

# Mineral Industry Surveys

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#### **MANGANESE IN JUNE 2014**

Preliminary data for June 2014 indicated that domestic consumption of manganese ore containing more than 20% manganese, exclusive of that consumed at iron and steel plants, was 37,400 metric tons (t) (gross weight). This was a slight increase compared with the amount consumed in May 2014. Manganese ore consumption during the first 6 months of 2014 was 221,000 t, or 24% less than that consumed during the same period of 2013. This decrease in manganese ore consumption was primarily the result of continuing curtailment at Felman Production, LLC's silicomanganese production facility in Letart, WV. Industry stocks of ore at the end of June 2014 were

estimated to be 215,000 t, which was a 27% increase from those at the end of May 2014.

Included in this Mineral Industry Surveys are U.S. spot market prices and U.S. foreign trade data for selected manganese-containing materials in May 2014.

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### TABLE 1 PRICES FOR MANGANESE FERROALLOYS, METAL, AND ORE IN JUNE 2014

	High	Low	Average	Average low, mid, and high
	-			
dollars per long ton of contained manganese	1,080.00	1,060.00	1,070.00	XX
cents per pound of contained manganese	98.00	95.00	96.63	XX
do.	62.00	58.00	60.00	XX
cents per pound	125.00	117.00	XX	120.25-122.56-124.88
dollars per metric ton unit contained manganese	3.80	3.10	XX	3.35-3.42-3.49
do.	4.50	4.30	XX	4.30-4.39-4.49
do.	5.00	4.55	XX	4.90-4.94-4.98
	cents per pound of contained manganese do. cents per pound dollars per metric ton unit contained manganese do.	dollars per long ton of contained manganese       1,080.00         cents per pound of contained manganese       98.00         do.       62.00         cents per pound       125.00         dollars per metric ton unit contained manganese       3.80         do.       4.50	dollars per long ton of contained manganese1,080.001,060.00cents per pound of contained manganese98.0095.00do.62.0058.00cents per pound125.00117.00dollars per metric ton unit contained manganese3.803.10do.4.504.30	dollars per long ton of contained manganese         1,080.00         1,060.00         1,070.00           cents per pound of contained manganese         98.00         95.00         96.63           do.         62.00         58.00         60.00           cents per pound         125.00         117.00         XX           dollars per metric ton unit contained manganese         3.80         3.10         XX           do.         4.50         4.30         XX

do. Ditto. XX Not applicable.

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

<sup>2</sup>CRU Ryan's Notes North American transaction prices, electrolytic manganese metal flake, 99.99% manganese, free-on-board producing point or Chicago/Pittsburgh warehouse; average prices reported for the price range.

<sup>3</sup>CRU Ryan's Notes, cost and freight, China; average prices reported for the price range.

<sup>4</sup>To determine dollars per metric ton of ore (gross weight), multiply the manganese content percentage by the price; that is, by 46 when the manganese content is 46%.

## TABLE 2 SELECTED U.S. FOREIGN TRADE IN MANGANESE<sup>1</sup>

	Impo	rts for consump	tion		Exports	
	Ore and	Ferroalloy				
	dioxide	and metal	Total	Ore	and metal	Total
2013:						
June	24,900	52,700	77,600	31	345	376
January–June	131,000	291,000	423,000	121	5,400	5,520
2014:						
January	6,510	32,200	38,700	21	1,130	1,150
February	28,000	61,500	89,500	202	1,100	1,310
March	1,910	46,400	48,300	1	1,010	1,020
April	19,100	52,100	71,100	23	464	487
May	27,500	74,700	102,000	31	749	780
June	6,740	48,400	55,200	19	346	366
January–June	89,800	315,000	405,000	297	4,810	5,100

#### (Metric tons, manganese content)<sup>2</sup>

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

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

Source: U.S. Census Bureau.

### TABLE 3 U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN JUNE 2014 $^{\rm 1}$

#### (Metric tons)

					January–June	
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value <sup>2</sup>	weight	content	value <sup>2</sup>
Australia	9,100	6,040	\$10,500,000	41,100	27,400	\$43,400,000
Bahrain	540	351	613,000	2,540	1,650	2,870,000
Brazil				7,550	4,980	7,760,000
China				400	302	564,000
Georgia	12,700	8,790	14,100,000	74,900	51,600	76,700,000
Hong Kong				1	1	3,700
India	324	193	556,000	2,120	1,330	3,140,000
Indonesia	1,170	773	1,200,000	1,250	825	1,280,000
Korea, Republic of				20	13	20,500
Mexico	6,000	3,910	6,160,000	18,500	12,100	19,000,000
Norway	1,700	1,110	1,860,000	21,700	14,000	27,000,000
Russia				538	377	633,000
Saudi Arabia				6,030	3,920	6,170,000
South Africa	8,800	5,730	9,350,000	61,300	40,200	63,300,000
Spain	382	249	457,000	1,720	1,120	2,060,000
Total	40,800	27,100	44,800,000	240,000	160,000	254,000,000

-- Zero.

