



Mineral Industry Surveys

For information, contact:

Lisa A. Corathers, Silicon Commodity Specialist
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4973, Fax: (703) 648-7757
E-mail: lcorathers@usgs.gov

Maria Arguelles (Data)
Telephone: (703) 648-7990
Fax: (703) 648-7975
E-mail: marguell@usgs.gov

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

SILICON IN FEBRUARY 2011

Preliminary data for February 2011 indicate that domestic production and net shipments of total silicon materials (ferrosilicon plus silicon metal), on a gross-weight basis, were 36,500 metric tons (t) and 28,000 t, respectively, according to the U.S. Geological Survey. Ending stocks were 32,700 t. 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. A total for both categories is found on table 1.

On a gross-weight basis, U.S. ferrosilicon and silicon metal exports in January 2011 were 20% higher and 20% lower,

respectively, than those in December 2010. U.S. ferrosilicon and silicon metal exports in January 2011 were slightly less and 26% higher, respectively, than those in January 2010.

On a gross-weight basis, U.S. ferrosilicon and silicon metal imports in January 2011 were 149% higher and 19% higher, respectively, than those in December 2010. U.S. ferrosilicon and silicon metal imports in January 2011 were 119% higher and 68% higher, respectively, than those in January 2010.

Prices

Prices for silicon materials in February 2011, in cents per pound, silicon content, are listed below.

50% Ferrosilicon prices¹

<u>Price Range</u>	<u>Average Low, Mid, and High Prices</u>
115.00-120.00	115.00-117.00-120.00

75% Ferrosilicon prices²

<u>Price Range</u>	<u>Average Price</u>
105.00-107.00	106.00

Silicon metal prices²

<u>Price Range</u>	<u>Average Price</u>
160.00-165.00	162.75

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
U.S. PRODUCTION, SHIPMENTS, AND PRODUCER STOCKS OF SILICON ALLOYS AND METAL IN 2011^{1,2}

(Metric tons)

Material	Gross production ³		Net shipments		Stocks,
	February	Year to date	February	Year to date	February 28
Ferrosilicon, all grades ⁴	W	W	W	W	W
Silicon metal, excludes semiconductor grades	W	W	W	W	W
Total silicon materials	36,500	75,100	28,000	59,100	32,700

W Withheld to avoid disclosing company proprietary data; included in "Total."

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

²Includes U.S. Geological Survey estimates.

³Includes in-plant consumption, as in production of magnesium ferrosilicon and other miscellaneous alloys.

⁴Includes miscellaneous silicon alloys and other silicon products.

TABLE 2
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN JANUARY 2011^{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:						
Brazil	45	27	\$93,200	45	27	\$93,200
Canada	718	431	639,000	718	431	639,000
Colombia	14	10	34,500	14	10	34,500
Italy	340	262	680,000	340	262	680,000
Japan	386	301	812,000	386	301	812,000
Mexico	177	107	397,000	177	107	397,000
Singapore	12	9	25,000	12	9	25,000
United Kingdom	20	14	20,000	20	14	20,000
Total	1,710	1,160	2,700,000	1,710	1,160	2,700,000
Other ferrosilicon:						
Belgium	140	70	289,000	140	70	289,000
Canada	178	89	276,000	178	89	276,000
Colombia	24	11	56,200	24	11	56,200
Japan	208	98	555,000	208	98	555,000
Mexico	15	8	38,400	15	8	38,400
Peru	16	9	41,000	16	9	41,000
Portugal	120	46	264,000	120	46	264,000
Turkey	128	63	300,000	128	63	300,000
United Kingdom	21	10	45,600	21	10	45,600
Total	850	404	1,870,000	850	404	1,870,000
Total ferrosilicon	2,560	1,560	4,570,000	2,560	1,560	4,570,000

See footnotes at end of table.

TABLE 2—Continued
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN JANUARY 2011^{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	1,250	XX	\$56,900,000	1,250	XX	\$56,900,000
France	67	XX	3,000,000	67	XX	3,000,000
Germany	646	XX	26,400,000	646	XX	26,400,000
Hong Kong	100	XX	2,790,000	100	XX	2,790,000
Japan	815	XX	46,900,000	815	XX	46,900,000
Korea, Republic of	318	XX	18,600,000	318	XX	18,600,000
Malaysia	23	XX	1,970,000	23	XX	1,970,000
Norway	297	XX	14,700,000	297	XX	14,700,000
Singapore	241	XX	12,200,000	241	XX	12,200,000
Taiwan	422	XX	17,700,000	422	XX	17,700,000
Other (18 countries)	79	XX	6,080,000	79	XX	6,080,000
Total	4,260	4,260^e	207,000,000	4,260	4,260^e	207,000,000
99.00% - 99.99% silicon:						
Italy	2	2	2,940	2	2	2,940
Japan	167	166	492,000	167	166	492,000
Mexico	19	19	30,900	19	19	30,900
United Kingdom	40	40	45,000	40	40	45,000
Total	228	226	571,000	228	226	571,000
Other silicon:						
Australia	1	1	9,770	1	1	9,770
Canada	669	650	2,270,000	669	650	2,270,000
China	137	133	181,000	137	133	181,000
Finland	(3)	(3)	6,270	(3)	(3)	6,270
Japan	269	257	1,070,000	269	257	1,070,000
Korea, Republic of	22	22	226,000	22	22	226,000
South Africa	(3)	(3)	4,200	(3)	(3)	4,200
Taiwan	40	39	142,000	40	39	142,000
United Arab Emirates	(3)	(3)	3,960	(3)	(3)	3,960
Total	1,140	1,100	3,910,000	1,140	1,100	3,910,000
Total silicon metal	5,630	5,590	212,000,000	5,630	5,590	212,000,000

