

Mineral Industry Surveys

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SILICON IN JANUARY 2009

Preliminary data for January 2009 indicate that domestic production and net shipments of silicon ferroalloys, on a gross-weight basis, were about the same compared with those in December 2008, according to the U.S. Geological Survey. Ending stocks were 2% higher than those at the end of December. 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 alloys during January 2009 decreased by 5% and 4%, respectively, compared with those during January 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 December 2008 were 40% and 5% higher,

respectively, than those in November 2008. U.S. ferrosilicon and silicon metal exports in 2008 totaled 17,700 t and 35,400 t, respectively; these were 52% and 24% higher, respectively, than those in 2007.

On a gross-weight basis, U.S. ferrosilicon and silicon metal imports in December 2008 were 6% lower and 39% higher, respectively, than those in November 2008. U.S. ferrosilicon and silicon metal imports in 2008 totaled 281,000 t and 172,000 t, respectively; these were 9% lower and 16% higher, respectively, than those in 2007.

Prices

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

50% Ferrosilicon prices¹

<u>Price Range</u>	<u>Average Low-High Prices</u>
75.00-85.00	75.00-85.00

75% Ferrosilicon prices²

<u>Price Range</u>	<u>Average Price</u>
68.00-75.00	71.00

Silicon metal prices²

<u>Price Range</u>	<u>Average Price</u>
130.00-140.00	133.13

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,
	January	Year to date	January	Year to date	January 31
Ferrosilicon, all grades ^{5,6}	21,100	21,100	17,500	17,500	23,200
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 DECEMBER 2008^{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	--	--	--	375	236	\$663,000
Canada	655	393	\$851,000	9,410	5,650	14,200,000
Colombia	--	--	--	26	19	39,100
Costa Rica	--	--	--	3	2	10,000
Germany	--	--	--	22	13	15,800
Honduras	--	--	--	1	1	3,210
Italy	--	--	--	98	64	247,000
Japan	--	--	--	45	(3)	44,700
Malaysia	--	--	--	44	32	72,000
Mexico	170	105	242,000	2,390	1,480	4,140,000
Total	825	498	1,090,000	12,400	7,490	19,500,000
Other ferrosilicon:						
Belgium	--	--	--	160	85	282,000
Brazil	--	--	--	552	276	1,180,000
Canada	80	40	175,000	1,580	791	2,940,000
Colombia	--	--	--	69	32	117,000
Germany	--	--	--	452	227	867,000
Italy	33	15	80,600	229	107	525,000
Mexico	78	39	179,000	1,160	577	2,220,000
Netherlands	--	--	--	379	190	651,000
Turkey	--	--	--	223	109	400,000
United Kingdom	219	110	351,000	333	167	594,000
Other (7 countries)	5	2	19,300	128	57	247,000
Total	416	207	805,000	5,270	2,620	10,000,000
Total ferrosilicon	1,240	705	1,900,000	17,700	10,100	29,500,000

See footnotes at end of table.

TABLE 2--Continued
 U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN DECEMBER 2008 ^{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	1	XX	\$76,700	196	XX	\$13,500,000
China	708	XX	60,400,000	4,260	XX	466,000,000
Finland	--	XX	--	186	XX	28,700,000
Germany	378	XX	34,200,000	4,730	XX	295,000,000
Hong Kong	9	XX	2,450,000	122	XX	37,500,000
Japan	660	XX	72,500,000	8,540	XX	829,000,000
Korea, Republic of	111	XX	11,500,000	1,440	XX	126,000,000
Malaysia	3	XX	498,000	124	XX	23,100,000
Norway	366	XX	23,200,000	3,710	XX	214,000,000
Taiwan	58	XX	4,460,000	1,470	XX	109,000,000
Other (38 countries)	10	XX	1,360,000	616	XX	88,900,000
Total	2,300	2,300^e	211,000,000	25,400	23,100^e	2,230,000,000
99.00% - 99.99% silicon:						
China	--	--	--	597	592	1,700,000
Dominican Republic	--	--	--	13	13	17,800
Germany	3	3	3,580	14	14	19,800
Hong Kong	--	--	--	45	44	163,000
Italy	--	--	--	13	13	17,900
Japan	--	--	--	89	88	239,000
Korea, Republic of	180	178	225,000	195	193	246,000
Mexico	13	13	18,600	58	57	88,600
Singapore	--	--	--	55	54	95,400
United Kingdom	--	--	--	505	501	1,120,000
Other (13 countries)	--	--	--	156	155	359,000
Total	195	194	247,000	1,740	1,720	4,060,000
Other silicon:						
Canada	6	6	6,470	591	574	646,000
China	230	219	2,080,000	2,560	2,480	13,400,000
Germany	--	--	--	137	133	190,000
Hong Kong	--	--	--	494	479	773,000
Japan	151	146	199,000	2,310	2,240	4,140,000
Korea, Republic of	--	--	--	355	344	1,610,000
Netherlands	--	--	--	110	105	828,000
Singapore	(3)	(3)	4,120	148	144	230,000
Taiwan	10	9	57,500	1,070	1,040	2,190,000
United Kingdom	--	--	--	106	103	151,000
Other (21 countries)	88	88	162,000	397	384	962,000
Total	485	468	2,510,000	8,280	8,030	25,200,000
Total silicon metal	2,980	2,970	213,000,000	35,400	32,800	2,260,000,000

