

Mineral Industry Surveys

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MANGANESE IN AUGUST 2000

In August, reported consumption of manganese ore containing 35% or more manganese, exclusive of that at iron and steel plants. was estimated as 39,000 metric tons (t), which was an increase of less than 3% compared with that for the previous month, according to the U.S. Geological Survey. This brought the year-to-date total to 307,000 t. The figures for August increase to 41,400 t and 335,000 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 262,000 t, which includes an estimate for annual respondents on the basis of 1999 data. This also was an increase of less than 3% compared with the corresponding figure for stocks at the end of July.

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

Foreign trade data for August will appear in a subsequent report. The data for July tabulated in this report indicate that the monthly totals for total units of manganese imported and of manganese imported as ore were the greatest in at least 17 years. Of the total units imported, about 50% was as ore, of which about four-fifths was from Gabon. For the third consecutive month, medium-carbon ferromanganese was being imported at a rate approaching twice that of the average for the year in which a record quantity was received. Among exports, those of silicomanganese again were minimal, and were the least since June 1986. Note: For early availability, the trade data appearing in this report are being placed on MINES FaxBack in preliminary form. The data for July were placed on FaxBack as of September 28. The FaxBack document number for the August trade data will be 420208.

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

Japan's Nippon Denko Co. Ltd. and South Africa's Samancor Ltd. joined in a cooperation agreement whereby Nippon Denko would produce high-carbon ferromanganese in place of that which Samancor had been shipping to Japanese customers, and Samancor would increase its supply of manganese ore to Nippon Denko. Under this agreement, which extended back to April 2000, Nippon Denko's output of high-carbon ferromanganese at its Tokushima plant would increase by about 50,000 metric tons per year (t/yr) and Nippon Denko's intake of Samancor ore by about 75,000 t/yr. The agreement included an exchange of technology for production of ferromanganese (Metal Bulletin, 2000; TEX Report, 2000).

Roskill Information Services, London, issued its latest comprehensive report on the global manganese industry. This 2000 report was the ninth edition of "The Economics of Manganese." The e-mail and Internet addresses for Roskill are info@roskill.co.uk and http://www.roskill.co.uk, respectively.

References Cited

Metal Bulletin, 2000, Revitalised Nippon Denko sees profits soar: Metal Bulletin, no. 8507, September 11, p. 15.

TEX Report, 2000, Nippon Denko has concluded strategic cooperation with Samancor on Fe-Mn: TEX Report, August 31, p. 2.

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

(Metric tons, manganese content) 2/

	Impor	rts for consumption	Exports						
	Ore and	Ore and Ferroalloy			Ferroalloy				
	dioxide	and metal	Total	Ore	and metal	Total			
1999: 3/									
July	17,100	29,700	46,800	385	1,190	1,570			
January-July	159,000	270,000	429,000	773	9,580	10,400			
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			
Total	167,000	324,000	491,000	2,810	6,090	8,900			

- 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.

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

(Metric tons, unless otherwise specified)

					Year to date	
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value	weight	content	value
Australia	1,360	1,040	\$702,000	29,100	27,400	\$14,400,000
Brazil				15	12	20,400
Bulgaria				2,450	1,590	1,030,000
France				1,350	918	636,000
Georgia	2,990	2,170	1,520,000	2,990	2,170	1,520,000
India				34,500	22,300	14,800,000
Kazakhstan	11,100	7,560	4,860,000	39,000	26,500	18,000,000
Korea, Republic of	2,800	1,850	1,240,000	2,800	1,850	1,240,000
Mexico				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	9,980	6,860,000	64,800	42,200	30,200,000
Venezuela	2,800	1,820	1,300,000	16,200	10,800	7,360,000
Total	35,900	24,400	16,500,000	228,000	157,000	106,000,000
Total, general imports	35,900	24,400	16,500,000	228,000	157,000	106,000,000

⁻⁻ Zero.

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

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

(Metric tons)

			_		ear to date p/ 2	
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value	weight	content	value
Low carbon:						
China				959	872	\$1,030,000
Italy	529	447	\$484,000	4,540	3,870	4,520,000
Japan				4,330	3,620	3,520,000
Mexico				530	428	469,000
Norway				30	24	22,800
South Africa	200	187	320,000	910	854	1,470,000
Ukraine				240	228	275,000
Total, low carbon	729	634	804,000	11,500	9,900	11,300,000
Total, general imports						
of low carbon	729	634	804,000	11,500	9,900	11,300,000
Medium carbon, 1%-2% C:						
Brazil				108	85	76,800
China	2,050	1,640	1,190,000	2,050	1,640	1,190,000
Germany				80	65	52,800
Japan	2,500	2,130	1,450,000	2,500	2,130	1,450,000
Korea, Republic of	2,850	2,280	1,650,000	5,700	4,560	3,260,000
Mexico	102	77	71,100	12,700	10,200	8,200,000
Norway	2,960	2,400	2,110,000	7,650	6,210	4,850,000
South Africa	1,950	1,570	1,350,000	17,900	14,500	10,800,000
Total, m.c., 1%-2% C	12,400	10,100	7,820,000	48,700	39,400	29,900,000
Total, general imports	,	.,	.,,.	-,	,	.,,
of m.c., 1%-2% C	12,400	10,100	7,820,000	48,700	39,400	29,900,000
Medium carbon, 2%-4% C:		-,			,	
South Africa				30	24	16,800
Total, m.c., 2%-4% C				30	24	16,800
Total, general imports						ŕ
of m.c., 2%-4% C				30	24	16,800
High carbon:						
Australia				18,800	14,400	7,060,000
Brazil				4,810	3,700	2,050,000
Canada				36	28	26,200
France	13,000	10,200	5,490,000	39,400	31,200	17,200,000
South Africa	6,880	5,330	2,800,000	75,600	58,600	28,300,000
Total, high carbon	19,900	15,500	8,290,000	139,000	108,000	54,600,000
Total, general imports	17,700	13,500	0,270,000	157,000	100,000	3 1,000,000
of high carbon	19,900	15,500	8,290,000	139,000	108,000	54,600,000
Grand total	33,000	26,300	16,900,000	199,000	157,000	95,800,000
Grand total Grand imports	33,000	26,300	16,900,000	199,000	157,000	95,800,000
(P. 1)	33,000	20,300	10,700,000	177,000	157,000	75,000,000

