

Mineral Industry Surveys

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SILICON IN JULY 2009

Preliminary data for July 2009 indicate that domestic production and net shipments of silicon ferroalloys, on a gross-weight basis, were about the same and 30% higher, respectively, compared with those in June 2009, according to the U.S. Geological Survey. Ending stocks were 20% lower than those at the end of June. Stocks included adjustments in inventory and in-plant consumption of ferrosilicon to produce magnesium ferrosilicon and other miscellaneous alloys.

Production and net shipments of silicon ferroalloys during the first 7 months of 2009 decreased by 17% and 7%, respectively, compared with those during the same period in 2008. Production-related statistics for silicon metal were concealed to avoid disclosing company proprietary data.

On a gross-weight basis, U.S. ferrosilicon and silicon metal exports in June 2009 were 16% lower and slightly lower,

respectively, than those in May 2009. U.S. ferrosilicon and silicon metal exports in the first 6 months of 2009 were 29% lower and 7% lower, respectively, than those in the same period of 2008.

On a gross-weight basis, U.S. ferrosilicon and silicon metal imports in June 2009 were 21% higher and 48% higher, respectively, than those in May 2009. U.S. ferrosilicon and silicon metal imports in the first 6 months of 2009 were 77% lower and 46% lower, respectively, than those in the same period of 2008.

Prices

Prices for silicon materials in July 2009, in cents per pound, silicon content, are listed below.

50% Ferrosilicon prices¹

<u>Price Range</u>	<u>Average Low, Mid, and High Prices</u>
74.00-84.00	74.89-77.00-79.11

75% Ferrosilicon prices²

<u>Price Range</u>	<u>Average Price</u>
65.00-73.00	69.75

Silicon metal prices²

<u>Price Range</u>	<u>Average Price</u>
104.00-109.00	106.50

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 2009^{1,2,3}

(Metric tons)

Material	Gross production ⁴		Net shipments		Stocks, July 31
	July	Year to date	July	Year to date	
Ferrosilicon, all grades ^{5,6}	19,600	141,000	22,300	126,000	20,600
Silicon metal, excludes semiconductor grades	W	W	W	W	W

W Withheld to avoid disclosing company proprietary data.

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.

⁵Ferrosilicon categories were aggregated to avoid disclosing company proprietary data.

⁶Includes miscellaneous silicon alloys and other silicon products.

TABLE 2
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN JUNE 2009^{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:						
Argentina	--	--	--	4	3	\$12,000
Canada	539	323	\$627,000	2,000	1,200	2,500,000
Colombia	--	--	--	27	24	77,000
Mexico	69	41	111,000	1,050	750	1,540,000
Netherlands	--	--	--	3	2	3,270
New Zealand	--	--	--	3	3	5,350
Turkey	--	--	--	10	7	22,200
United Kingdom	20	15	12,800	20	15	12,800
Total	629	380	751,000	3,110	2,000	4,180,000
Other ferrosilicon:						
Australia	--	--	--	60	30	121,000
Belgium	40	20	76,000	100	50	195,000
Canada	25	12	56,700	811	406	1,270,000
Egypt	--	--	--	100	46	210,000
Germany	11	6	10,900	73	37	106,000
Mexico	27	14	62,300	476	213	913,000
Netherlands	--	--	--	60	30	200,000
Portugal	40	19	76,000	40	19	76,000
Spain	--	--	--	180	90	352,000
Turkey	--	--	--	89	40	168,000
Other (5 countries)	20	10	38,000	63	31	111,000
Total	163	81	320,000	2,050	992	3,720,000
Total ferrosilicon	792	461	1,070,000	5,160	2,990	7,900,000

See footnotes at end of table.

TABLE 2--Continued
 U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN JUNE 2009^{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:						
Brazil	--	XX	--	72	XX	\$4,730,000
China	511	XX	\$30,000,000	2,610	XX	164,000,000
Denmark	14	XX	3,040,000	50	XX	9,970,000
Germany	370	XX	19,700,000	2,170	XX	114,000,000
Hong Kong	11	XX	752,000	39	XX	4,630,000
Japan	990	XX	60,800,000	5,050	XX	370,000,000
Korea, Republic of	68	XX	5,100,000	804	XX	63,400,000
Malaysia	6	XX	1,240,000	114	XX	11,300,000
Norway	261	XX	17,900,000	2,360	XX	146,000,000
Taiwan	96	XX	6,340,000	519	XX	34,300,000
Other (34 countries)	36	XX	2,980,000	184	XX	14,400,000
Total	2,360	2,360 ^e	148,000,000	14,000	14,000 ^e	937,000,000
99.00% - 99.99% silicon:						
Belgium	--	--	--	163	161	465,000
Brazil	--	--	--	16	16	47,500
Germany	--	--	--	41	41	57,900
Israel	10	10	14,200	15	15	21,700
Italy	--	--	--	100	99	194,000
Japan	22	22	47,200	22	22	47,200
Korea, Republic of	--	--	--	21	21	29,400
Netherlands	--	--	--	100	99	194,000
Singapore	7	7	10,500	30	30	65,200
Taiwan	11	11	15,000	190	188	524,000
Other (10 countries)	3	2	8,230	44	43	79,000
Total	53	52	95,100	742	735	1,720,000
Other silicon:						
Brazil	2	2	2,850	23	23	30,600
Canada	6	6	33,400	77	75	148,000
China	99	96	330,000	246	239	535,000
Germany	20	20	26,600	22	22	29,600
India	--	--	--	23	22	30,400
Japan	--	--	--	294	284	1,020,000
Korea, Republic of	108	105	76,700	216	210	151,000
South Africa	(3)	(3)	8,180	32	31	49,800
Taiwan	--	--	--	220	214	372,000
United Kingdom	--	--	--	83	80	212,000
Other (13 countries)	16	15	45,300	53	50	168,000
Total	251	244	523,000	1,290	1,250	2,740,000
Total silicon metal	2,670	2,660	149,000,000	16,000	16,000	941,000,000

