

Mineral Industry Surveys

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SILICON IN FEBRUARY 2012

Data for February 2012 indicate that domestic production and net shipments of total silicon materials (ferrosilicon plus silicon metal), on a gross-weight basis, were slightly higher and 27% higher, respectively, than those in January 2012. Ending stocks were 18% higher than those at the end of January. Stocks included adjustments in inventory and in-plant consumption of ferrosilicon to produce magnesium ferrosilicon and other miscellaneous alloys.

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. foreign trade data for selected silicon-containing materials in February 2012.

Prices

Prices for silicon materials in February 2012, in cents per pound, silicon content, are listed below.

50% Ferrosilicon prices¹

<u>Price Range</u>	<u>Average Low, Mid, and High Prices</u>
105.00–108.00	105.00–106.50–108.00

75% Ferrosilicon prices²

<u>Price Range</u>	<u>Average Price</u>
93.00–96.00	95.20

Silicon metal prices²

<u>Price Range</u>	<u>Average Price</u>
129.00–138.00	133.90

¹Source: Ryan's Notes, North American transaction price. Average prices reported for the price range.

²Source: Platts Metals Week, dealer import price. Average price reported for all transactions during the month.

TABLE 1
 PRODUCTION, SHIPMENTS, AND STOCKS OF SILICON ALLOYS
 AND METAL IN THE UNITED STATES^{1,2,3}

(Metric tons, gross weight)

	Gross production ⁴	Net shipments	Producers' stocks, end of period
2011:			
January–December ⁵	437,000	354,000	42,600
January–February ⁵	57,500	46,000	32,700
February	36,500	28,000	32,700
March	39,000 ^r	32,600 ^r	31,900
April	39,500 ^r	33,000 ^r	31,200
May	38,900	28,900	33,900
June	38,600	32,700	34,000
July	39,100	29,600	36,100
August	39,000	29,700	39,400
September	36,900	29,900	38,800
October	36,900	29,900	38,800
November	32,500	27,400	24,600
December	39,200	25,800	42,600
2012:			
January	42,700	25,800	38,600
February	43,300	32,900	45,300
January–February	86,000	58,700	45,300

^rRevised.

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

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

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

⁴Ferrosilicon production includes material consumed in the production of miscellaneous silicon alloys.

⁵January 2011 data include ferrosilicon and miscellaneous silicon alloys only.

TABLE 2
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN FEBRUARY 2012^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	January–February		
				Gross weight	Contained weight	Value
Ferrosilicon:						
More than 55% silicon:						
Canada	458	275	\$691,000	1,150	692	\$1,750,000
Colombia	--	--	--	3	2	6,960
Hong Kong	3	2	4,700	3	2	4,700
Japan	351	269	699,000	654	498	1,300,000
Mexico	148	92	321,000	295	180	692,000
Spain	120	97	297,000	120	97	297,000
Total	1,080	735	2,010,000	2,230	1,470	4,050,000
Other ferrosilicon:						
Brazil	--	--	--	39	20	95,000
Canada	95	48	182,000	229	114	528,000
Colombia	19	9	58,800	35	16	109,000
Italy	33	17	87,700	33	17	87,700
Korea, Republic of	144	65	192,000	144	65	192,000
Mexico	134	67	343,000	223	112	549,000
Poland	20	9	51,000	20	9	51,000
Taiwan	--	--	--	42	21	52,400
Turkey	180	82	422,000	180	82	422,000
United Kingdom	38	19	105,000	38	19	105,000
Total	663	314	1,440,000	983	473	2,190,000
Total ferrosilicon	1,740	1,050	3,450,000	3,210	1,940	6,240,000
Metal:						
More than 99.99% silicon:						
China	2,900	XX	66,000,000	6,280	XX	142,000,000
Germany	587	XX	16,000,000	825	XX	23,000,000
Hong Kong	100	XX	2,090,000	131	XX	2,560,000
Japan	483	XX	28,200,000	845	XX	50,000,000
Korea, Republic of	267	XX	14,400,000	510	XX	28,300,000
Malaysia	14	XX	1,740,000	38	XX	3,730,000
Netherlands	--	XX	--	45	XX	1,680,000
Norway	56	XX	2,310,000	91	XX	3,110,000
Singapore	187	XX	5,300,000	250	XX	7,060,000
Taiwan	579	XX	16,000,000	1,320	XX	37,000,000
Others (20 countries)	20	XX	3,290,000	61	XX	7,650,000
Total	5,190	5,190^e	155,000,000	10,400	10,400^e	306,000,000
99.00–99.99% silicon:						
Belgium	--	--	--	9	9	12,500
China	752	752	808,000	752	752	808,000
Japan	--	--	--	260	258	918,000
Korea, Republic of	329	278	966,000	329	278	966,000
Mexico	2	2	5,830	4	4	11,700
Netherlands	20	20	26,500	20	20	26,500
United Kingdom	--	--	--	38	38	90,700
Total	1,100	1,050	1,810,000	1,410	1,360	2,830,000

See footnotes at end of table.