^eEstimated. XX Not applicable.

¹Countries listed are the leading exporters in terms of year-to-date 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 FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN JANUARY 2011^{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, more than 3% Ca:						
Brazil	430	261	\$1,120,000	430	261	\$1,120,000
China	168	121	252,000	168	121	252,000
France	144	89	362,000	144	89	362,000
Total	742	471	1,730,000	742	471	1,730,000
55% - 80% silicon, other:						
Brazil	22	15	41,700	22	15	41,700
Canada	960	708	2,270,000	960	708	2,270,000
China	2,220	1,670	3,980,000	2,220	1,670	3,980,000
France	270	191	728,000	270	191	728,000
Germany	50	36	264,000	50	36	264,000
Hong Kong	190	144	370,000	190	144	370,000
India	17	13	58,700	17	13	58,700
Norway	108	82	115,000	108	82	115,000
Russia	16,000	12,200	25,600,000	16,000	12,200	25,600,000
South Africa	87	57	177,000	87	57	177,000
Other (1 country)	3	2	17,100	3	2	17,100
Total	19,900	15,100	33,700,000	19,900	15,100	33,700,000
Magnesium ferrosilicon:						
Argentina	43	16	107,000	43	16	107,000
Canada	939	429	1,840,000	939	429	1,840,000
France	36	18	47,800	36	18	47,800
Total	1,020	463	2,000,000	1,020	463	2,000,000
Other ferrosilicon:						
Canada	723	221	798,000	723	221	798,000
China	40	18	191,000	40	18	191,000
Total	763	240	989,000	763	240	989,000
Total ferrosilicon	22,400	16,200	38,400,000	22,400	16,200	38,400,000

See footnotes at end of table.

TABLE 3—Continued
 U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN JANUARY 2011^{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:						
Canada	12	XX	\$462,000	12	XX	\$462,000
China	29	XX	2,140,000	29	XX	2,140,000
Germany	195	XX	14,000,000	195	XX	14,000,000
Italy	39	XX	2,570,000	39	XX	2,570,000
Japan	35	XX	4,000,000	35	XX	4,000,000
Korea, Republic of	77	XX	4,500,000	77	XX	4,500,000
Norway	18	XX	664,000	18	XX	664,000
Russia	1	XX	75,600	1	XX	75,600
Taiwan	9	XX	450,000	9	XX	450,000
United Kingdom	1	XX	98,500	1	XX	98,500
Other (3 countries)	1	XX	442,000	1	XX	442,000
Total	416	416^e	29,400,000	416	416^e	29,400,000
99.00% - 99.99% silicon:						
Australia	1,010	1,010	3,440,000	1,010	1,010	3,440,000
Brazil	7,890	7,820	22,500,000	7,890	7,820	22,500,000
Canada	1,080	1,070	3,080,000	1,080	1,070	3,080,000
France	324	321	1,150,000	324	321	1,150,000
Japan	32	1	41,800	32	1	41,800
Laos	810	806	1,710,000	810	806	1,710,000
Philippines	36	36	107,000	36	36	107,000
South Africa	3,030	3,000	8,540,000	3,030	3,000	8,540,000
Spain	539	537	1,700,000	539	537	1,700,000
Thailand	450	448	1,190,000	450	448	1,190,000
Other (2 countries)	10	10	87,700	10	10	87,700
Total	15,200	15,100	43,600,000	15,200	15,100	43,600,000
Other silicon:						
Brazil	793	775	2,300,000	793	775	2,300,000
Canada	1,340	1,320	3,000,000	1,340	1,320	3,000,000
China	120	118	301,000	120	118	301,000
France	337	327	561,000	337	327	561,000
Germany	75	72	81,600	75	72	81,600
Japan	40	1	50,100	40	1	50,100
Norway	412	396	505,000	412	396	505,000
Spain	6	(3)	6,930	6	(3)	6,930
Total	3,130	3,010	6,810,000	3,130	3,010	6,810,000
Total silicon metal	18,800	18,500	79,800,000	18,800	18,500	79,800,000

^eEstimated. XX Not applicable.

¹Presentation of monthly data is based on the year-to-date 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.