	282
Total, general imports	4,210	5,920,000	26,900	38,500,000	1,450	8,400	60	282

⁻⁻ Zero.

Note: Imports for consumption of metallic manganese waste and scrap totaled 46 tons, all of which was from Canada, to give a year-to-date total of 119 tons.

^{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.

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

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)

			Ferrom	anganese,				
	Manganese ore		2% or less C		Silicomanganese		Manganese metal 2/	
	June	Year to date	June	Year to date	June	Year to date	June	Year to date
Australia		172						
Belgium								19
Brazil		67						
Canada	691	2,510	35	2,870	22	996		434
Chile								4
Colombia								8
Finland							12	49
France		82				4		
Germany		1,020						
Hong Kong								2
Italy	50	149						18
Japan	43	70					91	378
Korea, Republic of								6
Mexico		1,070	21	97		314	24	110
Netherlands						9	18	36
Peru								1
Switzerland	13	13						
Taiwan		11						30
United Kingdom								17
Total	797	5,160	56	2,970	22	1,320	145	1,110

⁻⁻ Zero.

Note: Exports of ferromanganese with more than 2% carbon totaled 355 tons, of which 309 tons went to Canada and 46 tons went to Mexico, to give a year-to-date total of 1,190 tons.

 $^{1/\,\}text{Data}$ 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.

 ${\it TABLE~7} \\ {\it U.S.~FOREIGN~TRADE~IN~SELECTED~MANGANESE~CHEMICALS~IN~JUNE~2000,~BY~CLASS~1/} \\$

					Year to d	ate
	Gross weight	Value 2/	Principal sources and destinations: gross weight (metric tons);	Gross weight	Value 2/	Principal sources and destinations: gross weight (metric tons):
Class	(metric tons)	(thousands)	value 2/ (thousands)	(metric tons)	(thousands)	value 2/ (thousands)
Imports for consumption:						
Manganese oxides other than dioxide	165	\$194	Mexico 60; \$19	738	\$1,010	Mexico 300; \$97
Sulfates, basket category,						
including manganese sulfate	2,410	1,200	China 1,360; \$452	18,400	10,400	Mexico 8,430; \$4,120
Potassium permanganate	126	231	India 72; \$132	771	1,490	Czech Republic 350; \$671
Manganites, manganates, and						
other permanganates	18	127	Germany 18; \$127	37	260	Germany 36; \$257
Exports:						
Manganese dioxide	369	376	Canada 277; \$122	1,730	1,870	Canada 1,020; \$428
Manganese oxides other than dioxide	656	1,680	United Kingdom 216; \$510	4,430	5,730	Canada 1,590; \$616
Sulfates, basket category,						
including manganese sulfate	1,530	710	Canada 1,370; \$430	11,400	6,010	Canada 9,350; \$2,890
Potassium permanganate	140	290	United Kingdom 63; \$127	672	1,340	Germany 164; \$312
Manganites, manganates, and						
other permanganates	40	274	Taiwan 20; \$139	113	696	United Kingdom 38; \$252

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

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