^eEstimated. 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.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN JUNE 2009^{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:						
Argentina	--	--	--	40	24	\$162,000
China	40	24	\$88,000	658	479	741,000
France	--	--	--	91	56	356,000
Total	40	24	88,000	789	559	1,260,000
55% - 80% silicon, other:						
Brazil	19	11	33,400	91	62	174,000
Canada	569	421	1,220,000	4,290	3,180	8,490,000
China	17	12	25,200	3,620	2,740	3,970,000
France	6	4	14,600	569	392	1,610,000
Germany	16	12	94,300	131	92	686,000
India	--	--	--	38	28	120,000
Russia	2,570	1,980	2,020,000	13,700	10,500	13,100,000
United Kingdom	--	--	--	26	17	187,000
Venezuela	2,500	1,880	2,400,000	6,600	4,950	7,710,000
Total	5,690	4,320	5,800,000	29,100	22,000	36,000,000
80% - 90% silicon, Norway	--	--	--	1	1	3,170
Magnesium ferrosilicon:						
Argentina	--	--	--	374	165	1,200,000
Brazil	152	67	268,000	1,200	569	2,070,000
Canada	491	225	992,000	2,750	1,260	5,620,000
China	--	--	--	645	323	880,000
France	48	23	63,700	186	88	247,000
Japan	15	7	58,400	15	7	58,400
South Africa	17	8	29,600	17	8	29,600
Total	724	330	1,410,000	5,190	2,420	10,100,000
Other ferrosilicon:						
Brazil	--	--	--	38	17	22,000
Canada	247	65	344,000	1,530	561	2,030,000
France	--	--	--	18	9	39,600
Poland	19	4	45,200	19	4	45,200
Russia	--	--	--	152	71	138,000
Total	266	68	390,000	1,760	662	2,270,000
Total ferrosilicon	6,720	4,740	7,690,000	36,800	25,600	49,700,000

See footnotes at end of table.

TABLE 3--Continued
 U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN JUNE 2009^{1,2}

(Metric tons, unless otherwise specified)

	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Metal:						
More than 99.99% silicon:						
Canada	--	XX	--	141	XX	\$5,950,000
China	14	XX	\$205,000	62	XX	1,250,000
Denmark	(3)	XX	34,200	2	XX	996,000
Germany	125	XX	7,960,000	715	XX	51,600,000
Italy	24	XX	1,240,000	91	XX	4,510,000
Japan	18	XX	2,270,000	119	XX	12,800,000
Korea, Republic of	5	XX	368,000	57	XX	2,650,000
Norway	--	XX	--	17	XX	974,000
Spain	1	XX	4,330	2	XX	12,800
Taiwan	7	XX	128,000	21	XX	491,000
Other (8 countries)	1	XX	7,180	1	XX	233,000
Total	195	195^c	12,200,000	1,230	1,230^c	81,500,000
99.00% - 99.99% silicon:						
Australia	266	264	664,000	5,460	5,430	14,700,000
Brazil	3,190	3,060	6,780,000	18,700	18,100	45,600,000
Canada	384	381	776,000	3,290	3,260	6,770,000
Japan	(3)	(3)	2,700	14	1	20,000
Laos	540	537	1,070,000	3,060	3,050	7,210,000
Norway	744	739	2,430,000	4,990	4,960	16,400,000
Philippines	133	132	290,000	223	221	452,000
South Africa	3,940	3,910	9,070,000	7,830	7,770	20,100,000
Sweden	--	--	--	32	30	244,000
Ukraine	--	--	--	302	299	800,000
Total	9,190	9,030	21,100,000	43,900	43,200	112,000,000
Other silicon:						
Australia	--	--	--	969	951	2,750,000
Brazil	90	89	212,000	1,730	1,620	5,380,000
Canada	20	20	47,800	732	716	1,420,000
China	(3)	(3)	2,400	362	357	586,000
Japan	--	--	--	23	22	103,000
Norway	--	--	--	754	618	1,690,000
Philippines	--	--	--	72	70	129,000
Singapore	--	--	--	23	(3)	36,200
South Africa	--	--	--	17	(3)	18,100
Ukraine	--	--	--	318	314	801,000
Other (3 countries)	10	10	25,900	11	10	32,500
Total	120	119	288,000	5,010	4,680	12,900,000
Total silicon metal	9,510	9,340	33,600,000	50,100	49,100	207,000,000

^cEstimated. 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.