

Mineral Industry Surveys

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SILICON IN APRIL 2004

In April 2004, domestic production of silicon ferroalloys plus metal, excluding silvery pig iron, increased by about 2% compared with that in March 2004, according to the U.S. Geological Survey. Domestic shipments and stocks of silicon ferroalloys plus metal decreased by 5% and 6%, respectively, compared with those in the previous month. All domestic data for ferrosilicon have been combined to avoid disclosing company proprietary data.

The ensuing discussion is based on a comparison of the March 2004 trade data, which are included in this report, to those of the prior month, on a gross weight basis. Ferrosilicon exports increased by 5%, owing to an increase in the "ferrosilicon, other" trade category. Silicon metal exports increased by 34% owing primarily to a significant increase in the "silicon metal, more than 99.99% silicon" trade category. Ferrosilicon imports decreased by 46%, and silicon metal imports increased by 61%. The decrease in ferrosilicon imports was due primarily to a significant decrease in the "ferrosilicon, 55%-80%, other" trade category, while the increase in silicon metal imports was due primarily to significant increases in all trade categories.

On April 15, the U.S. Court of International Trade (CIT) remanded the antidumping duty margins for silicon metal imports from Companhia Brasileira Carbuerto de Calcio (CBCC) (0.63%) and Eletrosilex S.A. (93.2%) back to the U.S. Department of Commerce's International Trade Administration. These antidumping duties apply to such silicon metal imports during the period July 1, 1998, through June 30, 1999 (Elkem

Metals Company and Globe Metallurgical Inc. v. United States, Consolidated Court No. 01-00098, Slip Opinion 04-36).

Update

On May 12, the CIT remanded for the third time the antidumping case on U.S. ferrosilicon imports back to the U.S. International Trade Commission (Elkem Metals Co. v. United States, Consolidated Court No. 99-10-00628, Slip Opinion 04-49). The case involves the elimination of all duties on ferrosilicon imports from Brazil, China, Kazakhstan, Russia, Ukraine, and Venezuela in 1994. The Court's opinion was confidential. As of June 23, a public version had yet to be posted on the CIT website.

On June 8, Globe restarted one of the two silicon metal smelters at its Selma, AL, plant. The smelter was shut down on May 28 because of what the company called an "eruption." The company reported a loss of about 360 metric tons (400 short tons). The company did not cite a reason for the outage (Platts Metals Week, 2004).

Reference Cited

Platts Metals Week, 2004, Globe restarts Alabama silicon furnace, lost 400st:
 Platts Metals Week, v. 75, no. 24, June 14, p. 5.

Prices, cents per pound, silicon content

	<u>50% Ferrosilicon¹</u>	<u>75% Ferrosilicon²</u>	<u>Silicon Metal²</u>
April 1	67.0-70.0	66.00-68.50	78.0-80.0
April 8	67.0-70.0	68.00-70.00	78.0-80.0
April 15	67.0-70.0	67.00-70.00	81.0-85.0
April 22	66.0-69.0	67.00-69.00	81.0-85.0
April 29	66.0-69.0	64.00-68.00	83.0-85.0

¹Source: Ryan's Notes, North American transaction price.

²Source: Platts Metals Week, dealer import price.

TABLE 1
U.S. PRODUCTION, SHIPMENTS, AND PRODUCER STOCKS OF SILICON ALLOYS AND METAL IN 2004^{1, 2, 3}

(Metric tons)

Material	Gross production ⁴		Net shipments		Stocks, April 30
	April	Year to date ⁵	April	Year to date ⁵	
Ferrosilicon, all grades ^{6, 7}	15,100	57,500	11,700	47,100	17,300
Silicon metal, excludes semiconductor grades	12,500	47,300	12,400	47,200	2,860

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

²Includes U.S. Geological Survey estimates.

³Data for silvery pig iron (less than 25% silicon) withheld to avoid disclosing company proprietary data.

⁴Includes in-plant consumption, as in production of magnesium ferrosilicon and other miscellaneous alloys.

⁵Includes revisions to previous months' data.

⁶Ferrosilicon categories were aggregated to avoid disclosing company proprietary data.

⁷Includes miscellaneous silicon alloys.

