

Mineral Industry Surveys

For information, contact:

Lisa A. Corathers, Manganese Commodity Specialist National Minerals Information Center U.S. Geological Survey 989 National Center Reston, VA 20192

Telephone: (703) 648-4973, Fax: (703) 648-7757

Email: lcorathers@usgs.gov

Hodan A. Fatah (Data) Telephone: (703) 648-4971 Fax: (703) 648-7975 Email: hfatah@usgs.gov

Internet: http://minerals.usgs.gov/minerals

MANGANESE IN APRIL 2015

Preliminary data for April 2015 indicated that domestic consumption of manganese ore containing more than 20% manganese, exclusive of that consumed at iron and steel plants, was 57,900 metric tons (t) (gross weight). This was a 55% increase compared with the revised amount consumed in March 2015 (37,400 t). Manganese ore consumption during the first 4 months of 2015 was about 205,000 t, 40% more than the amount consumed during the same period of 2014 (146,000 t). This year-over-year increase was primarily the result of resumed production at Felman Production, LLC's silicomanganese production facility in Letart, WV, in July 2014. Industry stocks

of ore at the end of April 2015 were estimated to be 209,000 t, which was slightly higher than the revised amount at the end of March 2015 (205,000 t).

List services and Web feed subscribers are the first to receive notification of USGS minerals information publications and data releases. For information on how to subscribe, go to http://minerals.usgs.gov/minerals/.

 ${\it TABLE~1}$ PRICES FOR MANGANESE FERROALLOYS, METAL, AND ORE IN APRIL 2015

					Average low,
		High	Low	Average	mid, and high
Manganese ferroalloys: ¹					
High-carbon ferromanganese, 75% manganese	dollars per long ton of contained manganese	975.00	925.00	945.50	XX
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	98.00	97.00	97.50	XX
Silicomanganese, 65% manganese	do.	56.00	52.50	54.10	XX
Manganese metal, 99.9% manganese flake ²	cents per pound	125.00	120.00	XX	120.63-121.94-123.25
Manganese ore: ^{3, 4}					
36%–39% manganese	dollars per metric ton unit contained manganese	3.10	2.70	XX	2.80-2.88-2.95
44% manganese	do.	3.40	3.00	XX	3.10-3.19-3.28
46% manganese	do.	3.65	3.31	XX	3.45-3.55-3.65

do. Ditto. XX Not applicable.

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

²CRU 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.

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

⁴To 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%.

 $\label{eq:table 2} \textbf{TABLE 2}$ SELECTED U.S. FOREIGN TRADE IN MANGANESE 1

(Metric tons, manganese content)²

	Impo	rts for consump	tion	Exports		
	Ore and	Ferroalloy		Ferroalloy		
	dioxide	and metal	Total	Ore	and metal	Total
2014:						
April	19,100	52,100	71,100	23	464	487
January-April	55,500	192,000	248,000	247	3,710	3,960
2015:	_ '					
January	25,200	53,800	78,900	9	894	903
February	24,600	44,300	69,000	27	378	405
March	24,600	32,800	57,300	56	292	348
April	40,700	40,900	81,500	9	582	591
January-April	115,000	172,000	287,000	100	2,150	2,250

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

Source: U.S. Census Bureau.

 ${\bf TABLE~3} \\ {\bf U.S.~IMPORTS~FOR~CONSUMPTION~OF~SILICOMANGANESE~IN~APRIL~2015}^1$

(Metric tons)

				January–April		
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value ²	weight	content	value ²
Australia	9,110	5,960	\$9,950,000	24,400	16,000	\$26,900,000
Georgia	13,800	10,100	14,200,000	32,200	23,400	33,600,000
India				2,250	1,370	3,650,000
Indonesia				23	15	24,800
Mexico				6,280	4,090	6,530,000
Norway	2,460	1,520	3,910,000	6,900	4,320	9,630,000
South Africa	11,600	7,530	12,200,000	36,500	23,600	38,700,000
Spain				6,360	4,150	6,200,000
Total	37,000	25,100	40,200,000	115,000	77,000	125,000,000

⁻⁻ Zero.

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

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

²Customs 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.

