

Mineral Industry Surveys

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MANGANESE IN MAY 2012

Preliminary domestic data (gross weight) for May 2012 indicated that consumption of manganese ore containing 35% or more manganese, exclusive of that consumed at iron and steel plants, was 51,500 metric tons (t). This was a 25% increase from the amount consumed in April 2012. Manganese ore consumption during the first 5 months of 2012 was 224,000 t. This was a 13% increase from the revised amount that was

consumed during the same period in 2011 (198,000 t). Industry stocks of ore at the end of May 2012 were 207,000 t, which was a 4% decrease from those at the end of April 2012.

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 2012.

 $\label{table 1} {\it TABLE~1}$ PRICES FOR MANGANESE FERROALLOYS, METAL, AND ORE IN MAY 2012

					Average low,
		High	Low	Average	mid, and high
Manganese ferroalloys: ¹					
High-carbon ferromanganese, 75% manganese	dollars per long ton of contained manganese	1,320.00	1,250.00	1,292.50	XX
Medium-carbon ferromanganese, 85% manganese	cents per pound of contained manganese	98.00	93.00	95.30	XX
Silicomanganese, 65% manganese	do.	80.00	65.00	74.40	XX
Manganese metal, 99.9% manganese flake ²	cents per pound	162.00	150.00	XX	154.78-157.50-160.22
Manganese ore: ^{3, 4}					
36%-39% manganese	dollars per metric ton unit contained manganese	4.95	4.65	XX	4.73-4.78-4.83
44% manganese	do.	5.25	5.00	XX	5.01-5.09-5.17
46% manganese	do.	5.35	5.15	XX	5.13-5.21-5.29

do. Ditto. XX Not applicable.

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

²Ryan'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.

³Ryan'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

-	Imports	for consumpti	on		Exports	
•	Ore and	Ferroalloy			Ferroalloy	
	dioxide	and metal	Total	Ore	and metal	Total
2011:						
January-December	283,000	541,000	824,000	681	12,500	13,200
January-May	112,000	223,000	334,000	250	7,010	7,260
January	28,900	44,500	73,400	36	1,080	1,120
February	9,160	30,400	39,600	46	1,240	1,290
March	50,900	68,900	120,000	73	1,740	1,810
April	1,720	27,800	29,500	61	1,150	1,210
May	21,100	51,000	72,100	33	1,800	1,830
2012:						
January	11,800	53,000	64,800	36	603	639
February	12,400	34,900	47,300	158	616	775
March	24,500	54,000	78,400	352	848	1,200
April	3,960	59,500	63,400	106	816	922
May	15,500	49,500	65,000	42	620	662
January-May	68,100	251,000	319,000	694	3,500	4,200

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

Source: U.S. Census Bureau.

 ${\bf TABLE~3} \\ {\bf U.S.~IMPORTS~FOR~CONSUMPTION~OF~SILICOMANGANESE~IN~MAY~2012}^1$

(Metric tons)

