

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

Lisa D. Miller (Data)
Telephone: (703) 648-7973
Fax: (703) 648-7975
millerl@usgs.gov

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

SILICON IN FEBRUARY 2003

In February 2003, domestic production of silicon ferrous alloys plus metal, excluding silvery pig iron, was estimated to have decreased by 8% compared with the corresponding figure for the previous month, according to the U.S. Geological Survey. Domestic shipments decreased by about 8% compared with those of January 2003. Producer stocks decreased by 2% from those of January 2003. All domestic data for ferrosilicon have been combined to avoid disclosing company proprietary data.

The January 2003 trade data included in this report indicated that the amount of silicon metal imports was more than double that of December 2002, with significant increases in the trade categories "other silicon," and "99.0% - 99.9% silicon." Ferrosilicon imports, on a gross weight basis, decreased by 25% compared with those of December 2002, owing primarily to significant decreases in the trade categories "other ferrosilicon," and "ferrosilicon, 55% - 80% silicon." On a gross weight basis, ferrosilicon exports increased by 50% compared with those of December 2002, with significant increases in both trade categories. Silicon metal exports increased by 73% compared with those in the previous month, owing primarily to significant increases in the trade categories of "other silicon," and "more than 99.99% silicon."

Update

On April 2, 2003, U.S. silicon ferrous alloy producer Globe Metallurgical, Inc., filed for Chapter 11 bankruptcy protection in the Southern District of New York (Ryan's Notes, 2003b). There are no plans for layoffs or plant closings, and the company's tolling agreement with Marco International is

expected to remain in place as the bankruptcy restructuring proceeds (Platts Metal Week, 2003a). The company hopes to emerge from Chapter 11 within the next year. Globe took the action primarily because of its nonproductive Norwegian assets (Ryan's Notes, 2003b).

Several appeals of the March 7, 2003, U.S. International Trade Commission's (ITC) final antidumping ruling on silicon metal imports from Russia (see Silicon in January 2003) were filed in late April 2003. The following companies separately appealed the ITC decision that Russian silicon imports had injured or threatened to injure U.S. silicon producers: General Electric Company, and Russian silicon producers SUAL-Kremny-Ural, Ltd. and Brask Aluminum Smelter (Platts Metals Week, 2003b; Ryan's Notes, 2003a). The U.S. silicon producers who filed the antidumping complaint, Globe Metallurgical, Inc. and Simcala, Inc., also appealed the antidumping margin rates on the basis that they are too low (Platts Metals Week, 2003b).

References Cited

- Platts Metals Week, 2003a, Globe files for Chapter 11; silicon toll deal secure: Platts Metals Week, v. 74, no. 14, April 7, p. 2.
Platts Metals Week, 2003b, Si producers appeal US dumping ruling: Platts Metals Week, v. 74, no. 18, May 5, p. 15.
Ryan's Notes, 2003a, First appeals for Russian Si dumping case: Ryan's Notes, v. 10, no. 17, April 28, p. 3.
Ryan's Notes, 2003b, Globe files for Chap. 11: Ryan's Notes, v. 9, no. 14, April 7, p. 2.

Prices, cents per pound, silicon content

	<u>50% Ferrosilicon¹</u>	<u>75% Ferrosilicon²</u>	<u>Silicon metal²</u>
February 6	50.0-55.0	41.0-43.5	60.5-61.5
February 13	51.0-56.0	43.0-46.0	60.5-61.5
February 20	51.0-56.0	43.0-46.0	59.0-62.0
February 27	51.0-56.0	44.0-48.0	59.0-62.0

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 2003^{1, 2, 3}

(Metric tons)

Material	Gross production ⁴		Net shipments		Stocks, February 28
	February	Year to date ⁵	February	Year to date ⁵	
Ferrosilicon:					
All grades ^{6, 7}	19,000	40,300	14,300	29,300	33,100
Silicon metal:					
Excludes semiconductor grades	9,830	20,000	8,490	18,200	4,220

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 JANUARY 2003^{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	295	177	\$296,000	295	177	\$296,000
Malaysia	5	4	9,120	5	4	9,120
Mexico	71	43	96,100	71	43	96,100
Total	372	224	401,000	372	224	401,000
Other ferrosilicon:						
Brazil	20	9	24,500	20	9	24,500
Canada	262	131	233,000	262	131	233,000
Korea, Republic of	112	56	115,000	112	56	115,000
Mexico	88	44	83,300	88	44	83,300
Total	481	240	456,000	481	240	456,000
Total ferrosilicon	853	464	857,000	853	464	857,000
Metal:						
More than 99.99% silicon:						
China	85	XX	1,990,000	85	XX	1,990,000
Czech Republic	7	XX	204,000	7	XX	204,000
Georgia	14	XX	332,000	14	XX	332,000
Germany	59	XX	1,910,000	59	XX	1,910,000
Japan	434	XX	18,800,000	434	XX	18,800,000
Korea, Republic of	24	XX	1,070,000	24	XX	1,070,000
Norway	66	XX	1,710,000	66	XX	1,710,000
Taiwan	17	XX	592,000	17	XX	592,000
Ukraine	14	XX	410,000	14	XX	410,000
United Kingdom	10	XX	1,460,000	10	XX	1,460,000
Other (16 countries)	25	XX	2,280,000	25	XX	2,280,000
Total	755	755 ^e	30,800,000	755	755 ^e	30,800,000

See footnotes at end of table.