 ${\it TABLE~4} \\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~FERROMANGANESE~IN~APRIL~2015}^1$

(Metric tons)

					January–April		
	Gross	Mn	Customs	Gross	Mn	Customs	
Source	weight	content	value ²	weight	content	value ²	
Low carbon:							
China	618	575	\$1,430,000	6,230	5,840	\$14,000,000	
Germany	24	23	67,300	50	45	130,000	
Korea, Republic of				1,510	1,260	3,230,000	
Mexico				200	157	316,000	
Norway	3,770	3,060	6,190,000	8,690	7,040	14,300,000	
South Africa	76	72	197,000	76	72	197,000	
Total	4,490	3,730	7,890,000	16,800	14,400	32,200,000	
Medium carbon, 1%–2% C:							
China	80	61	177,000	80	61	177,000	
Egypt				298	242	444,000	
Korea, Republic of	805	661	1,750,000	8,310	6,660	12,900,000	
Mexico				1,020	782	1,790,000	
Norway	2,710	2,210	3,930,000	3,680	3,000	5,360,000	
South Africa	750	591	1,090,000	7,250	5,810	11,700,000	
Total	4,350	3,520	6,950,000	20,600	16,600	32,400,000	
Medium carbon, 2%–4% C:	· ·	·		·	-		
China	13	10	28,500	13	10	28,500	
Norway				36	29	64,000	
South Africa				384	302	1,160,000	
Vietnam				54	42	76,100	
Total	13	10	28,500	487	385	1,330,000	
High carbon:							
Australia	5,250	3,880	4,430,000	14,400	10,700	12,300,000	
Brazil				162	124	132,000	
Canada				20	13	25,700	
France				49	37	40,700	
Norway	1,000	785	866,000	2,000	1,570	1,680,000	
South Africa	907	690	796,000	46,500	34,900	43,800,000	
Ukraine	40	25	51,800	4,360	3,330	3,970,000	
Zambia				20	13	29,600	
Total	7,200	5,380	6,150,000	67,500	50,700	62,000,000	
Grand total	16,000	12,600	21,000,000	105,000	82,000	128,000,000	

⁻⁻ Zero.

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

²Customs 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.

 ${\rm TABLE~5}$ U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn) IN APRIL 2015^1

(Metric tons)

					January-April	
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value ²	weight	content	value ²
More than 20%, but less than 47% manganese:						
Gabon				34,600	16,100	\$5,960,000
South Africa	40,000	14,700	\$4,290,000	40,000	14,700	4,290,000
Total	40,000	14,700	4,290,000	74,600	30,800	10,200,000
47% or more manganese:						
Australia				19,800	9,830	5,840,000
Brazil	53	25	23,000	3,460	1,790	1,120,000
Canada				38	20	8,220
China				4	2	3,920
Gabon	48,900	25,400	11,400,000	136,000	70,600	30,700,000
Ivory Coast				18	8	19,400
Morocco				39	34	51,100
Netherlands	(3)	(3)	23,900	(3)	(3)	23,900
South Africa				400	200	106,000
Total	49,000	25,500	11,400,000	160,000	82,500	37,800,000
Grand total	89,000	40,200	15,700,000	235,000	113,000	48,100,000

⁻⁻ Zero.

Source: U.S. Census Bureau.

 ${\bf TABLE~6}$ U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE IN APRIL 2015 1

(Metric tons, gross weight)

·	·	·	Januar	y–April
		Customs		Customs
Source	Quantity	value ²	Quantity	value ²
Belgium	19	\$86,600	39	\$179,000
China	3	11,900	74	110,000
Germany	2	9,600	9	29,300
India	(3)	3,600	(3)	8,640
Japan	704	1,710,000	2,200	5,030,000
Korea, Republic of			(3)	3,880
Mexico	(3)	4,220	(3)	4,220
Netherlands			15	24,900
Poland	(3)	4,320	(3)	4,320
Singapore	12	20,200	60	101,000
South Africa			275	468,000
Spain			4	13,600
Turkey			156	266,000
Total	740	1,850,000	2,840	6,240,000

⁻⁻ Zero.

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

²Customs 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.

³Less than ½ unit.

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

²Customs 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.

³Less than ½ unit.

