

Mineral Industry Surveys

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SILICON IN MARCH 2014

On a gross-weight basis, data for March 2014 indicate that domestic production of total silicon materials (ferrosilicon plus silicon metal) was 7% higher than that in February 2014. Net shipments and ending stocks were 17% and 4% higher, respectively, than those in February 2014 (table 1). Stocks included adjustments in inventory and in-plant consumption of ferrosilicon to produce magnesium ferrosilicon and other miscellaneous alloys. Total production and net shipments during

the first 3 months of 2014 were 20% higher and 26% higher, respectively, than those during the same period in 2013.

Production-related statistics for the individual categories of ferrosilicon and silicon metal were concealed to avoid disclosing company proprietary data. Totals for both categories are listed on table 1.

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

TABLE 1
 PRODUCTION, SHIPMENTS, AND STOCKS OF SILICON ALLOYS
 AND METAL IN THE UNITED STATES^{1,2}

(Metric tons, gross weight)

	Gross production ³	Net shipments	Producers' stocks, end of period
2013:			
January–December	468,000	331,000	33,700
January–March	107,000	74,200 ^r	40,300 ^r
March	38,600	24,500	40,300
April	39,300	22,400	44,400
May	34,300	25,500	43,300
June	42,100	34,600	42,200
July	34,100	25,500	40,000
August	42,100	30,200	40,500
September	39,700	30,000	35,500
October	45,200	30,800	34,800
November	44,300	27,800	37,100
December	40,000	29,700	33,700
2014:			
January	43,700	32,700	31,900
February	40,900	28,100	33,400
March	43,800	32,800	34,900
January–March	128,000	93,700	34,900

^rRevised.

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

²Includes ferrosilicon, miscellaneous silicon alloys, and silicon metal, excluding semiconductor and solar grades, except where noted.

³Ferrosilicon production includes material consumed in the production of miscellaneous silicon alloys.

TABLE 2
 PRICES FOR FERROSILICON AND SILICON METAL IN MARCH 2014

	High	Low	Average	Average low, mid, and high
Ferrosilicon:				
50% ferrosilicon ¹				
cents per pound of contained silicon	110.00	106.00	XX	106.00–108.00–110.00
75% ferrosilicon ²				
do.	100.00	96.00	98.50	XX
Silicon metal, 553 grade ³				
cents per pound	137.00	134.00	135.63	XX

do. Ditto. XX Not applicable.

¹CRU Ryan's Notes, North American transaction price, duty paid, f.o.b. Pittsburgh, producing plant or Chicago/Pittsburgh warehouse. Average price reported for price range.

²Platts Metals Week, in U.S. warehouse, U.S. origin and imported material. Average prices reported for all transactions during the month.

³Platts Metals Week, duty paid, delivered Midwest, U.S. spot and imported 553 grade silicon metal (minimum 98.50% silicon). Average price reported for all transactions during the month.