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.

 ${\rm TABLE~4}$ U.S. IMPORTS OF MANGANESE ORE (20% OR MORE Mn) IN JULY 2000 1/ 2/

(Metric tons)

	20% - 47% Mn		47% or mo:	re Mn	Total		
	Gross	Mn	Gross	Mn	Gross	Mn	
Source	weight	content	weight	content	weight	content	
Australia			22,400	11,600	22,400	11,600	
Gabon	11,100	4,280	85,000	41,900	96,000	46,200	
India	18 3/	112 3/			18	112	
Mexico	197	87			197	87	
Total	11,300	4,480	107,000	53,500	119,000	58,000	
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	220,000	113,000	257,000	129,000	
India	88	559			88	559	
Mexico	4,980	2,900			4,980	2,900	
Morocco			20	11	20	11	
Total	48,600	22,200	244,000	126,000	293,000	148,000	

- -- 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 JULY 2000 $1\!/$

(Metric tons, gross weight, unless otherwise specified)

		Manganes	e dioxide			Manganes	e metal	
			Year	to date	Unwi	rought		her
		Customs		Customs				
Source	Quantity	value	Quantity	value	Quantity	Year to date	Quantity	Year to date
Australia	1,750	\$2,480,000	16,300	\$23,500,000				
Belgium	74	150,000	476	821,000				
Brazil			9	18,200				
Canada								12
China			172	181,000	729	2,590		92
France							16	73
Germany	10	57,200	84	437,000	141	724	11	23
Ghana	3	4,530	3	4,530				
Greece	488	638,000	944	1,230,000				
India							20	21
Ireland	881	1,210,000	5,710	7,740,000				
Japan							(2/)	5
Netherlands					37	106	10	58
Peru							4	4
South Africa	1,140	1,620,000	7,410	10,500,000	606	5,870		
Switzerland	79	80,200	79	80,200				
Taiwan								18
Ukraine						20		
United Kingdom	6	10,300	117	174,000	87	449	1	2
Venezuela								36
Total	4,430	6,250,000	31,300	44,700,000	1,600	9,760	62	344
Total, general imports	4,430	6,250,000	31,400	44,800,000	1,600	10,000	62	344

⁻⁻ Zero.

Note: Imports for consumption of metallic manganese waste and scrap totaled 24 tons, of which 20 tons was from Norway and 3 tons was from Canada, to give a year-to-date total of 142 tons.

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

 $^{2/\} Less$ than $1/2\ unit.$

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)

	Ferromanganese,									
	Manganese ore		2% c	or less C	Silicomanganese		Manganese metal 2/			
	July	Year to date	July	Year to date	July	Year to date	July	Year to date		
Australia		172								
Austria							39	39		
Belgium							19	38		
Brazil		67								
Canada	157	2,660	527	3,400		996	5	439		
Chile								4		
Colombia								8		
Finland								49		
France		82				4				
Germany	10	1,030								
Hong Kong								2		
Italy	151	300						18		
Japan		70					129	507		
Korea, Republic of								6		
Mexico		1,070		97	4	318	26	135		
Netherlands						9	18	55		
Norway	139	139								
Panama			18	18						
Peru								1		
Switzerland		13								
Taiwan		11						30		
United Kingdom								17		
Total	457	5,620	545	3,520	4	1,330	235	1,350		

⁻⁻ Zero.

Note: Exports of ferromanganese with more than 2% carbon totaled 195 tons, of which 107 tons went to Canada, 73 tons went to China, and 15 tons went to Mexico, to give a year-to-date total of 1,380 tons.

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

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

	·		·	·	Year to	date
	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	120	\$189	Mexico 60; \$19	859	\$1,200	Mexico 360; \$116
Sulfates, basket category,						
including manganese sulfate	4,220	2,330	Mexico 2,310; \$1,140	22,600	12,800	Mexico 10,700; \$5,260
Potassium permanganate	120	225	Czech Republic 65; \$122	891	1,720	Czech Republic 415; \$793
Manganites, manganates, and						
other permanganates				37	260	Germany 36; \$257
Exports:						
Manganese dioxide	297	372	Canada 193; \$85	2,020	2,240	Canada 1,210; \$513
Manganese oxides other than dioxide	782	922	Canada 333; \$134	5,210	6,650	Canada 1,920; \$750
Sulfates, basket category,						
including manganese sulfate	1,230	571	Canada 1,060; \$235	12,600	6,580	Canada 10,400; \$3,130
Potassium permanganate	162	341	Spain 90; \$179	835	1,680	Germany 164; \$312
Manganites, manganates, and						
other permanganates	68	209	Nicaragua 38; \$67	181	905	Nicaragua 57; \$100

⁻⁻ Zero.

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

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