 ${\rm TABLE}~7$ U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN APRIL 2015^1

(Metric tons)

			Januar	ry–April
	Gross	Customs	Gross	Customs
Source	weight	value ²	weight	value ²
Unwrought flake:				
China	1,170	\$2,200,000	4,780	\$9,390,000
Japan	63	215,000	161	548,000
Mexico			4	10,900
South Africa	815	2,090,000	3,150	8,260,000
Total	2,050	4,510,000	8,100	18,200,000
Unwrought powder:				
China	75	202,000	175	419,000
Mexico	19	57,200	120	369,000
South Africa	258	869,000	512	1,690,000
Total	352	1,130,000	807	2,480,000
Unwrought, other:				
China	603	1,390,000	2,850	6,380,000
Germany	14	32,000	73	165,000
Russia			12	12,200
South Africa	19	49,200	97	240,000
United Kingdom			(3)	2,790
Total	636	1,470,000	3,030	6,800,000
Other manganese, wrought:				
France	(3)	5,550	1	10,200
Germany	41	383,000	120	1,270,000
India			4	14,400
Japan			(3)	13,800
Korea, Republic of			515	1,170,000
Mexico	69	233,000	86	298,000
Sweden			(3)	4,500
Total	110	622,000	727	2,780,000
Metallic waste and scrap, Canada	71	24,300	71	24,300
Grand total	3,220	7,760,000	12,700	30,300,000

⁻⁻ Zero.

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

²Customs 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.

³Less than ½ unit.

TABLE 8 U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE, SILICOMANGANESE, FERROMANGANESE, SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN APRIL 2015^{1, 2}

Source Ore and concentrates with 20% or more manganese: Mexico Netherlands	Gross weight (metric tons)	F.a.s. ³ value (thousands)	Gross weight (metric tons)	ry–April F.a.s. ³ value (thousands)
Ore and concentrates with 20% or more manganese: Mexico	(metric tons) 2 16	(thousands)	_	
Ore and concentrates with 20% or more manganese: Mexico		,	(metric tons)	(thousands)
Mexico	16	\$6		
Mexico	16	\$6		
Netherlands	_		3	\$12
		62	64	246
United Kingdom			133	104
Total	18	67	200	362
Ferromanganese:				
2% or less carbon:	_			
Canada	_		704	1,090
Mexico	_		3	9
United Kingdom			5	9
Total			712	1,110
More than 2% carbon:				
Angola	_		2	3
Canada	20	21	257	265
Congo	6	9	6	9
Equatorial Guinea			9	20
Germany			4	11
Ghana			(5)	5
Italy			22	38
Venezuela			1	3
Total	25	31	300	353
Silicomanganese:				
Canada	73	107	280	345
India			20	18
Mexico	_		142	201
Total	73	107	442	565
Metal, including alloys and waste and scrap: ⁴				
Canada	8	24	13	38
China	13	206	14	210
Germany	13	52	13	57
India	 11	179	11	179
Japan	42	143	71	258
Malaysia	365	208	722	421
Netherlands			81	325
Norway	_		19	855
Pakistan	60	25	60	25
Taiwan			40	21
Other (5 countries)	3	71	10	185
Total	514	909	1,060	2,570
Grand total	630	1,110	2,710	4,960

⁻⁻ Zero.

¹Presentation of monthly data is based on the "January-April" quantities of the leading countries.

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

³Free alongside ship.

⁴Includes manganese-aluminum, other alloys, and waste and scrap.

⁵Less than ½ unit.

TABLE 9 $\mbox{U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS } \\ \mbox{IN APRIL 2015, BY CLASS}^1$

					Janua	ary–April
	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	1,470	\$1,180	Korea, Republic of 639; \$489	3,350	\$2,760	Korea, Republic of 1,580; \$1,230
Manganites, manganates, and			-			-
other permanganates				98	278	China 95; \$248
Potassium permanganate	171	385	India 171; \$385	492	1,290	India 492; \$1,290
Sodium permanganate	189	417	China 189; \$417	685	1,460	China 684; \$1,460
Sulfates, basket category, including manganese sulfate	6,360	5,650	China 3,110; \$2,550	26,200	21,700	China 8,120; \$6,840
Exports:	·	•		·	·	
Manganese dioxide	202	634	Estonia 48; \$254	877	2,230	Canada 346; \$347
Manganese oxides other than dioxide	706	1,140	Canada 138; \$211	3,020	4,930	United Arab Emirates 447; \$537
Manganites, manganates, and						
other permanganates	24	50	Canada 24; \$50	46	131	Canada 42; \$90
Potassium permanganate	416	1,030	Belgium 241; \$549	1,290	3,140	Belgium 892; \$2,020
Sodium permanganate	88	344	Mexico 80; \$325	290	1,040	Mexico 211; \$847
Sulfates, basket category,						
including manganese sulfate	2,600	1,640	Canada 2,300; \$969	9,970	6,360	Canada 8,670; \$3,290

⁻⁻ Zero.

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

²For imports, customs value; for exports, free alongside ship value.