^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 DECEMBER 2008^{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	120	72	\$459,000	240	145	\$867,000
Brazil	--	--	--	2	1	4,870
Canada	--	--	--	59	30	33,800
China	256	163	563,000	17,100	12,200	21,400,000
Egypt	--	--	--	21	12	21,100
France	90	55	335,000	1,150	694	2,870,000
Germany	--	--	--	31	19	50,900
Total	466	290	1,360,000	18,600	13,100	25,300,000
55% - 80% silicon, other:						
Brazil	39	29	120,000	702	523	1,370,000
Canada	565	422	1,070,000	11,300	8,400	18,700,000
China	1,360	1,050	2,120,000	122,000	91,200	175,000,000
Egypt	--	--	--	141	104	297,000
France	242	159	708,000	2,350	1,560	5,660,000
Germany	38	29	114,000	661	485	3,140,000
India	34	24	94,300	354	255	733,000
Norway	27	20	66,300	607	437	1,340,000
Russia	1,400	1,050	1,550,000	54,600	41,400	85,600,000
Venezuela	7,000	5,250	9,900,000	26,000	19,500	35,700,000
Other (5 countries)	--	--	--	326	191	856,000
Total	10,700	8,030	15,700,000	219,000	164,000	328,000,000
Magnesium ferrosilicon:						
Argentina	84	38	273,000	1,510	636	4,130,000
Canada	813	343	1,370,000	9,510	4,210	12,700,000
China	34	12	134,000	758	361	1,180,000
France	10	5	15,500	10	5	15,500
Germany	--	--	--	10	3	14,400
Japan	34	11	134,000	126	53	496,000
Norway	--	--	--	27	13	62,800
South Africa	--	--	--	75	34	147,000
Total	975	409	1,920,000	12,000	5,310	18,700,000
Other ferrosilicon:						
Brazil	--	--	--	175	81	321,000
Canada	419	160	522,000	8,990	3,220	9,510,000
China	40	20	60,300	17,800	2,410	8,650,000
France	18	9	43,100	55	26	115,000
Poland	--	--	--	12	5	21,900
Russia	119	55	111,000	3,960	1,840	4,840,000
Total	596	243	737,000	31,000	7,590	23,500,000
Total ferrosilicon	12,700	8,970	19,800,000	281,000	190,000	395,000,000

See footnotes at end of table.

TABLE 3--Continued
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN DECEMBER 2008^{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	60	XX	\$2,790,000	407	XX	\$10,900,000
China	5	XX	165,000	128	XX	9,990,000
Denmark	(3)	XX	66,800	6	XX	2,970,000
Germany	77	XX	5,290,000	1,410	XX	132,000,000
Italy	1	XX	92,200	195	XX	14,400,000
Japan	27	XX	2,800,000	435	XX	70,000,000
Korea, Republic of	(3)	XX	16,600	85	XX	6,360,000
Poland	--	XX	--	12	XX	697,000
Spain	2	XX	9,580	8	XX	76,300
Taiwan	2	XX	47,500	49	XX	8,290,000
Other (16 countries)	(3)	XX	27,700	19	XX	2,470,000
Total	175	175^e	11,300,000	2,750	2,750^e	258,000,000
99.00% - 99.99% silicon:						
Australia	1,720	1,710	4,740,000	17,100	16,500	43,700,000
Belgium	--	--	--	280	278	560,000
Brazil	7,570	7,520	20,000,000	58,700	58,300	147,000,000
Canada	822	815	1,780,000	14,600	13,200	31,300,000
China	--	--	--	6,840	6,800	16,400,000
Korea, Republic of	--	--	--	334	6	434,000
Laos	360	358	1,100,000	2,880	2,870	6,990,000
Norway	744	740	2,180,000	6,840	6,800	20,200,000
Philippines	--	--	--	226	225	452,000
South Africa	3,290	3,270	8,690,000	35,600	35,400	91,000,000
Other (4 countries)	47	19	191,000	340	236	1,110,000
Total	14,600	14,400	38,700,000	144,000	141,000	359,000,000
Other silicon:						
Brazil	810	801	2,320,000	9,660	9,530	24,100,000
Canada	648	635	1,410,000	5,890	5,780	13,300,000
China	60	59	128,000	1,270	1,250	2,430,000
France	--	--	--	266	261	741,000
Japan	--	--	--	28	26	81,300
Norway	134	129	188,000	6,530	6,320	16,300,000
Philippines	36	35	64,500	1,040	1,020	1,630,000
Singapore	(3)	(3)	4,960	10	(3)	31,300
Sweden	--	--	--	575	106	711,000
United Kingdom	--	--	--	420	393	970,000
Other (7 countries)	12	2	13,800	32	2	64,600
Total	1,700	1,660	4,130,000	25,700	24,700	60,300,000
Total silicon metal	16,400	16,300	54,100,000	172,000	168,000	678,000,000

^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.