

Mineral Industry Surveys

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SILICON IN JUNE 2011

Preliminary data for June 2011 indicate that domestic production and net shipments of total silicon materials (ferrosilicon plus silicon metal), on a gross-weight basis, were slightly lower and 13% higher, respectively, compared with those in May 2011. Ending stocks were about the same as those at the end of May. 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 May 2011 were 28% lower and 22% lower,

respectively, than those in April 2011. U.S. ferrosilicon and silicon metal exports in the first 5 months of 2011 were 27% higher and 53% higher, respectively, than those during the same period in 2010.

On a gross-weight basis, U.S. ferrosilicon and silicon metal imports in May 2011 were 281% higher and 10% lower, respectively, than those in April 2011. U.S. ferrosilicon and silicon metal imports in the first 5 months of 2011 were 11% lower and 24% higher, respectively, than those during the same period in 2010.

Prices

Prices for silicon materials in June 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>
100.00–115.00	111.25–112.56–113.88

75% Ferrosilicon prices²

<u>Price Range</u>	<u>Average Price</u>
104.00–106.00	105.00

Silicon metal prices²

<u>Price Range</u>	<u>Average Price</u>
155.00–163.00	159.00

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, June 30
	June	Year to date ⁴	June	Year to date ⁴	
Ferrosilicon, all grades ⁵	W	W	W	W	W
Silicon metal, excludes semiconductor grades	W	W	W	W	W
Total silicon materials	38,600	231,000	32,700	186,000	34,000

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.

⁴May include revisions to previously published data.

⁵Includes miscellaneous silicon alloys and other silicon products.

TABLE 2
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN MAY 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	6	5	\$20,600	135	83	\$302,000
Canada	1,200	718	942,000	6,860	4,120	5,320,000
Colombia	--	--	--	27	20	69,300
Italy	--	--	--	380	292	757,000
Japan	--	--	--	386	301	812,000
Mexico	226	136	528,000	1,150	695	2,510,000
Netherlands	--	--	--	200	190	310,000
Singapore	2	1	7,280	28	19	71,100
Sweden	--	--	--	95	71	191,000
Turkey	40	29	115,000	60	44	172,000
Other (5 countries)	31	22	55,000	53	37	85,800
Total	1,500	911	1,670,000	9,380	5,870	10,600,000
Other ferrosilicon:						
Belgium	--	--	--	721	360	1,590,000
Canada	128	64	246,000	630	315	1,210,000
Colombia	--	--	--	66	31	144,000
Japan	--	--	--	833	400	1,590,000
Korea, Republic of	--	--	--	290	128	382,000
Mexico	105	49	210,000	475	177	841,000
Portugal	--	--	--	200	82	440,000
Spain	80	36	180,000	180	82	405,000
Turkey	220	97	529,000	688	314	1,640,000
United Kingdom	--	--	--	79	37	188,000
Other (8 countries)	58	28	126,000	187	92	444,000
Total	591	274	1,290,000	4,350	2,020	8,880,000
Total ferrosilicon	2,090	1,190	2,960,000	13,700	7,890	19,500,000

See footnotes at end of table.

TABLE 2—Continued
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN MAY 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	1,430	XX	\$64,800,000	7,400	XX	\$343,000,000
Germany	440	XX	22,200,000	2,520	XX	120,000,000
Hong Kong	94	XX	3,210,000	1,660	XX	27,900,000
Japan	1,160	XX	59,500,000	5,170	XX	272,000,000
Korea, Republic of	182	XX	11,200,000	1,160	XX	69,500,000
Malaysia	49	XX	4,090,000	165	XX	15,400,000
Norway	457	XX	22,700,000	2,530	XX	124,000,000
Singapore	258	XX	12,800,000	1,530	XX	78,000,000
Taiwan	358	XX	17,000,000	1,760	XX	79,900,000
Ukraine	105	XX	4,870,000	349	XX	15,300,000
Other (35 countries)	47	XX	4,100,000	514	XX	38,600,000
Total	4,570	4,570^c	226,000,000	24,800	24,800^c	1,180,000,000
99.00%–99.99% silicon:						
Argentina	15	15	43,300	15	15	43,300
Belgium	35	34	59,900	41	41	68,600
China	--	--	--	101	100	170,000
Colombia	--	--	--	12	12	35,000
Hong Kong	--	--	--	21	21	29,400
Italy	--	--	--	13	13	34,000
Japan	330	328	972,000	1,180	1,170	3,480,000
Mexico	2	2	5,830	29	29	60,100
Netherlands	--	--	--	237	235	692,000
United Kingdom	114	113	295,000	442	438	884,000
Other (6 countries)	10	10	13,700	18	18	28,500
Total	506	502	1,390,000	2,110	2,090	5,520,000
Other silicon:						
Brazil	7	7	8,960	31	30	40,900
Canada	446	433	1,520,000	2,420	2,350	8,190,000
China	41	39	99,600	195	189	309,000
Hong Kong	17	17	53,000	805	782	1,320,000
Japan	475	456	1,650,000	2,190	2,100	7,700,000
Korea, Republic of	--	--	--	176	171	630,000
Mexico	1	1	7,180	47	45	88,100
Taiwan	20	19	87,300	212	206	539,000
United Arab Emirates	--	--	--	100	97	332,000
United Kingdom	19	19	49,100	97	94	233,000
Other (15 countries)	6	6	24,700	97	94	212,000
Total	1,030	997	3,500,000	6,370	6,160	19,600,000
Total silicon metal	6,110	6,070	231,000,000	33,200	33,000	1,210,000,000

^cEstimated. XX Not applicable. -- Zero.