			January–May		
Gross	Mn	Customs	Gross	Mn	Customs
weight	content	value ²	weight	content	value ²
4,870	3,350	\$5,900,000	9,260	6,290	\$9,530,000
			1,500	984	1,700,000
34	23	29,600	50	34	39,000
2,220	1,210	2,460,000	40,700	28,000	38,300,000
216	95	281,000	216	95	281,000
499	286	778,000	1,440	819	2,210,000
297	195	393,000	297	195	393,000
1,270	843	1,740,000	1,270	843	1,740,000
			620	372	1,070,000
2,210	1,440	2,690,000	5,860	3,830	6,560,000
1,410	864	2,570,000	15,500	9,630	26,700,000
2,700	1,840	3,750,000	5,880	3,990	8,040,000
5,750	3,800	7,180,000	48,000	32,100	51,300,000
4,630	2,990	6,990,000	6,280	3,980	9,650,000
592	370	674,000	592	370	674,000
26,700	17,300	35,400,000	138,000	91,500	158,000,000
	weight 4,870 34 2,220 216 499 297 1,270 2,210 1,410 2,700 5,750 4,630 592	weight content 4,870 3,350 34 23 2,220 1,210 216 95 499 286 297 195 1,270 843 2,210 1,440 1,410 864 2,700 1,840 5,750 3,800 4,630 2,990 592 370	weight content value² 4,870 3,350 \$5,900,000 34 23 29,600 2,220 1,210 2,460,000 216 95 281,000 499 286 778,000 297 195 393,000 1,270 843 1,740,000 2,210 1,440 2,690,000 1,410 864 2,570,000 2,700 1,840 3,750,000 5,750 3,800 7,180,000 4,630 2,990 6,990,000 592 370 674,000	weight content value² weight 4,870 3,350 \$5,900,000 9,260 1,500 34 23 29,600 50 2,220 1,210 2,460,000 40,700 216 95 281,000 216 499 286 778,000 1,440 297 195 393,000 297 1,270 843 1,740,000 1,270 620 2,210 1,440 2,690,000 5,860 1,410 864 2,570,000 15,500 2,700 1,840 3,750,000 5,880 5,750 3,800 7,180,000 48,000 4,630 2,990 6,990,000 6,280 592 370 674,000 592	Gross weight Mn Customs value² Gross weight Mn 4,870 3,350 \$5,900,000 9,260 6,290 1,500 984 34 23 29,600 50 34 2,220 1,210 2,460,000 40,700 28,000 216 95 281,000 216 95 499 286 778,000 1,440 819 297 195 393,000 297 195 1,270 843 1,740,000 1,270 843 620 372 2,210 1,440 2,690,000 5,860 3,830 1,410 864 2,570,000 15,500 9,630 2,700 1,840 3,750,000 5,880 3,990 5,750 3,800 7,180,000 48,000 32,100 4,630 2,990 6,990,000 6,280 3,980 592

⁻⁻ Zero.

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

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.

 ${\bf TABLE~4} \\ {\bf U.S.~IMPORTS~FOR~CONSUMPTION~OF~FERROMANGANESE~IN~MAY~2012}^{1}$

(Metric tons)

					January-M	lay
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value ²	weight	content	value ²
Low carbon:						
China	869	812	\$2,490,000	3,170	2,970	\$8,910,000
India				2,520	2,050	4,370,000
Korea, Republic of				1,040	936	2,870,000
Mexico	1,200	973	2,080,000	2,920	2,360	5,010,000
Norway	518	415	884,000	4,620	3,730	7,480,000
South Africa				20	16	59,400
Vietnam				1,040	899	2,040,000
Total	2,590	2,200	5,460,000	15,300	13,000	30,700,000
Medium carbon, 1%–2% C:						
China	40	30	97,300	40	30	97,300
Korea, Republic of				10,900	8,820	16,200,000
Mexico	40	31	54,100	1,050	801	2,090,000
Norway	3,800	3,080	5,280,000	11,000	8,950	15,200,000
South Africa	5,950	4,760	8,640,000	12,600	10,100	18,900,000
Total	9,830	7,910	14,100,000	35,600	28,700	52,500,000
Medium carbon, 2%–4% C, South Africa	21	19	50,400	57	50	139,000
High carbon:						
Australia	4,010	3,110	4,090,000	17,000	13,200	16,600,000
Bahrain	89	71	128,000	89	71	128,000
Brazil	219	163	228,000	219	163	228,000
China	190	144	228,000	273	204	298,000
France				2,500	1,910	3,000,000
India				297	223	248,000
Korea, Republic of	20	16	22,400	140	106	157,000
Norway	900	688	891,000	6,620	5,110	6,610,000
Saudi Arabia				1,400	1,010	1,180,000
South Africa	17,700	13,800	20,000,000	91,300	70,200	94,300,000
Ukraine	130	83	155,000	7,310	5,670	7,590,000
Total	23,300	18,100	25,700,000	127,000	97,900	130,000,000
Grand total	35,700	28,200	45,300,000	178,000	140,000	214,000,000

⁻⁻ 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.