TABLE 3
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN MARCH 2014^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	January–March ³		
				Gross weight	Contained weight	Value
Ferrosilicon:						
More than 55% silicon:						
Austria	--	--	--	4	3	\$7,000
Brazil	19	11	\$29,600	19	11	29,600
Canada	222	133	346,000	763	458	1,190,000
Colombia	--	--	--	19	14	50,400
France	--	--	--	20	15	26,600
Japan	--	--	--	208	160	373,000
Mexico	170	103	382,000	612	382	1,500,000
Turkey	--	--	--	5	4	11,700
United Kingdom	--	--	--	55	33	85,800
Total	411	247	758,000	1,710	1,080	3,270,000
Other ferrosilicon:						
Belgium	40	20	76,400	239	110	464,000
Brazil	--	--	--	38	19	90,400
Canada	238	119	255,000	302	151	396,000
Korea, Republic of	54	24	62,100	162	71	186,000
Mexico	55	27	122,000	245	120	620,000
Netherlands	40	17	18,800	100	43	47,000
Poland	--	--	--	61	12	137,000
Switzerland	--	--	--	20	9	38,800
Turkey	140	64	266,000	555	251	1,100,000
United Kingdom	139	70	116,000	200	100	158,000
Other (2 countries)	20	9	43,700	39	18	93,700
Total	726	350	960,000	1,960	903	3,330,000
Total ferrosilicon	1,140	597	1,720,000	3,670	1,980	6,600,000
Metal:						
More than 99.99% silicon:						
China	581	581	31,000,000	3,470	3,470	91,600,000
Germany	500	500	16,800,000	2,040	2,040	70,900,000
Hong Kong	50	50	1,500,000	108	108	3,680,000
Japan	918	918	49,100,000	2,610	2,610	141,000,000
Korea, Republic of	410	410	13,900,000	920	920	39,200,000
Malaysia	31	31	3,990,000	91	91	12,100,000
Norway	12	12	574,000	93	93	4,780,000
Singapore	247	247	4,140,000	543	543	9,160,000
Taiwan	320	320	13,800,000	1,420	1,420	42,300,000
Thailand	--	--	--	80	80	1,270,000
Other (27 countries)	85	85	5,420,000	186	186	12,400,000
Total	3,150	3,150	140,000,000	11,600	11,600	429,000,000
99.00%–99.99% silicon:						
China	--	--	--	14	14	41,000
India	1	1	5,760	1	1	5,760
Mexico	2	2	4,530	4	4	9,070
Taiwan	1	1	7,640	1	1	7,640
Turkey	--	--	--	9	9	12,600
Total	4	4	17,900	29	29	76,000
Other silicon:						
Austria	21	21	28,200	21	21	28,200
Belgium	39	38	40,000	52	51	57,900
Canada	37	36	112,000	617	599	1,700,000
India	(3)	(3)	3,050	6	6	11,000
Korea, Republic of	83	81	125,000	84	82	136,000
Kuwait	--	--	--	11	11	14,700
Mexico	23	22	67,600	30	29	85,000

See footnotes at end of table.

TABLE 3—Continued
 U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN MARCH 2014^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	January–March ³		Value
				Gross weight	Contained weight	
Metal—Continued:						
99.00%–99.99% silicon:						
South Africa	1	1	\$15,400	8	7	\$27,900
Taiwan	26	25	250,000	26	25	250,000
Turkey	5	4	6,000	5	4	6,000
Others (9 countries)	2	2	23,600	14	13	87,900
Total	237	230	671,000	875	849	2,400,000
Total silicon metal	3,390	3,380	141,000,000	12,500	12,500	431,000,000

-- Zero.

¹Presentation of monthly data is based on the "January–March" quantities (gross weight) of the leading countries.

