

Mineral Industry Surveys

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SILICON IN NOVEMBER 2008

Preliminary data for November 2008 indicate that domestic production and net shipments of silicon ferroalloys, on a gross-weight basis, decreased by 20% and slightly, respectively, compared with those in October 2008, according to the U.S. Geological Survey. Ending stocks were 7% lower than those at the end of October. Stocks included adjustments in inventory and in-plant consumption of ferrosilicon to produce magnesium ferrosilicon and other miscellaneous alloys.

Production and net shipments during the first 11 months of 2008 increased by 7% and 5%, respectively, compared with the revised amounts of those during the same period in 2007 [247,000 metric tons (t), production; 204,000 t, net shipments]. 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 October 2008 were 27% lower and 16% higher,

respectively, than those in September 2008. U.S. ferrosilicon and silicon metal exports in the first 10 months of 2008 were 15,600 t and 29,600 t, respectively; these were 67% and 28% higher, respectively, than those during the same period in 2007.

On a gross-weight basis, U.S. ferrosilicon and silicon metal imports in October 2008 were 15% higher and 25% lower, respectively, than those in the prior month. U.S. ferrosilicon and silicon metal imports during the first 10 months of 2008 were 254,000 t and 144,000 t, respectively; these were 6% lower and 19% higher, respectively, than those during the same period in 2007.

Prices

Prices for silicon materials in November 2008, in cents per pound, silicon content, are listed below.

50% Ferrosilicon prices¹

<u>Price Range</u>	<u>Average Low-High Prices</u>
90.00-115.00	105.00-110.00

75% Ferrosilicon prices²

<u>Price Range</u>	<u>Average Price</u>
91.00-100.00	96.13

Silicon metal prices²

<u>Price Range</u>	<u>Average Price</u>
135.00-160.00	149.13

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 2008^{1, 2, 3}

(Metric tons)

Material	Gross production ⁴		Net shipments		Stocks,
	November	Year to date	November	Year to date	November 30
Ferrosilicon, all grades ^{5, 6}	20,100	266,000	18,500	213,000	22,200
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 OCTOBER 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	1,060	637	\$1,630,000	8,310	4,990	12,700,000
Colombia	--	--	--	26	19	39,100
Costa Rica	--	--	--	3	2	10,000
Germany	22	13	15,800	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	116	76	200,000	2,030	1,260	3,520,000
Total	1,200	725	1,850,000	10,900	6,610	17,300,000
Other ferrosilicon:						
Belgium	--	--	--	160	85	282,000
Brazil	--	--	--	552	276	1,180,000
Canada	153	77	290,000	1,420	708	2,590,000
Colombia	--	--	--	69	32	117,000
Germany	50	25	105,000	418	210	796,000
Italy	33	15	80,600	163	77	364,000
Mexico	202	96	502,000	997	494	1,850,000
Netherlands	--	--	--	379	190	651,000
Turkey	--	--	--	223	109	400,000
United Kingdom	--	--	--	114	57	243,000
Other (5 countries)	--	--	--	115	53	212,000
Total	438	213	977,000	4,610	2,290	8,690,000
Total ferrosilicon	1,640	938	2,820,000	15,600	8,900	26,000,000

See footnotes at end of table.

TABLE 2--Continued
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN OCTOBER 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	\$64,400	193	XX	\$13,300,000
China	502	XX	75,900,000	3,140	XX	375,000,000
Finland	4	XX	445,000	174	XX	26,800,000
Germany	537	XX	32,800,000	4,000	XX	243,000,000
Hong Kong	1	XX	303,000	110	XX	34,200,000
Japan	841	XX	81,600,000	7,030	XX	667,000,000
Korea, Republic of	150	XX	16,200,000	1,180	XX	102,000,000
Malaysia	6	XX	1,100,000	115	XX	21,500,000
Norway	386	XX	23,200,000	3,040	XX	172,000,000
Taiwan	154	XX	10,100,000	1,280	XX	95,300,000
Other (37 countries)	43	XX	11,400,000	541	XX	80,700,000
Total	2,630	2,630^e	253,000,000	20,800	20,800^e	1,830,000,000
99.00% - 99.99% silicon:						
China	36	36	105,000	580	575	1,670,000
Dominican Republic	--	--	--	13	13	17,800
Germany	--	--	--	12	11	16,200
Hong Kong	--	--	--	45	44	163,000
Italy	--	--	--	13	13	17,900
Japan	43	43	127,000	89	88	239,000
Korea, Republic of	--	--	--	15	15	21,000
Mexico	--	--	--	44	44	70,000
Singapore	4	4	5,580	47	46	84,200
United Kingdom	--	--	--	505	501	1,120,000
Other (12 countries)	15	14	26,600	54	55	87,300
Total	98	97	264,000	1,420	1,410	3,500,000
Other silicon:						
Canada	77	75	80,600	561	544	606,000
China	105	101	1,080,000	2,220	2,150	10,400,000
Germany	--	--	--	137	133	190,000
Hong Kong	114	110	150,000	440	426	701,000
Japan	242	235	319,000	2,010	1,950	3,650,000
Korea, Republic of	--	--	--	355	344	1,610,000
Netherlands	--	--	--	110	105	828,000
Singapore	14	14	18,500	131	128	205,000
Taiwan	22	21	54,700	979	951	1,970,000
United Kingdom	21	20	27,700	105	102	148,000
Other (20 countries)	16	17	51,000	306	296	786,000
Total	611	593	1,780,000	7,350	7,130	21,100,000
Total silicon metal	3,330	3,320	255,000,000	29,600	29,300	1,860,000,000