TABLE 2--Continued
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN JANUARY 2003^{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:						
Belgium	4	4	\$5,180	4	4	\$5,180
Denmark	7	7	\$9,270	7	7	9,270
Jamaica	9	9	12,200	9	9	12,200
Japan	1	1	7,470	1	1	7,470
Mexico	8	7	10,700	8	7	10,700
Norway	84	83	118,000	84	83	118,000
Panama	2	2	9,500	2	2	9,500
Taiwan	3	3	7,870	3	3	7,870
Total	116	115	181,000	116	115	181,000
Other silicon:						
Brazil	(3)	(3)	8,530	(3)	(3)	8,530
Canada	1,630	1,580	1,660,000	1,630	1,580	1,660,000
Honduras	(3)	(3)	2,600	(3)	(3)	2,600
Indonesia	8	8	12,700	8	8	12,700
Italy	2	2	5,310	2	2	5,310
Japan	94	91	183,000	94	91	183,000
Mexico	3	3	17,400	3	3	17,400
Netherlands	46	44	324,000	46	44	324,000
Taiwan	2	2	7,040	2	2	7,040
United Kingdom	92	90	99,500	92	90	99,500
Total	1,880	1,820	2,330,000	1,880	1,820	2,330,000
Total silicon metal	2,750	2,690	33,300,000	2,750	2,690	33,300,000

⁶Estimated. XX Not applicable.

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 JANUARY 2003^{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:						
Argentina	32	19	\$48,100	32	19	\$48,100
Brazil	53	31	59,800	53	31	59,800
Canada	41	30	16,400	41	30	16,400
Mexico	2	2	7,390	2	2	7,390
Total	128	82	132,000	128	82	132,000
55% - 80% silicon, Other:						
Brazil	3,010	2,270	1,580,000	3,010	2,270	1,580,000
Canada	697	528	432,000	697	528	432,000
China	41	31	20,200	41	31	20,200
Egypt	1,150	814	583,000	1,150	814	583,000
France	195	128	364,000	195	128	364,000
Kazakhstan	4,250	3,260	2,510,000	4,250	3,260	2,510,000
Norway	408	304	529,000	408	304	529,000
Russia	770	507	390,000	770	507	390,000
South Africa	1,300	996	703,000	1,300	996	703,000
Venezuela	303	2,270 ³	1,790,000	303	2,270	1,790,000
Other (Germany)	17	13	76,500	17	13	76,500
Total	12,100	11,100	8,980,000	12,100	11,100	8,980,000

See footnotes at end of table.

TABLE 3--Continued
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN JANUARY 2003^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Ferrosilicon--Continued:						
Magnesium ferrosilicon:						
Argentina	40	18	\$31,000	40	18	\$31,000
Brazil	356	159	250,000	356	159	250,000
Canada	27	13	23,400	27	13	23,400
China	920	414	620,000	920	414	620,000
Japan	16	7	36,700	16	7	36,700
Norway	592	274	469,000	592	274	469,000
Total	1,950	885	1,430,000	1,950	885	1,430,000
Other ferrosilicon:						
Brazil	728	241	500,000	728	241	500,000
Canada	116	65	76,900	116	65	76,900
Total	843	306	576,000	843	306	576,000
Total ferrosilicon	15,100	12,400	11,100,000	15,100	12,400	11,100,000
Metal:						
More than 99.99% silicon:						
China	(4)	XX	25,000	(4)	XX	25,000
Denmark	(4)	XX	94,700	(4)	XX	94,700
Germany	35	XX	3,640,000	35	XX	3,640,000
Italy	42	XX	1,120,000	42	XX	1,120,000
Japan	49	XX	1,060,000	49	XX	1,060,000
Total	127	127 ^e	5,940,000	127	127 ^e	5,940,000
99.00% - 99.99% silicon:						
Argentina	100	99	95,900	100	99	95,900
Australia	870	615 ³	897,000	870	615	897,000
Austria	20	20	19,100	20	20	19,100
Brazil	4,950	4,910	6,310,000	4,950	4,910	6,310,000
Canada	1,550	1,540	1,850,000	1,550	1,540	1,850,000
Kazakhstan	180	178	157,000	180	178	157,000
Norway	521	518	885,000	521	518	885,000
South Africa	5,010	4,970	5,580,000	5,010	4,970	5,580,000
Spain	20	(4)	19,200	20	(4)	19,200
Sweden	10	10	68,800	10	10	68,800
Total	13,200	12,900	15,900,000	13,200	12,900	15,900,000
Other silicon:						
Australia	80	79	75,900	80	79	75,900
Brazil	540	532	543,000	540	532	543,000
Canada	379	366	317,000	379	366	317,000
China	872	859	769,000	872	859	769,000
Korea, Republic of	80	78	54,800	80	78	54,800
Norway	1,050	1,040	1,060,000	1,050	1,040	1,060,000
South Africa	1,230	1,210	1,170,000	1,230	1,210	1,170,000
Ukraine	119	117	112,000	119	117	112,000
United Arab Emirates	319	314	264,000	319	314	264,000
United Kingdom	201	193	201,000	201	193	201,000
Other (3 countries)	91	89	102,000	91	89	102,000
Total	4,960	4,880	4,670,000	4,960	4,880	4,670,000
Total silicon metal	18,300	17,900	26,500,000	18,300	17,900	26,500,000

^eEstimated. XX Not applicable.

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.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

⁴Less than 1/2 unit.

Source: U.S. Census Bureau.