

Mineral Industry Surveys

For information, contact:

Christopher A. Tuck, Silicon Commodity Specialist
National Minerals Information Center
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4912, Fax: (703) 648-7757
Email: ctuck@usgs.gov

Martha L. Jackson (Data)
Telephone: (703) 648-7944
Fax: (703) 648-7975
Email: mjackson@usgs.gov

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

SILICON IN AUGUST 2014

Domestic production of total silicon materials was 39,900 metric tons (t) for August 2014, 6% less than that of July 2014 and 5% less than that of August 2013. Net shipments were 28,200 t, 4% less than those in July 2014 and 7% less than those in August 2013. Total production and net shipments during the first 8 months of 2014 were 10% and 13% more, respectively, than those during the same period in 2013 (table 1). Individual production-related statistics were concealed to avoid disclosing company proprietary data.

Ending stocks were 31,800 t in August 2014, slightly more than those in July 2014 and 22% less than those in August 2013 (table 1). Stocks included adjustments in inventory and in-plant consumption of ferrosilicon to produce magnesium ferrosilicon and other miscellaneous alloys.

Included in this Mineral Industry Surveys are U.S. spot market prices and U.S. foreign trade data for selected silicon-containing materials in August 2014. All comparative statistics were calculated based on gross weight figures.

Industry News

On July 31, the International Trade Administration (ITA) of the U.S. Department of Commerce announced a final antidumping duty rate of 22.84% on ferrosilicon imports from Venezuela for the period of July 1, 2012, through June 30, 2013 (International Trade Administration, 2014a). However, the U.S. International Trade Commission (USITC) determined on September 8 that the subject imports did not materially injure or threaten U.S. industry (U.S. International Trade Commission, 2014a). As a result, the antidumping investigation of these ferrosilicon imports from Venezuela was terminated and no duties would be assessed. Ferrosilicon imports from Venezuela in 2013 were valued at \$44.3 million.

Also on July 31, the ITA found that all ferrosilicon imported from Russia during the period of July 1, 2012, through June 30, 2013, were not sold in the United States at less than fair value.

Consequently, the ITA terminated its antidumping investigation of the subject ferrosilicon imports, as did the USITC (International Trade Administration, 2014b; U.S. International Trade Commission, 2014b).

The Stakhanov Ferroalloys Plant, subsidiary of Privat Group located in Luhansk Province, Ukraine, was seized and shut down by separatists in August. The plant's production capacity consisted of 150,000 t of various grades of ferrosilicon, including the 75% grade. Personnel were relocated to another Privat subsidiary, Zaporozhye Ferroalloys Plant, where operators indicated they might increase ferrosilicon production. Zaporozhye only produces the lower 65% and 45% grades of ferrosilicon for domestic consumption (Metal-Pages, 2014).

List services and Web feed subscribers are the first to receive notification of USGS minerals information publications and data releases. For information on how to subscribe, go to <http://minerals.usgs.gov/minerals/>.

References Cited

- International Trade Administration, 2014a, Ferrosilicon from Venezuela—Final determination of sales at less than fair value: Federal Register, v. 79, no. 147, July 31, p. 44397–44398.
- International Trade Administration, 2014b, Ferrosilicon from the Russian Federation— Final determination of sales at not less than fair value: Federal Register, v. 79, no. 147, July 31, p. 44393–44394.
- Metal-Pages, 2014, Ukraine ferro-alloys sector troubles deepen, supports EU prices: London, United Kingdom, Metal Pages, September 3. (Accessed October 30, 2014, via <https://www.metal-pages.com/>)
- U.S. International Trade Commission, 2014a, Ferrosilicon from Venezuela: Federal Register, v. 79, no. 177, September 12, p. 54744–54745.
- U.S. International Trade Commission, 2014b, Ferrosilicon from Russia: Federal Register, v. 79, no. 153, August 8, p. 46450.

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:^P			
January–December	468,000	331,000	33,700
January–August ^f	299,000	212,000	40,500
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	42,600	32,000	31,400
February	39,700	27,500	33,000
March	42,700	32,200	34,400
April	37,600	25,900	34,000
May	39,400	30,400	31,800
June	43,700	33,600	29,900
July	42,300	29,500	31,500
August	39,900	28,200	31,800
January–August	328,000	239,000	31,800

^PPreliminary. ^fRevised.

