

Mineral Industry Surveys

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SILICON IN MAY 2009

Preliminary data for May 2009 indicate that domestic production and net shipments of silicon ferroalloys, on a gross-weight basis, were 11% lower and about the same, respectively, compared with those in April 2009, according to the U.S. Geological Survey. Ending stocks were 4% lower than those at the end of April. 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 5 months of 2009 decreased by 15% and 9%, 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 April 2009 were 10% and 15% higher, respectively, than those in March 2009. U.S. ferrosilicon and silicon metal exports in the first 4 months of 2009 were 22% and 13% lower, respectively, than those in the same period of 2008.

On a gross-weight basis, U.S. ferrosilicon and silicon metal imports in April 2009 were each slightly lower than those in March 2009. U.S. ferrosilicon and silicon metal imports in the first 4 months of 2009 were 77% and 46% lower, respectively, than those during the first quarter of 2008.

Prices

Prices for silicon materials in May 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>
65.00-70.00	63.89-66.39-68.89

75% Ferrosilicon prices²

<u>Price Range</u>	<u>Average Price</u>
52.00-62.00	57.25

Silicon metal prices²

<u>Price Range</u>	<u>Average Price</u>
110.00-120.00	115.00

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 2009^{1, 2, 3}

(Metric tons)

Material	Gross production ⁴		Net shipments		Stocks
	May	Year to date	May	Year to date	May 31
Ferrosilicon, all grades ^{5, 6}	19,100	102,000	17,900	86,200	25,200
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 APRIL 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	238	143	\$265,000	1,030	616	1,330,000
Colombia	--	--	--	27	24	77,000
Mexico	77	46	158,000	903	664	1,300,000
Netherlands	--	--	--	3	2	3,270
New Zealand	--	--	--	3	3	5,350
Turkey	--	--	--	10	7	22,200
Total	315	189	423,000	1,980	1,320	2,750,000
Other ferrosilicon:						
Australia	--	--	--	40	20	80,900
Belgium	60	30	119,000	60	30	119,000
Canada	164	82	310,000	593	297	905,000
Colombia	--	--	--	11	5	23,800
Egypt	--	--	--	60	28	126,000
Germany	--	--	--	51	25	84,800
India	--	--	--	9	4	14,000
Mexico	81	25	180,000	389	169	740,000
Spain	120	60	232,000	180	90	352,000
Turkey	40	18	75,500	49	22	94,700
Other (2 countries) ³	--	--	--	6	2	15,300
Total	465	215	916,000	1,450	693	2,560,000
Total ferrosilicon	780	404	1,340,000	3,420	2,010	5,300,000

See footnotes at end of table.

TABLE 2--Continued
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN APRIL 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:						
Canada	21	XX	\$1,160,000	24	XX	\$1,360,000
China	455	XX	28,300,000	1,730	XX	113,000,000
Denmark	3	XX	695,000	32	XX	6,100,000
Germany	390	XX	19,900,000	1,420	XX	74,400,000
Hong Kong	4	XX	164,000	29	XX	3,880,000
Japan	612	XX	42,100,000	3,180	XX	252,000,000
Korea, Republic of	169	XX	12,300,000	610	XX	47,800,000
Malaysia	92	XX	6,880,000	103	XX	8,820,000
Norway	478	XX	28,300,000	1,790	XX	109,000,000
Taiwan	124	XX	7,500,000	349	XX	21,900,000
Other (29 countries)	42	XX	3,910,000	172	XX	12,900,000
Total	2,390	2,390^e	151,000,000	9,440	9,440^e	650,000,000
99.00% - 99.99% silicon:						
Australia	--	--	--	9	9	13,100
Belgium	--	--	--	148	147	436,000
Brazil	--	--	--	16	16	47,500
Germany	--	--	--	41	41	57,900
Ireland	--	--	--	5	5	6,900
Netherlands	100	99	194,000	100	99	194,000
Peru	--	--	--	5	5	7,560
Singapore	4	4	5,860	23	22	54,700
Spain	--	--	--	6	6	9,000
Taiwan	--	--	--	10	10	14,100
Other (6 countries) ⁴	4	4	5,630	14	14	31,700
Total	108	107	205,000	378	375	872,000
Other silicon:						
Brazil	3	3	3,580	18	18	24,200
Canada	21	20	47,800	65	63	100,000
China	20	20	26,700	50	49	74,000
Japan	142	138	188,000	294	284	1,020,000
Philippines	--	--	--	18	18	42,100
South Africa	--	--	--	32	31	41,700
Taiwan	36	35	56,600	114	111	224,000
United Kingdom	79	77	174,000	81	79	194,000
Other (8 countries) ⁵	113	109	92,600	121	116	115,000
Total	414	402	589,000	793	769	1,830,000
Total silicon metal	2,910	2,900	152,000,000	10,600	10,600	653,000,000

^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.