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

<sup>2</sup>Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

#### TABLE 4 U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN JUNE $2014^1$

#### (Metric tons)

					January–Jun	e
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value <sup>2</sup>	weight	content	value <sup>2</sup>
Low carbon:	-					
Canada	33	5	\$13,600	33	5	\$13,600
China	629	587	1,410,000	5,090	4,710	11,600,000
France				19	15	48,300
Korea, Republic of				3,010	2,760	6,190,000
Norway	319	257	520,000	8,770	7,110	13,200,000
South Africa				1,620	1,530	3,820,000
Total	981	849	1,940,000	18,500	16,100	34,900,000
Medium carbon, 1%–2% C:						
China	100	76	244,000	100	76	244,000
India				1	1	3,250
Korea, Republic of				8,000	6,480	10,800,000
Mexico	60	47	115,000	696	531	1,490,000
Norway	1,000	815	1,310,000	7,780	6,330	9,940,000
South Africa				8,980	7,220	12,300,000
Total	1,160	939	1,670,000	25,600	20,600	34,700,000
Medium carbon, 2%–4% C:						
Brazil				135	100	123,000
China				1	(3)	3,300
Total				136	100	126,000
High carbon:						
Australia	2,600	2,020	2,390,000	32,600	24,700	26,000,000
Brazil	108	78	94,000	1,160	842	990,000
Canada	19	13	28,100	107	69	151,000
France				662	503	609,000
Korea, Republic of				519	395	548,000
Macedonia				152	114	141,000
Saudi Arabia				503	377	483,000
South Africa	16,900	13,100	16,200,000	92,200	70,300	83,600,000
Spain				48	37	49,300
Ukraine	2,960	2,310	2,800,000	3,130	2,420	3,020,000
Total	22,600	17,500	21,500,000	131,000	99,800	116,000,000
Grand total	24,800	19,300	25,100,000	175,000	137,000	185,000,000

-- Zero.

<sup>1</sup>Data rounded to no more than three significant digits; may not add to totals shown. <sup>2</sup>Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance and other charges incurred in bringing the material into the United States.

<sup>3</sup>Less than  $\frac{1}{2}$  unit.

#### TABLE 5

#### U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn) IN JUNE 2014<sup>1, 2</sup>

(Metric tons)

					January–June	e
Source	Gross weight	Mn content	Customs value <sup>3</sup>	Gross weight	Mn content	Customs value <sup>3</sup>
More than 20%, but less than 47% manganese:						
China				11	5	\$6,120
Gabon				40,600	16,500	6,690,000
Mexico				3,360	1,250	773,000
Morocco	96	44	\$51,100	96	44	51,100
Total	96	44	51,100	44,000	17,800	7,520,000
47% or more manganese:						
Australia				17,600	8,670	5,920,000
Belgium	1,440	721	86,600	1,440	721	86,600
Brazil	53	26	22,600	2,970	1,580	1,300,000
Gabon	9,500	4,890	2,610,000	108,000	54,800	25,500,000
Morocco				851	425	51,100
Netherlands				5	4	5,760
South Africa				1,400	1,080	1,320,000
Total	11,000	5,640	2,720,000	132,000	67,300	34,200,000
Grand total	11,100	5,680	2,770,000	176,000	85,100	41,700,000

-- Zero.

<sup>1</sup>Quantities for general imports and imports for consumption are identical.

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

<sup>3</sup>Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

Source: U.S. Census Bureau.

## TABLE 6U.S. IMPORTS FOR CONSUMPTION OF MANGANESEDIOXIDE IN JUNE 20141

#### (Metric tons, gross weight)

			January	/–June	
		Customs		Customs	
Source	Quantity	value <sup>2</sup>	Quantity	value <sup>2</sup>	
Belgium			164	\$98,600	
Bolivia			9	14,500	
Brazil			18	20,300	
China			62	56,800	
Germany	2	\$10,100	15	33,300	
Japan	628	1,470,000	3,210	7,440,000	
Netherlands			80	34,000	
Singapore	12	20,200	71	121,000	
South Africa	708	1,020,000	3,190	6,580,000	
Spain			70	27,700	
Turkey	402	183,000	866	423,000	
Total	1,750	2,710,000	7,750	14,800,000	

-- Zero.

<sup>1</sup>Data rounded to no more than three significant digits; may not add to totals shown. <sup>2</sup>Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