TABLE 2
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN MARCH 2004^{1, 2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Ferrosilicon:						
More than 55% silicon:						
Canada	350	210	\$309,000	1,070	640	\$887,000
Japan	1	(3)	2,780	1	(3)	2,780
Mexico	168	101	208,000	373	227	416,000
United Kingdom	--	--	--	2	1	2,690
Total	519	311	520,000	1,440	868	1,310,000
Other ferrosilicon:						
Canada	256	128	260,000	764	382	792,000
France	13	6	10,000	13	6	10,000
India	--	--	--	(3)	(3)	5,010
Mexico	151	76	154,000	402	201	393,000
Spain	8	4	7,550	12	6	10,800
Total	428	214	432,000	1,190	595	1,210,000
Total ferrosilicon	947	525	951,000	2,630	1,460	2,520,000
Metal:						
More than 99.99% silicon:						
China	153	XX	3,660,000	376	XX	9,530,000
Denmark	16	XX	1,160,000	36	XX	2,280,000
France	28	XX	699,000	108	XX	2,610,000
Germany	90	XX	2,420,000	200	XX	6,410,000
Italy	10	XX	604,000	33	XX	2,180,000
Japan	397	XX	18,400,000	1,170	XX	50,300,000
Korea, Republic of	70	XX	3,320,000	189	XX	8,470,000
Norway	72	XX	1,800,000	96	XX	2,410,000
Taiwan	14	XX	534,000	49	XX	1,980,000
United Kingdom	19	XX	1,720,000	48	XX	4,270,000
Other (28 countries)	44	XX	3,150,000	110	XX	7,420,000
Total	914	914^e	37,500,000	2,410	2,410^e	97,900,000

See footnotes at end of table.

TABLE 2--Continued
 U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN MARCH 2004^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Metal--Continued:						
99.00% - 99.99% silicon:						
Australia	--	--	--	3	3	\$4,020
Brazil	49	48	\$143,000	74	73	212,000
China	2	2	4,380	4	4	7,810
Colombia	--	--	--	85	84	120,000
France	--	--	--	8	8	17,400
Hong Kong	4	4	5,400	4	4	5,400
Italy	--	--	--	4	4	12,700
Japan	--	--	--	15	15	44,000
Korea, Republic of	--	--	--	4	4	12,900
Mexico	11	11	15,000	11	11	15,000
Other (Venezuela)	3	3	6,670	3	3	6,670
Total	68	67	175,000	215	213	458,000
Other silicon:						
Canada	40	39	50,400	79	77	98,100
Hong Kong	4	4	44,100	4	4	44,100
Indonesia	4	4	5,550	4	4	5,550
Japan	5	5	67,400	146	142	460,000
Latvia	--	--	--	81	79	107,000
Mexico	61	60	133,000	113	110	311,000
Netherlands	64	61	614,000	221	213	1,510,000
Norway	23	22	30,400	37	36	49,000
Taiwan	--	--	--	164	159	216,000
United Kingdom	134	130	177,000	146	142	277,000
Other (7 countries)	(3)	(3)	3,680	9	8	36,300
Total	336	325	1,130,000	1,010	974	3,110,000
Total silicon metal	1,320	1,310	38,800,000	3,630	3,600	101,000,000

⁰Estimated. XX Not applicable. -- Zero.

¹Presentation of monthly data is based on the year-to-date quantities (gross weight) of the top 10 countries.

