

Mineral Industry Surveys

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SILICON IN JANUARY 2012

Data for January 2012 indicate that domestic production and net shipments of total silicon materials (ferrosilicon plus silicon metal), on a gross-weight basis, were 9% higher and the same as, respectively, than those in December 2011. Ending stocks were 10% lower than those at the end of December. 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, except for January 2011, which includes ferrosilicon and miscellaneous silicon alloys only.

Included in this Mineral Industry Surveys are U.S. foreign trade data for selected silicon-containing materials in January 2012.

Prices

Prices for silicon materials in January 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>
100.00–108.00	103.11–104.67–106.22

75% Ferrosilicon prices²

<u>Price Range</u>	<u>Average Price</u>
91.00–95.00	93.00

Silicon metal prices²

<u>Price Range</u>	<u>Average Price</u>
133.00–141.00	137.38

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 ⁵	20,900	18,000	26,200
February	36,500	28,000	32,700
March	39,000 ^r	32,600 ^r	31,900
April	39,500	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

^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 includes ferrosilicon and miscellaneous silicon alloys only.

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

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value
Ferrosilicon:			
More than 55% silicon:			
Canada	695	417	\$1,050,000
Colombia	3	2	6,960
Japan	303	228	603,000
Mexico	147	88	372,000
Total	1,150	736	2,040,000
Other ferrosilicon:			
Brazil	39	20	95,000
Canada	133	67	346,000
Colombia	16	7	50,400
Mexico	90	45	206,000
Taiwan	42	21	52,400
Total	320	159	750,000
Total ferrosilicon	1,470	895	2,790,000
Metal:			
More than 99.99% silicon:			
China	3,380	XX	76,300,000
Germany	238	XX	7,030,000
Hong Kong	31	XX	468,000
Japan	363	XX	21,900,000
Korea, Republic of	243	XX	13,900,000
Malaysia	24	XX	1,990,000
Netherlands	45	XX	1,680,000
Norway	34	XX	801,000
Singapore	62	XX	1,770,000
Taiwan	745	XX	21,000,000
Other (16 countries)	40	XX	4,360,000
Total	5,210	5,210 ^e	151,000,000
99.00%–99.99% silicon:			
Belgium	9	9	12,500
Japan	260	258	918,000
Mexico	2	2	5,830
United Kingdom	38	38	90,700
Total	309	307	1,030,000
Other silicon:			
Belgium	1	1	8,430
Canada	291	283	878,000
China	1,960	1,850	2,310,000
Denmark	(3)	(3)	3,890
Japan	144	140	190,000
Korea, Republic of	12	11	109,000
Malaysia	141	137	186,000
Mexico	12	12	19,000
United Kingdom	19	19	45,400
Total	2,580	2,450	3,750,000
Total silicon metal	8,100	7,970	156,000,000

^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 2012^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value
Ferrosilicon:			
55%–80% silicon, more than 3% Ca:			
Brazil	200	151	\$333,000
China	316	236	501,000
Germany	19	12	48,400
India	18	14	43,900
Total	554	413	926,000
55%–80% silicon, other:			
Brazil	174	134	315,000
Canada	825	606	2,230,000
China	4,560	3,410	6,960,000
France	162	116	518,000
Germany	84	63	309,000
Iceland	1,050	792	1,380,000
Russia	25,500	19,400	34,300,000
South Africa	650	500	1,740,000
United Kingdom	15	10	80,100
Total	33,000	25,000	47,800,000
Magnesium ferrosilicon:			
Canada	1,010	462	2,570,000
China	254	115	514,000
France	18	9	13,500
Germany	5	2	5,550
Total	1,290	588	3,100,000
Other ferrosilicon:			
Brazil	24	13	116,000
Canada	732	179	1,020,000
China	40	18	172,000
Total	796	210	1,300,000
Total ferrosilicon	35,700	26,200	53,200,000
Metal:			
More than 99.99% silicon:			
Canada	3	XX	121,000
China	22	XX	889,000
Denmark	(3)	XX	78,700
Finland	4	XX	296,000
Germany	127	XX	8,630,000
Italy	2	XX	44,000
Japan	28	XX	1,680,000
Malaysia	(3)	XX	18,600
Spain	1	XX	6,980
Taiwan	5	XX	247,000
Total	193	193 ^e	12,000,000
99.00%–99.99% silicon:			
Australia	1,170	1,160	3,800,000
Brazil	4,100	4,070	13,100,000
Canada	1,560	1,550	4,240,000
Japan	(3)	(3)	3,740
Kazakhstan	240	238	628,000
Netherlands	360	358	1,700,000
Norway	680	668	3,180,000
South Africa	3,000	2,980	9,900,000
Spain	260	258	839,000
Thailand	1,810	1,800	4,810,000
Total	13,200	13,100	42,200,000

See footnotes at end of table.

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

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value
Metal:			
Other silicon:			
Australia	312	307	\$1,060,000
Brazil	780	771	2,460,000
Canada	686	676	1,690,000
Japan	(3)	(3)	90,600
Norway	54	53	123,000
Total	1,830	1,810	5,430,000
Total silicon metal	15,200	15,100	59,700,000

⁰Estimated. 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.