TABLE 5 U.S. IMPORTS FOR CONSUMPTION OF MANGANESE ORE (20% OR MORE Mn) IN MAY $2012^{1,\,2}$

(Metric tons)

				J	anuary–Ma	y
	Gross	Mn	Customs	Gross	Mn	Customs
Source	weight	content	value ³	weight	content	value ³
More than 20%, but less than 47% manganese:						
Brazil				2,580	682	\$669,000
Gabon				19,500	8,360	2,600,000
Mexico				3,040	1,100	602,000
Total				25,100	10,100	3,870,000
47% or more manganese:						
Australia				20,700	10,300	3,120,000
Belgium	1,390	703	\$107,000	2,840	1,450	281,000
Brazil				2,690	1,430	861,000
Gabon	27,500	13,800	6,270,000	76,500	38,700	17,900,000
Korea, Republic of	20	(4)	137,000	20	(4)	137,000
Morocco				1,050	556	285,000
Poland				7	4	5,760
Total	29,000	14,500	6,520,000	104,000	52,400	22,600,000
Grand total	29,000	14,500	6,520,000	129,000	62,600	26,500,000

⁻⁻ Zero.

Source: U.S. Census Bureau.

 ${\it TABLE~6}$ U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE IN MAY 2012^1

(Metric tons, gross weight)

			January	y–May
		Customs		Customs
Source	Quantity	value ²	Quantity	value ²
Belgium	59	\$29,000	545	\$300,000
Germany			24	40,200
India			25	20,500
Japan	674	1,650,000	3,160	7,650,000
Korea, Republic of	(3)	3,500	13	25,200
Mexico			40	35,100
Norway			260	197,000
Singapore	11	19,400	57	96,900
South Africa	953	1,700,000	4,740	11,000,000
Turkey			379	180,000
Total	1,700	3,410,000	9,250	19,500,000

⁻⁻ Zero.

¹Quantities for general imports and imports for consumption are identical.

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

³Customs 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.

⁴Less 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 1/2 unit.

 ${\it TABLE~7}$ U.S. IMPORTS FOR CONSUMPTION OF MANGANESE METAL IN MAY 2012^1

(Metric tons)

			Janua	ry–May
	Gross	Customs	Gross	Customs
Source	weight	value ²	weight	value ²
Unwrought flake:				
Brazil			21	\$61,400
China	1,350	\$3,730,000	6,600	18,300,000
Japan			1	2,960
Mexico	36	173,000	89	422,000
South Africa	1,390	4,570,000	2,180	7,420,000
Vietnam			200	547,000
Total	2,770	8,470,000	9,080	26,800,000
Unwrought powder:				
China			238	679,000
Mexico			53	252,000
South Africa	180	726,000	976	3,850,000
Spain			1	2,220
Total	180	726,000	1,270	4,780,000
Unwrought, other:				
China	945	2,540,000	8,650	23,700,000
Germany			13	44,900
South Africa			267	974,000
Spain	109	369,000	420	1,650,000
Total	1,050	2,910,000	9,350	26,400,000
Other manganese, wrought:				
China			3	13,800
Germany			1	71,900
Japan			(3)	39,200
Mexico			7	31,300
Total			12	156,000
Grand total	4,000	12,100,000	19,700	58,100,000

⁻⁻ Zero.

Note: Imports for consumption of metallic waste and scrap totaled 61 metric tons (t), all of which was from Canada, to give a January–May total of 328 t.