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

³Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN MARCH 2004^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Ferrosilicon:						
55% - 80% silicon, over 3% Ca:						
Brazil	54	32	\$58,400	111	67	\$119,000
France	36	22	49,400	53	32	72,100
Total	90	54	108,000	164	99	191,000
55% - 80% silicon, Other:						
Canada	950	720	715,000	3,450	2,590	2,540,000
China	2,070	1,530	1,200,000	17,700	13,600	10,900,000
France	256	173	477,000	831	547	1,450,000
Germany	83	60	364,000	202	143	738,000
Iceland	--	--	--	4,300	3,230	2,710,000
Kazakhstan	--	--	--	4,000	3,060	2,880,000
Norway	553	412	683,000	2,000	1,480	2,270,000
Russia	2,250	1,700	1,580,000	4,060	3,010	2,660,000
South Africa	--	--	--	1,300	991	872,000
Venezuela	2,950	2,280	2,150,000	10,200	7,890	7,180,000
Other (4 countries)	102	65	112,000	261	181	234,000
Total	9,220	6,930	7,280,000	48,300	36,700	34,400,000
80% - 90% silicon:						
Brazil	--	--	--	5	4	3,230
Canada	--	--	--	18	14	9,430
Total	--	--	--	23	19	12,700
Magnesium ferrosilicon:						
Argentina	422	193	336,000	842	389	661,000
Brazil	22	10	14,300	421	189	295,000
Canada	18	9	14,900	116	56	94,200
China	40	19	33,000	1,720	781	1,210,000
France	--	--	--	20	10	22,100
India	78	35	74,500	155	89	167,000
Japan	16	7	32,500	47	19	105,000
Netherlands	--	--	--	109	51	84,900
Norway	1,590	728	1,230,000	3,750	1,700	2,960,000
New Zealand	--	--	--	41	19	26,700
Other (South Africa)	--	--	--	1	(3)	10,500
Total	2,190	1,000	1,740,000	7,230	3,300	5,640,000
Other ferrosilicon:						
Brazil	83	38	91,100	269	102	260,000
Canada	801	221	572,000	2,370	703	1,660,000
China	--	--	--	64	33	108,000
France	19	10	39,200	22	12	50,500
Italy	4	2	3,670	4	2	3,670
Ukraine	--	--	--	5	3	4,030
Total	907	271	706,000	2,730	854	2,080,000
Total ferrosilicon	12,400	8,250	9,830,000	58,500	41,000	42,400,000

See footnotes at end of table.

TABLE 3--Continued
 U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN MARCH 2004^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Metal:						
More than 99.99% silicon:						
China	(3)	XX	\$6,070	(3)	XX	\$28,400
Denmark	(3)	XX	61,600	(3)	XX	137,000
Germany	45	XX	4,760,000	105	XX	12,500,000
Ireland	--	XX	--	(3)	XX	4,890
Italy	21	XX	1,350,000	95	XX	3,840,000
Japan	27	XX	1,700,000	72	XX	3,610,000
Korea, Republic of	6	XX	32,000	12	XX	119,000
Mexico	16	XX	111,000	16	XX	111,000
Spain	--	XX	--	3	XX	12,000
Taiwan	17	XX	43,000	24	XX	126,000
Other (Ukraine)	--	XX	--	(3)	XX	2,420
Total	132	132^e	8,070,000	328	328^e	20,500,000
99.00% - 99.99% silicon:						
Australia	279	278	388,000	612	608	827,000
Brazil	4,540	4,510	5,340,000	13,400	13,300	15,700,000
Canada	2,650	2,640	3,520,000	5,970	5,940	7,900,000
France	894	888	1,380,000	934	928	1,420,000
Netherlands	9	9	30,100	9	9	30,100
Norway	538	535	1,100,000	1,560	1,540	3,080,000
South Africa	3,470	3,180	4,250,000	5,880	5,570	7,050,000
Sweden	7	7	47,900	17	17	121,000
Total	12,400	12,000	16,100,000	28,400	27,900	36,100,000
Other silicon:						
Belgium	79	51	112,000	96	52	130,000
Brazil	1,080	1,060	1,420,000	1,760	1,730	2,190,000
Canada	281	275	374,000	867	850	1,140,000
China	120	118	135,000	690	679	680,000
France	583	575	755,000	795	773	1,020,000
Germany	--	--	--	100	97	443,000
Korea, Republic of	--	--	--	21	(3)	22,800
South Africa	297	289	332,000	1,390	1,360	1,370,000
Ukraine	163	159	175,000	535	522	580,000
United Kingdom	17	17	28,500	75	74	120,000
Other (2 countries)	2	2	2,200	2	2	11,400
Total	2,620	2,550	3,330,000	6,330	6,150	7,700,000
Total silicon metal	15,100	14,700	27,500,000	35,100	34,400	64,300,000

^eEstimated. XX Not applicable. -- Zero.

¹Presentation of monthly data is based on the year-to-date quantities (gross weight) of the top 10 countries.

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

³Less than 1/2 unit.

Source: U.S. Census Bureau.