³Includes exports from Belgium, Mexico, Taiwan, and the United Kingdom that were previously published separately.

⁴Includes exports from the following countries that were previously published separately: Costa Rica, Dominican Republic, El Salvador, Mexico, and Poland.

⁵Includes exports from Belgium and Mexico that were previously published separately.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN APRIL 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	--	--	--	618	455	653,000
France	--	--	--	91	56	356,000
Total	--	--	--	749	535	1,170,000
55% - 80% silicon, other:						
Brazil	5	4	\$14,000	53	36	107,000
Canada	805	593	1,480,000	2,930	2,170	5,910,000
China	--	--	--	3,600	2,730	3,940,000
France	--	--	--	539	371	1,540,000
Germany	30	21	183,000	98	69	511,000
India	--	--	--	38	28	120,000
Russia	865	665	740,000	7,380	5,650	7,740,000
United Kingdom	--	--	--	16	11	109,000
Venezuela	--	--	--	4,100	3,080	5,310,000
Total	1,710	1,280	2,420,000	18,800	14,100	25,300,000
80% - 90% silicon, Norway	1	1	3,170	1	1	3,170
Magnesium ferrosilicon:						
Argentina	75	34	234,000	356	156	1,150,000
Brazil	--	--	--	1,010	483	1,740,000
Canada	424	195	882,000	1,840	837	3,780,000
China	258	133	329,000	349	173	480,000
France	108	51	139,000	126	59	167,000
Total	865	413	1,580,000	3,670	1,710	7,310,000
Other ferrosilicon:						
Brazil	--	--	--	38	17	22,000
Canada	182	67	253,000	1,150	441	1,490,000
France	--	--	--	18	9	39,600
Russia	--	--	--	152	71	138,000
Total	182	67	253,000	1,350	538	1,690,000
Total ferrosilicon	2,750	1,760	4,260,000	24,500	16,900	35,500,000

See footnotes at end of table.

TABLE 3--Continued
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN APRIL 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	20	XX	\$760,000	141	XX	\$5,930,000
China	16	XX	416,000	42	XX	900,000
Germany	128	XX	8,770,000	480	XX	35,000,000
Italy	15	XX	832,000	58	XX	2,810,000
Japan	20	XX	2,570,000	83	XX	7,520,000
Norway	4	XX	269,000	16	XX	897,000
Taiwan	6	XX	138,000	9	XX	222,000
Other (10 countries) ⁴	8	XX	638,000	44	XX	2,420,000
Total	217	217 ^e	14,400,000	873	873 ^e	55,700,000
99.00% - 99.99% silicon:						
Australia	1,090	1,080	2,820,000	4,280	4,250	11,700,000
Brazil	4,320	4,290	10,100,000	12,500	12,200	31,700,000
Canada	372	369	742,000	2,190	2,170	4,580,000
Japan	13	(3) ⁵	17,300	13	(3) ⁵	17,300
Laos	--	--	--	1,710	1,700	4,530,000
Norway	970	964	3,170,000	3,500	3,480	11,500,000
Philippines	--	--	--	90	89	161,000
South Africa	1,010	1,000	2,370,000	3,890	3,860	11,100,000
Sweden	--	--	--	32	30	244,000
Ukraine	--	--	--	302	299	800,000
Total	7,770	7,700	19,200,000	28,500	28,100	76,300,000
Other silicon:						
Australia	775	760	2,200,000	969	951	2,750,000
Brazil	203	200	648,000	1,640	1,530	5,160,000
Canada	20	20	50,900	672	659	1,310,000
China	60	59	104,000	342	337	547,000
Japan	23	22	96,200	23	22	103,000
Norway	13	13	17,100	754	618	1,690,000
Philippines	--	--	--	72	70	129,000
Singapore	--	--	--	23	(3)	36,200
Ukraine	--	--	--	318	314	801,000
Other (2 countries)	--	--	--	(3)	(3)	6,630
Total	1,090	1,070	3,120,000	4,810	4,500	12,500,000
Total silicon metal	9,080	8,990	36,700,000	34,200	33,500	145,000,000

^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.

⁴Includes imports from Czech Republic, Denmark, Singapore, and Spain that were previously published separately.

⁵All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.