^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 OCTOBER 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	40	24	\$136,000	120	72	\$408,000
Brazil	(3)	(3)	2,220	1	1	4,870
Canada	--	--	--	59	30	33,800
China	19	11	49,700	16,800	12,100	20,800,000
Egypt	--	--	--	21	12	21,100
France	142	88	519,000	879	529	1,910,000
Germany	--	--	--	31	19	50,900
Total	202	124	707,000	17,900	12,700	23,200,000
55% - 80% silicon, other:						
Brazil	--	--	--	642	478	1,190,000
Canada	779	580	1,480,000	10,100	7,480	16,400,000
China	1,780	1,330	3,390,000	113,000	84,200	159,000,000
Egypt	--	--	--	141	104	297,000
France	340	222	1,000,000	1,840	1,220	4,130,000
Germany	52	38	262,000	554	405	2,610,000
India	19	13	56,000	269	195	503,000
Norway	27	20	66,400	532	382	1,140,000
Russia	--	--	--	51,900	39,400	82,100,000
Venezuela	5,050	3,790	8,360,000	19,000	14,200	25,800,000
Other (5 countries)	11	8	98,400	292	181	717,000
Total	8,050	6,000	14,700,000	198,000	148,000	294,000,000
Magnesium ferrosilicon:						
Argentina	108	43	340,000	1,290	546	3,440,000
Canada	806	360	1,290,000	7,740	3,510	10,100,000
China	68	43	174,000	656	319	883,000
Germany	--	--	--	10	3	14,400
Japan	15	7	71,800	77	35	288,000
Norway	--	--	--	27	13	62,800
South Africa	--	--	--	75	34	147,000
Total	998	453	1,880,000	9,880	4,460	14,900,000
Other ferrosilicon:						
Brazil	--	--	--	98	46	129,000
Canada	617	234	714,000	8,100	2,890	8,430,000
China	--	--	--	17,800	2,390	8,590,000
France	--	--	--	19	9	28,800
Poland	--	--	--	12	5	21,900
Russia	--	--	--	2,580	1,220	3,330,000
Total	617	234	714,000	28,600	6,560	20,500,000
Total ferrosilicon	9,870	6,810	18,000,000	254,000	172,000	352,000,000

See footnotes at end of table.

TABLE 3--Continued
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN OCTOBER 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	53	XX	\$2,060,000	316	XX	\$6,570,000
China	11	XX	639,000	121	XX	9,720,000
Denmark	(3)	XX	90,700	5	XX	2,630,000
Germany	180	XX	15,000,000	1,220	XX	114,000,000
Italy	23	XX	1,350,000	181	XX	13,500,000
Japan	33	XX	5,640,000	377	XX	63,500,000
Korea, Republic of	1	XX	220,000	53	XX	4,890,000
Poland	(3)	XX	52,900	12	XX	697,000
Spain	2	XX	11,200	6	XX	66,700
Taiwan	(3)	XX	27,200	47	XX	8,230,000
Other (16 countries)	1	XX	96,100	16	XX	2,270,000
Total	304	304^e	25,200,000	2,350	2,350^e	226,000,000
99.00% - 99.99% silicon:						
Australia	908	901	2,450,000	14,400	13,900	36,200,000
Belgium	--	--	--	280	278	560,000
Brazil	1,660	1,650	4,510,000	45,400	45,100	112,000,000
Canada	1,650	1,500 ⁴	2,290,000	12,700	11,400	27,000,000
China	585	582	1,650,000	6,750	6,710	16,100,000
Korea, Republic of	11	(3)	14,000	334	6	434,000
Laos	--	--	--	2,520	2,510	5,890,000
Norway	600	596	1,760,000	5,920	5,890	17,500,000
Philippines	57	57	114,000	226	225	452,000
South Africa	1,960	1,950	4,980,000	30,600	30,400	77,800,000
Other (4 countries)	51	28	241,000	251	198	745,000
Total	7,490	7,260	18,000,000	119,000	117,000	294,000,000
Other silicon:						
Brazil	497	492	1,310,000	7,610	7,510	18,800,000
Canada	741	726	1,390,000	5,060	4,970	11,300,000
China	--	--	--	1,110	1,090	2,100,000
France	--	--	--	266	261	741,000
Japan	13	13	38,800	28	26	81,300
Norway	300	292	636,000	6,090	5,910	15,400,000
Philippines	36	35	76,200	1,010	984	1,560,000
Singapore	(3)	(3)	7,960	10	(3)	26,300
Sweden	--	--	--	575	106	711,000
United Kingdom	--	--	--	409	382	944,000
Other (7 countries)	--	--	--	18	2	50,800
Total	1,590	1,560	3,450,000	22,200	21,200	51,800,000
Total silicon metal	9,380	9,120	46,600,000	144,000	140,000	573,000,000

^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.

⁴All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.