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 AUGUST 2014

	Low	Average	High	Average low, mid, and high
Ferrosilicon:				
50% ferrosilicon ¹	cents per pound of contained silicon	106.00	XX	110.00
75% ferrosilicon ²	do.	95.00	97.38	99.00
Silicon metal, 553 grade ³	cents per pound	142.00	144.13	146.00

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 AUGUST 2014^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	January–August ³		
				Gross weight	Contained weight	Value
Ferrosilicon:						
More than 55% silicon:						
Austria	--	--	--	4	3	\$7,000
Belgium	--	--	--	20	15	27,600
Brazil	--	--	--	19	11	29,600
Canada	273	164	\$426,000	2,870	1,720	4,480,000
Colombia	--	--	--	33	24	86,400
France	--	--	--	20	15	26,600
Japan	198	150	374,000	932	720	1,450,000
Mexico	153	92	353,000	1,620	1,000	3,910,000
Turkey	--	--	--	5	4	11,700
United Kingdom	40	31	39,000	95	64	125,000
Other (2 countries)	--	--	--	6	3	13,200
Total	664	436	1,190,000	5,620	3,580	10,200,000
Other ferrosilicon:						
Belgium	40	19	48,200	379	178	701,000
Brazil	19	10	43,400	171	86	394,000
Canada	31	16	91,600	687	344	1,010,000
Japan	40	18	69,700	70	31	136,000
Korea, Republic of	60	26	71,100	456	200	530,000
Mexico	241	60	428,000	780	326	1,790,000
Netherlands	60	27	28,200	380	169	208,000
Poland	41	8	91,200	203	58	446,000
Turkey	100	46	200,000	1,750	798	3,480,000
United Kingdom	--	--	--	360	175	456,000
Other (5 countries)	--	--	--	126	61	268,000
Total	631	229	1,070,000	5,370	2,430	9,420,000
Total ferrosilicon	1,300	665	2,260,000	11,000	6,010	19,600,000
Metal:						
More than 99.99% silicon:						
China	981	981	26,800,000	7,330	7,330	209,000,000
Germany	269	269	9,950,000	3,770	3,770	130,000,000
Hong Kong	34	34	2,350,000	505	505	16,000,000
Italy	21	21	1,140,000	191	191	11,100,000
Japan	1,780	1,780	80,200,000	6,970	6,970	364,000,000
Korea, Republic of	108	108	5,700,000	2,230	2,230	104,000,000
Malaysia	35	35	4,750,000	310	310	35,300,000
Norway	--	--	--	245	245	11,600,000
Singapore	(4)	(4)	7,140	1,050	1,050	18,300,000
Taiwan	186	186	7,330,000	3,980	3,980	130,000,000
Other (37 countries)	24	24	1,740,000	337	337	21,100,000
Total	3,430	3,430	140,000,000	26,900	26,900	1,050,000,000
99.00%–99.99% silicon:						
China	--	--	--	23	23	56,800
India	--	--	--	1	1	5,760
Japan	--	--	--	2	2	3,150
Mexico	2	2	5,420	33	33	89,800
Saudi Arabia	--	--	--	9	9	12,000
Taiwan	2	2	2,780	4	4	18,100
Thailand	7	7	9,650	7	7	9,650
Turkey	--	--	--	9	9	12,600
Total	11	11	17,900	88	88	208,000
Other silicon:						
Austria	--	--	--	21	21	28,200

See footnotes at end of table.

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

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	January–August ³		
				Gross weight	Contained weight	Value
Metal—Continued:						
Other silicon:						
Belgium	46	45	\$38,800	133	129	\$143,000
Canada	52	51	102,000	851	826	2,260,000
China	10	10	13,500	51	49	67,300
Germany	--	--	--	21	20	31,000
Korea, Republic of	1	1	7,360	113	110	187,000
Mexico	--	--	--	477	463	1,500,000
South Africa	31	30	41,300	59	57	119,000
Taiwan	--	--	--	26	25	250,000
United Kingdom	1	1	16,000	76	73	150,000
Others (13 countries)	1	1	16,500	40	39	161,000
Total	143	139	235,000	1,870	1,810	4,900,000
Total silicon metal	3,580	3,580	140,000,000	28,900	28,800	1,060,000,000

-- Zero.

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

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

³May include revisions to previously published data.

⁴Less than ½ unit.

Source: U.S. Census Bureau.