TABLE 2—Continued
 U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN FEBRUARY 2012^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	January–February		
				Gross weight	Contained weight	Value
Metal—continued:						
Other silicon:						
Belgium	--	--	--	1	1	\$8,430
Canada	566	550	\$1,830,000	857	832	2,710,000
China	113	59	2,360,000	2,070	1,910	4,670,000
Hong Kong	16	16	21,600	16	16	21,600
Japan	96	93	127,000	240	233	316,000
Korea, Republic of	26	25	101,000	37	36	209,000
Malaysia	285	277	377,000	426	414	563,000
Mexico	(3)	(3)	3,180	12	12	22,200
South Africa	(3)	(3)	8,490	(3)	(3)	8,490
United Kingdom	--	--	--	19	19	45,400
Others (3 countries)	(3)	(3)	7,540	1	1	11,400
Total	1,100	1,020	4,830,000	3,680	3,470	8,580,000
Total silicon metal	7,400	7,260	162,000,000	15,500	15,200	318,000,000

⁰Estimated. XX Not applicable. -- Zero.

¹Countries listed are the leading exporters in terms of January–February quantities (gross weight).

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 3
U.S. IMPORTS OF FERROSILICON AND SILICON METAL IN FEBRUARY 2012^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	January–February		
				Gross weight	Contained weight	Value
Ferrosilicon:						
55%–80% silicon, more than 3% Ca:						
Brazil	369	259	\$739,000	569	410	\$1,070,000
China	28	18	84,400	344	254	586,000
France	34	22	96,900	34	22	96,900
Germany	--	--	--	19	12	48,400
India	--	--	--	18	14	43,900
South Africa	3	2	5,400	3	2	5,400
Total	434	300	926,000	987	713	1,850,000
55%–80% silicon, other:						
Brazil	118	88	257,000	292	222	572,000
Canada	994	731	2,950,000	1,820	1,340	5,170,000
China	1,650	1,250	2,280,000	6,200	4,660	9,240,000
France	108	75	321,000	270	191	839,000
Germany	118	88	647,000	202	152	956,000
Iceland	1,860	1,390	2,630,000	2,900	2,180	4,010,000
Russia	999	760	1,530,000	26,500	20,100	35,800,000
South Africa	218	173	553,000	868	673	2,300,000
United Kingdom	--	--	--	15	10	80,100
Vietnam	189	141	229,000	189	141	229,000
Other (1 country)	4	3	14,700	4	3	14,700
Total	6,250	4,700	11,400,000	39,300	29,700	59,200,000
Magnesium ferrosilicon:						
Argentina	85	45	175,000	85	45	175,000
Canada	1,130	508	2,320,000	2,140	970	4,890,000
China	200	90	499,000	454	205	1,010,000
France	180	87	281,000	198	96	294,000
Germany	20	9	22,200	25	12	27,800
Total	1,620	739	3,300,000	2,900	1,330	6,400,000
Other ferrosilicon:						
Brazil	--	--	--	24	13	116,000
Canada	692	163	998,000	1,420	342	2,010,000
China	--	--	--	40	18	172,000
Total	692	163	998,000	1,490	374	2,300,000
Total ferrosilicon	8,990	5,900	16,600,000	44,700	32,100	69,800,000

See footnotes at end of table.

TABLE 3—Continued
 U.S. IMPORTS OF FERROSILICON AND SILICON METAL IN FEBRUARY 2012^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	January–February		
				Gross weight	Contained weight	Value
Metal:						
More than 99.99% silicon:						
Canada	(3)	XX	\$12,900	4	XX	\$134,000
China	5	XX	259,000	27	XX	1,150,000
Finland	2	XX	120,000	6	XX	416,000
Germany	87	XX	7,460,000	214	XX	16,100,000
Italy	(3)	XX	18,400	2	XX	62,300
Japan	29	XX	2,150,000	57	XX	3,830,000
Korea, Republic of	7	XX	1,030,000	7	XX	1,030,000
Malaysia	2	XX	51,300	2	XX	69,900
Spain	1	XX	5,640	2	XX	12,600
Taiwan	4	XX	261,000	9	XX	507,000
Others (4 countries)	(3)	XX	141,000	1	XX	219,000
Total	138	138^e	11,500,000	330	330^e	23,500,000
99.00%–99.99% silicon:						
Australia	531	528	1,630,000	1,700	1,690	5,420,000
Brazil	4,450	4,420	13,300,000	8,550	8,490	26,400,000
Canada	1,390	1,380	3,780,000	2,940	2,920	8,020,000
Japan	27	(3)	34,900	27	(3)	38,700
Kazakhstan	--	--	--	240	238	628,000
Netherlands	--	--	--	360	358	1,700,000
Norway	312	310	1,440,000	992	978	4,620,000
South Africa	4,260	4,230	14,300,000	7,260	7,200	24,200,000
Spain	120	119	386,000	380	377	1,230,000
Thailand	1,450	1,440	3,850,000	3,260	3,240	8,660,000
Other (1 country)	3	3	20,900	3	3	20,900
Total	12,500	12,400	38,700,000	25,700	25,500	81,000,000
Other silicon:						
Australia	480	473	1,560,000	792	780	2,630,000
Belgium	20	20	44,400	20	20	44,400
Brazil	439	434	1,220,000	1,220	1,210	3,680,000
Canada	465	458	1,170,000	1,150	1,140	2,860,000
Japan	12	4	54,500	13	4	145,000
Norway	116	112	203,000	170	165	326,000
Total	1,530	1,500	4,260,000	3,370	3,310	9,690,000
Total silicon metal	14,200	14,100	54,500,000	29,400	29,100	114,000,000

^eEstimated. XX Not applicable. -- Zero.

¹Presentation of monthly data is based on the January–February 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.