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

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 4
U.S. IMPORTS OF FERROSILICON AND SILICON METAL IN MARCH 2014^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	January–March ³		
				Gross weight	Contained weight	Value
Ferrosilicon:						
55%–80% silicon, more than 3% Ca:						
Brazil	50	38	\$85,000	266	201	\$386,000
Canada	--	--	--	20	11	11,700
China	398	299	507,000	933	697	1,210,000
France	7	5	38,600	43	27	125,000
Germany	--	--	--	5	3	8,200
South Africa	54	37	113,000	108	73	225,000
Total	509	379	743,000	1,380	1,010	1,970,000
55%–80% silicon, other:						
Brazil	294	216	428,000	1,640	1,230	2,290,000
Canada	1,120	820	2,630,000	2,760	2,020	6,850,000
China	6,380	4,810	9,130,000	12,100	9,140	17,000,000
France	257	173	734,000	563	379	1,650,000
Germany	86	59	254,000	172	120	578,000
Iceland	341	263	517,000	3,710	2,800	5,480,000
India	59	46	137,000	261	204	554,000
Russia	40	30	61,300	22,400	17,200	32,900,000
South Africa	604	451	987,000	919	687	1,510,000
Venezuela	--	--	--	10,400	7,800	14,700,000
Other (3 countries)	126	94	308,000	195	141	714,000
Total	9,300	6,960	15,200,000	55,200	41,700	84,100,000
Magnesium ferrosilicon:						
Argentina	53	25	45,500	133	62	146,000
Brazil	103	49	170,000	381	172	642,000
Canada	1,170	513	2,270,000	3,360	1,520	5,820,000
China	--	--	--	179	80	334,000
Germany	--	--	--	5	2	8,200
India	309	148	504,000	965	463	1,620,000
Norway	169	81	368,000	392	189	856,000
Total	1,800	816	3,360,000	5,410	2,490	9,420,000
Other ferrosilicon:						
Canada	1,120	380	1,210,000	3,150	1,090	3,620,000
China	16	8	32,200	140	77	243,000
Germany	1	(3)	2,340	2	1	7,010
Poland	--	--	--	19	9	29,700
Russia	--	--	--	3	1	4,700
Vietnam	--	--	--	150	113	209,000
Total	1,130	389	1,250,000	3,460	1,290	4,110,000
Total ferrosilicon	12,700	8,540	20,500,000	65,400	46,500	99,600,000
Metal:						
More than 99.99% silicon:						
Brazil	--	--	--	77	77	233,000
China	10	10	130,000	28	28	347,000
Denmark	(3)	(3)	104,000	1	1	209,000
Germany	115	115	6,350,000	226	226	14,900,000
Japan	19	19	1,290,000	33	33	2,510,000
Korea, Republic of	1	1	58,500	2	2	63,300
Malaysia	1	1	31,700	1	1	31,700
Norway	1	1	46,400	3	3	151,000
Spain	(3)	(3)	4,220	1	1	12,500
Taiwan	9	9	221,000	25	25	616,000
Other (6 countries)	(3)	(3)	49,200	1	1	203,000
Total	157	157	8,290,000	395	395	19,300,000

See footnotes at end of table.

TABLE 4—Continued
U.S. IMPORTS OF FERROSILICON AND SILICON METAL IN MARCH 2014^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	January–March ³		
				Gross weight	Contained weight	Value
Metal—Continued:						
99.00%–99.99% silicon:						
Australia	399	398	\$1,020,000	3,880	3,860	\$10,100,000
Brazil	2,690	2,670	6,890,000	11,700	11,600	30,700,000
Canada	555	551	1,550,000	716	710	1,990,000
France	1,120	1,110	2,950,000	1,120	1,110	2,950,000
Japan	16	(3)	21,400	16	(3)	21,400
Norway	528	525	1,810,000	1,480	1,460	5,070,000
South Africa	4,520	4,480	12,100,000	10,400	10,300	28,000,000
Spain	160	159	430,000	900	894	2,400,000
Thailand	659	654	1,560,000	1,350	1,340	3,160,000
United Kingdom	--	--	--	19	19	45,100
Other (1 country)	--	--	--	1	1	2,240
Total	10,600	10,500	28,300,000	31,500	31,200	84,500,000
Other silicon:						
Australia	288	284	799,000	288	284	799,000
Belgium	--	--	--	1	1	2,630
Brazil	816	796	2,120,000	2,250	2,220	5,710,000
Canada	100	99	269,000	201	199	539,000
China	65	(3)	16,200	65	(3)	16,200
France	214	212	566,000	214	212	566,000
Japan	--	--	--	7	(3)	9,670
Norway	20	19	52,900	132	127	199,000
South Africa	--	--	--	20	20	46,000
United Kingdom	36	34	79,000	36	34	79,000
Total	1,540	1,440	3,900,000	3,220	3,090	7,960,000
Total silicon metal	12,300	12,100	40,500,000	35,100	34,700	112,000,000

-- Zero.

¹Presentation of monthly data is based on the "January–March" quantities (gross weight) of the leading countries.

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

³Less than ½ unit.

Source: U.S. Census Bureau.