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

²Customs value generally represent 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, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN MAY $2012^{1,2}$

			Januar	
		F.a.s. ³		F.a.s. ³
	Gross weight	value	Gross weight	value
Source	(metric tons)	(thousands)	(metric tons)	(thousands)
Ore and concentrates with 20% or more manganese:	_		70	Ф20
Aruba		 #26	78	\$20
Canada		\$36	268	293
China			51	66
Denmark	_		77	32
Hong Kong	_		11	39
Indonesia			3	3
Korea, Republic of	_ 34	44	204	264
Netherlands	18	61	689	612
United Arab Emirates			3	10
United Kingdom	4	13	4	13
Total	83	154	1,390	1,350
Ferromanganese:	_			
2% or less carbon:		100	510	754
Canada	125	189	518	754
Guatemala			23	43
Hungary			3	5
Japan	_ 21	56	100	245
Mexico	_ 4	10	108	195
Turkey			60	154
Total	150	255	811	1,400
More than 2% carbon:	_			40
Brazil	_ 1	3	14	40
Canada	176	227	387	489
Chile			15	43
Japan			4	11
Mexico	_ 1	3	60	78
Norway			1	6
Saudi Arabia	11	31	11	31
Singapore	_ 4	11	15	43
United Arab Emirates			3	8
United Kingdom			1	3
Total	193	274	512	751
Silicomanganese:	_			
Brazil		48	176	428
Canada	105	144	1,250	1,700
Dominican Republic			9	21
Indonesia	_ 8	11	10	16
Mexico			362	514
Total	132	203	1,810	2,680
Metal, including alloys and waste and scrap: ⁴	_			
Belgium	_		24	52
Brazil	37	150	37	150
Canada	53	117	76	186
China	88	353	429	1,440
France			62	278
Germany	37	80	79	172
India	7	15	178	405
Japan			54	160
Mexico	23	44	186	505
Norway			62	278
Other (7 countries)	17	38	81	172
Total	262	796	1,270	3,800
Grand total	820	1,680	5,780	9,980

⁻⁻ Zero.

¹Presentation of monthly data is based on the year-to-date quantities (gross weight) 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.

TABLE 8 EXPORTS OF MANIGANIESE ORE (20% OR MODE Mr.) FE

U.S. EXPORTS OF MANGANESE ORE (20% OR MORE Mn), FERROMANGANESE, SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN MAY $2012^{1,2}$

Source: U.S. Census Bureau.

 ${\it TABLE~9} \\ {\it U.S.~FOREIGN~TRADE~IN~SELECTED~MANGANESE~CHEMICALS~IN~MAY~2012,~BY~CLASS}^1$

					Janua	ry–May
			Principal sources and destinations:			Principal sources and destinations:
	Gross weight	Value ²	gross weight (metric tons);	Gross weight	Value ²	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	420	\$396	Norway 200; \$160	1,440	\$1,660	Norway 390; \$320
Manganites, manganates, and						
other permanganates	17	68	Germany 17; \$63	44	393	China 18; \$45
Potassium permanganate	91	284	India 91; \$284	726	2,330	India 667; \$2,120
Sodium permanganate	21	49	China 21; \$49	87	215	China 87; \$215
Sulfates, basket category,						
including manganese sulfate	3,810	4,110	Mexico 1,640; \$1,540	21,800	20,900	Mexico 7,090; \$6,190
Exports:						
Manganese dioxide	679	1,340	Canada 312; \$260	3,700	6,210	Canada 2,110; \$1,790
Manganese oxides other than dioxide	827	1,320	Canada 283; \$313	4,030	6,210	Canada 1,090; \$1,270
Manganites, manganates, and						
other permanganates	21	34	Mexico 12; \$12	121	334	Canada 105; \$276
Potassium permanganate	263	652	Belgium 239; \$583	1,400	3,530	Belgium 1,020; \$2,340
Sodium permanganate	113	270	Mexico 37; \$77	446	1,020	Belgium 182; \$332
Sulfates, basket category,						
including manganese sulfate	1,530	948	Canada 1,290; \$543	6,600	5,540	Canada 5,380; \$2,930

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

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