## TABLE 7 U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN JUNE $2014^1$

#### (Metric tons)

			Januar	January–June		
	Gross	Customs	Gross	Customs		
Source	weight	value <sup>2</sup>	weight	value <sup>2</sup>		
Unwrought flake:						
China	112	\$216,000	3,350	\$6,810,000		
Hong Kong			60	130,000		
Japan	4	13,700	272	927,000		
Mexico	54	184,000	181	599,000		
South Africa	827	2,150,000	4,960	13,000,000		
Total	996	2,560,000	8,820	21,500,000		
Unwrought powder:						
China	40	88,000	60	133,000		
Mexico			1	8,170		
South Africa	158	537,000	1,230	4,290,000		
Total	198	625,000	1,290	4,440,000		
Unwrought, other:						
Belgium	3	7,520	3	7,520		
China	708	1,710,000	7,760	17,700,000		
Germany			78	139,000		
Mexico			15	47,900		
Netherlands			38	91,700		
Poland			(3)	4,320		
South Africa			231	689,000		
Spain			1	2,400		
Total	712	1,720,000	8,130	18,700,000		
Other manganese, wrought:						
China			(3)	2,370		
Germany	36	477,000	48	627,000		
India			7	22,700		
Japan	(3)	3,360	(3)	11,100		
Korea, Republic of	11	370,000	11	370,000		
Malaysia			(3)	2,400		
Mexico	3	16,300	14	55,500		
Poland			(3)	2,080		
Total	49	867,000	79	1,090,000		
Metallic waste and scrap, Canada	159	89,500	832	548,000		
Grand total	2,110	5,870,000	19,100	46,200,000		

-- Zero.

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

<sup>2</sup>Customs value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the material into the United States.

<sup>3</sup>Less than <sup>1</sup>/<sub>2</sub> unit.

## TABLE 8 U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE, SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN JUNE 2014<sup>1, 2</sup>

			January–June		
		F.a.s. <sup>3</sup>		F.a.s. <sup>3</sup>	
	Gross weight	value	Gross weight	value	
Source	(metric tons)	(thousands)	(metric tons)	(thousands)	
Ore and concentrates with 20% or more manganese:					
Argentina			3	\$13	
Canada	3	\$3	398	841	
China			19	17	
Malaysia			6	8	
Mexico			6	17	
Netherlands	18	62	124	503	
Poland	18	22	18	22	
United Kingdom			20	17	
Total	39	87	594	1,440	
Ferromanganese:					
2% or less carbon:					
Cameroon			3	8	
Canada	29	32	2,920	4,240	
Colombia			1	4	
Finland			20	36	
Germany			13	25	
Japan			119	211	
Korea, Republic of			10	23	
Qatar			3	6	
Spain			40	82	
Taiwan			6	11	
Total	29	32	3,130	4,650	
More than 2% carbon:					
Angola			7	18	
Brazil			3	8	
Canada	75	91	230	303	
Chile			48	134	
Equatorial Guinea	6	11	31	87	
Korea, Republic of			23	63	
Mexico			20	7	
Other (7 countries)	9	25	23	65	
Total	90	126	385	686	
Silicomanganese:					
Canada	36	46	324	422	
Mexico	19	53	67	141	
Total	55	100	392	563	
Metal, including alloys and waste and scrap:4					
Canada			29	81	
China	11	163	56	769	
Germany	(5)	15	76	315	
India			20	13	
Japan	25	87	44	152	
Malaysia	157	69	1,270	763	
Mexico	9	41	61	262	
Philippines			36	19	
United Kingdom			20	73	
Vietnam			102	36	
Other (8 countries)	13	38	53	1,110	
Total	216	412	1,770	3,590	
Grand total	429	758	6,270	10,900	

<sup>1</sup>Presentation of monthly data is based on the "January–June" quantities of the leading countries.

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

<sup>3</sup>Free alongside ship.

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

<sup>5</sup>Less than <sup>1</sup>/<sub>2</sub> unit.

TABLE 9
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN JUNE 2014, BY CLASS <sup>1</sup>

					Janu	ary–June
	~	2	Principal sources and destinations:		2	Principal sources and destinations:
	Gross weight	Value <sup>2</sup>	gross weight (metric tons);	Gross weight	Value <sup>2</sup>	gross weight (metric tons);
Class	(metric tons)	(thousands)	value <sup>2</sup> (thousands)	(metric tons)	(thousands)	value <sup>2</sup> (thousands)
Imports for consumption:						
Manganese oxides other than dioxide	220	\$208	Korea, Republic of 103; \$65	3,370	\$2,960	Korea, Republic of 2,130; \$1,41
Manganites, manganates, and						
other permanganates	14	27	Korea, Republic of 14; \$27	14	32	Korea, Republic of 14; \$27
Potassium permanganate	72	202	India 72; \$202	812	2,320	India 807; \$2,300
Sodium permanganate	329	776	China 329; \$776	1,130	2,690	China 1,080; \$2,550
Sulfates, basket category,						
including manganese sulfate	4,260	3,330	Mexico 1,520; \$1,410	28,900	22,900	Mexico 9,830; \$8,620
Exports:						
Manganese dioxide	449	895	Canada 226; \$156	2,060	4,450	Canada 918; \$813
Manganese oxides other than dioxide	505	896	Canada 91; \$123	5,990	8,420	Netherlands 1,520; \$1,260
Manganites, manganates, and						
other permanganates	12	29	Canada 12; \$29	91	274	Canada 52; \$124
Potassium permanganate	359	1,010	Belgium 276; \$700	2,060	5,550	Belgium 1,240; \$3,130
Sodium permanganate	112	304	Belgium 57; \$132	548	1,620	Belgium 217; \$474
Sulfates, basket category,						
including manganese sulfate	1,330	1,340	Canada 978; \$574	8,930	10,300	Canada 6,620; \$3,890

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

<sup>2</sup>For imports, customs value; for exports, free alongside ship value.