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.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN MAY 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:						
Belgium	23	14	\$85,300	23	14	\$85,300
Brazil	441	267	1,420,000	2,090	1,270	6,090,000
China	294	212	441,000	950	687	1,430,000
France	6	4	15,800	293	184	757,000
India	18	13	40,800	18	13	40,800
Spain	--	--	--	71	47	192,000
Total	782	509	2,000,000	3,450	2,210	8,600,000
55%–80% silicon, other:						
Brazil	--	--	--	237	175	544,000
Canada	969	709	2,600,000	5,020	3,660	12,400,000
China	6,610	4,990	10,400,000	14,800	10,900	23,200,000
France	149	107	419,000	941	677	2,580,000
Germany	101	73	645,000	292	211	1,710,000
Hong Kong	--	--	--	190	144	370,000
Norway	108	82	118,000	653	496	814,000
Russia	11,000	8,330	17,300,000	31,300	23,800	49,900,000
South Africa	168	111	241,000	1,020	730	1,750,000
Venezuela	--	--	--	5,100	3,830	7,700,000
Other (3 countries)	27	19	113,000	151	107	597,000
Total	19,100	14,400	31,800,000	59,700	44,800	102,000,000
80%–90% silicon, Germany	13	10	76,000	13	10	76,000
More than 90% silicon, Denmark	--	--	--	8	7	8,970
Magnesium ferrosilicon:						
Argentina	15	7	32,700	274	124	741,000
Brazil	109	49	232,000	588	282	1,270,000
Canada	887	405	1,860,000	4,700	2,140	9,130,000
China	74	36	132,000	271	132	546,000
France	--	--	--	106	53	139,000
Germany	18	10	20,000	78	37	170,000
Iceland	--	--	--	620	282	1,330,000
Japan	--	--	--	15	7	85,900
Korea, Republic of	133	60	277,000	133	60	277,000
Sweden	--	--	--	(3)	(3)	3,620
Total	1,240	566	2,550,000	6,790	3,110	13,700,000
Other ferrosilicon:						
Brazil	--	--	--	20	19	109,000
Canada	824	209	1,080,000	3,670	964	4,690,000
China	2,750	415	2,250,000	2,930	499	2,700,000
France	3	2	10,800	10	5	29,300
Poland	19	10	33,800	19	10	33,800
Total	3,600	635	3,380,000	6,650	1,500	7,560,000
Total ferrosilicon	24,700	16,100	39,900,000	76,600	51,600	132,000,000

See footnotes at end of table.

TABLE 3—Continued
 U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN MAY 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	72	XX	\$1,990,000	179	XX	\$5,790,000
China	27	XX	1,590,000	81	XX	5,530,000
Denmark	3	XX	504,000	5	XX	1,630,000
Germany	317	XX	22,500,000	1,270	XX	92,600,000
Italy	15	XX	1,530,000	145	XX	11,000,000
Japan	25	XX	2,670,000	177	XX	20,500,000
Korea, Republic of	3	XX	193,000	164	XX	10,600,000
Norway	18	XX	848,000	107	XX	4,900,000
Russia	9	XX	828,000	52	XX	4,630,000
Taiwan	21	XX	803,000	66	XX	3,460,000
Other (8 countries)	3	XX	101,000	9	XX	781,000
Total	513	513^e	33,500,000	2,260	2,260^e	161,000,000
99.00%–99.99% silicon:						
Australia	633	629	2,090,000	4,030	4,000	13,600,000
Brazil	4,260	4,230	13,900,000	31,000	30,600	94,400,000
Canada	460	457	1,500,000	3,930	3,900	11,100,000
France	168	167	571,000	563	558	1,950,000
Laos	--	--	--	1,890	1,880	3,990,000
Norway	1,130	1,120	4,770,000	4,020	3,980	16,900,000
Philippines	--	--	--	197	196	643,000
South Africa	2,390	2,370	8,230,000	13,700	13,600	39,900,000
Spain	540	537	1,950,000	2,430	2,420	8,330,000
Thailand	360	358	972,000	2,700	2,690	7,260,000
Other (2 countries)	120	13	242,000	217	46	587,000
Total	10,100	9,880	34,300,000	64,700	63,900	199,000,000
Other silicon:						
Australia	192	189	689,000	192	189	689,000
Brazil	1,300	1,250	2,730,000	6,650	6,490	18,800,000
Canada	1,430	1,410	3,490,000	6,550	6,420	15,600,000
China	--	--	--	300	296	764,000
France	444	438	1,490,000	2,040	2,000	6,170,000
Germany	135	129	147,000	230	221	281,000
Japan	23	11	58,000	215	125	535,000
Norway	54	52	160,000	1,170	1,130	2,150,000
Philippines	78	78	264,000	78	78	264,000
United Kingdom	--	--	--	91	88	244,000
Other (4 countries)	--	--	--	7	(3)	18,300
Total	3,650	3,550	9,030,000	17,500	17,000	45,500,000
Total silicon metal	14,200	13,900	76,800,000	84,400	83,200	406,000,000

^eEstimated. XX Not applicable. -- Zero.

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.