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

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	January–August ³		
				Gross weight	Contained weight	Value
Ferrosilicon:						
55%–80% silicon, more than 3% Ca:						
Brazil	--	--	--	296	223	\$455,000
Canada	--	--	--	20	11	11,700
China	1,160	872	\$1,450,000	5,170	3,880	6,640,000
France	36	23	79,100	161	103	402,000
Germany	--	--	--	22	15	27,900
Norway	20	14	67,900	41	28	136,000
South Africa	54	37	113,000	396	271	830,000
Total	1,270	946	1,710,000	6,100	4,530	8,500,000
55%–80% silicon, other:						
Brazil	--	--	--	1,820	1,350	2,570,000
Canada	812	590	2,010,000	7,160	5,230	17,800,000
China	6,870	5,180	9,530,000	40,500	30,500	55,400,000
France	187	128	550,000	1,580	1,070	4,670,000
Iceland	854	670	1,160,000	8,240	6,300	11,800,000
India	62	47	116,000	703	548	1,520,000
Russia	--	--	--	65,800	50,300	95,900,000
South Africa	180	123	432,000	1,430	1,050	2,580,000
Spain	384	291	681,000	2,640	2,000	4,250,000
Venezuela	--	--	--	10,400	7,800	14,700,000
Other (6 countries)	264	194	761,000	1,520	1,110	4,830,000
Total	9,620	7,220	15,200,000	142,000	107,000	216,000,000
80%–90% ferrosilicon, Germany	50	41	48,100	98	81	95,500
Magnesium ferrosilicon:						
Argentina	129	61	114,000	779	364	893,000
Brazil	22	14	43,300	688	312	1,160,000
Canada	1,040	477	2,140,000	8,760	3,970	16,300,000
China	57	25	108,000	407	182	772,000
France	--	--	--	1	(4)	2,600
Germany	--	--	--	20	9	26,700
India	82	39	145,000	1,640	786	2,830,000
Norway	572	275	1,130,000	2,170	1,040	4,440,000
Total	1,900	891	3,670,000	14,500	6,660	26,500,000
Other ferrosilicon:						
Brazil	--	--	--	19	10	31,500
Canada	1,330	464	1,600,000	8,740	3,090	10,300,000
China	80	47	182,000	405	224	764,000
Germany	1	(4)	5,220	19	7	88,100
Poland	--	--	--	38	17	60,700
Russia	--	--	--	14	7	22,000
Vietnam	--	--	--	199	151	280,000
Total	1,410	511	1,790,000	9,430	3,510	11,600,000
Total ferrosilicon	14,200	9,610	22,500,000	172,000	122,000	263,000,000
Metal:						
More than 99.99% silicon:						
Brazil	--	--	--	489	489	1,460,000
China	3	3	180,000	47	47	1,190,000
Germany	96	96	4,290,000	661	661	38,600,000
Italy	--	--	--	6	6	372,000
Japan	15	15	1,160,000	118	118	9,940,000
Korea, Republic of	3	3	148,000	19	19	1,230,000
Norway	1	1	47,900	5	5	295,000
Spain	(4)	(4)	4,060	4	4	37,500

See footnotes at end of table.

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

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	January–August ³		
				Gross weight	Contained weight	Value
Metal—Continued:						
Taiwan	1	1	\$56,200	49	49	\$1,350,000
Ukraine	--	--	--	1	1	59,900
Other (9 countries)	(4)	(4)	23,500	4	4	719,000
Total	119	119	5,910,000	1,400	1,400	55,300,000
99.00%–99.99% silicon:						
Australia	1,380	1,370	3,890,000	12,000	11,900	32,700,000
Brazil	1,640	1,630	3,750,000	22,200	22,000	59,000,000
Canada	1,630	1,620	3,780,000	3,500	3,470	8,700,000
France	--	--	--	2,660	2,640	7,350,000
Laos	--	--	--	540	535	1,400,000
Malaysia	--	--	--	120	119	270,000
Norway	600	596	2,000,000	4,290	4,240	14,400,000
South Africa	1,950	1,930	5,630,000	24,800	24,600	67,000,000
Spain	--	--	--	1,220	1,210	3,250,000
Thailand	376	372	958,000	4,610	4,570	10,300,000
Other (6 countries)	47	20	96,700	140	62	280,000
Total	7,630	7,550	20,100,000	76,100	75,300	205,000,000
Other silicon:						
Australia	192	189	575,000	480	473	1,370,000
Belgium	--	--	--	21	21	47,100
Brazil	765	755	1,960,000	5,630	5,550	14,500,000
Canada	1,970	1,940	5,240,000	6,820	6,720	17,800,000
China	45	23	74,500	191	102	269,000
France	--	--	--	494	488	1,310,000
Norway	--	--	--	486	472	987,000
South Africa	--	--	--	40	40	96,600
Thailand	--	--	--	216	213	546,000
United Kingdom	--	--	--	36	34	87,700
Other (4 countries)	--	--	--	54	39	144,000
Total	2,970	2,910	7,850,000	14,500	14,200	37,100,000
Total silicon metal	10,700	10,600	33,900,000	91,900	90,900	297,000,000

-- Zero.

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

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

³May include revisions to previously published data.

⁴Less than ½ unit.

Source: U.S. Census Bureau.