

Mineral Industry Surveys

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SILICON IN NOVEMBER 2007

Preliminary data for November 2007 indicate that domestic production and net shipments of silicon ferroalloys, on a gross-weight basis, increased by 7% and 16%, respectively, compared with those in October 2007, according to the U.S. Geological Survey. Ending stocks decreased by 4% compared with 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-related statistics for silicon metal were concealed to avoid disclosing company proprietary data.

U.S. trade data for October 2007 are published in this issue.

Prices, cents per pound, silicon content

	<u>50% Ferrosilicon¹</u>	<u>75% Ferrosilicon²</u>	<u>Silicon Metal²</u>
November 1	76.00-78.00	68.00-70.00	150.00-155.00
November 8	77.00-79.00	68.00-70.00	150.00-155.00
November 15	77.00-79.00	68.00-70.00	150.00-155.00
November 22	77.00-79.00	69.00-70.00	150.00-155.00
November 29	78.00-80.00	70.00-71.00	150.00-155.00

¹Source: Ryan's Notes, North American transaction price.

²Source: Platts Metals Week, dealer import price.

TABLE 1
U.S. PRODUCTION, SHIPMENTS, AND PRODUCER STOCKS OF SILICON ALLOYS AND METAL IN 2007^{1,2,3}

(Metric tons)

Material	Gross production ⁴		Net shipments		Stocks, November
	November	Year to date ⁵	November	Year to date ⁵	
Ferrosilicon, all grades ^{6,7}	22,600	247,000	21,000	204,000	20,900
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.

⁵Includes revisions to prior months' data.

⁶Ferrosilicon categories were aggregated to avoid disclosing company proprietary data.

⁷Includes miscellaneous silicon alloys and other silicon products.

TABLE 2
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN OCTOBER 2007^{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:						
Canada	773	464	\$901,000	5,230	3,140	\$6,130,000
Colombia	5	4	7,920	58	40	85,000
Italy	--	--	--	16	10	30,200
Malaysia	22	17	35,900	55	43	87,500
Mexico	198	119	253,000	1,090	661	1,320,000
Netherlands	106	63	106,000	106	63	106,000
Spain	--	--	--	16	10	20,300
Thailand	--	--	--	16	10	16,100
United Kingdom	--	--	--	12	11	33,900
Total	1,100	667	1,300,000	6,600	3,990	7,830,000
Other ferrosilicon:						
Belgium	--	--	--	17	8	19,600
Canada	178	89	315,000	1,800	900	2,140,000
Colombia	15	7	21,500	78	36	111,000
Dominican Republic	--	--	--	18	9	48,200
Germany	11	2	10,200	22	5	20,600
Indonesia	--	--	--	16	8	23,800
Italy	--	--	--	50	27	90,700
Mexico	102	51	134,000	629	316	809,000
Peru	--	--	--	15	8	28,800
Spain	--	--	--	16	8	23,800
Other (7 countries)	--	--	--	30	15	50,600
Total	305	149	481,000	2,690	1,340	3,370,000
Total ferrosilicon:	1,410	816	1,780,000	9,290	5,320	11,200,000

See footnotes at end of table.

TABLE 2--Continued
 U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN OCTOBER^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Metal:						
Over 99.99% silicon:						
Canada	32	XX	\$2,180,000	58	XX	\$4,030,000
China	291	XX	34,100,000	2,280	XX	258,000,000
Germany	295	XX	25,100,000	2,050	XX	157,000,000
Japan	658	XX	58,900,000	7,250	XX	647,000,000
Korea, Republic of	108	XX	9,330,000	1,000	XX	85,600,000
Malaysia	11	XX	2,080,000	121	XX	20,300,000
Norway	305	XX	16,400,000	2,800	XX	158,000,000
Taiwan	117	XX	10,700,000	796	XX	76,700,000
Ukraine	13	XX	600,000	159	XX	12,000,000
United Kingdom	6	XX	1,050,000	92	XX	13,500,000
Other (46 countries)	52	XX	7,880,000	321	XX	42,500,000
Total	1,890	1,890^e	168,000,000	16,900	16,900^e	1,470,000,000
99.00% - 99.99% silicon:						
Belgium	--	--	--	10	10	14,100
Brazil	--	--	--	678	672	1,720,000
China	119	118	351,000	1,130	1,120	3,330,000
Germany	--	--	--	36	36	51,000
Ireland	--	--	--	11	11	15,000
Japan	--	--	--	17	17	24,500
Mexico	--	--	--	14	14	22,900
Singapore	--	--	--	29	29	40,900
Switzerland	--	--	--	21	21	30,300
Taiwan	--	--	--	16	16	22,900
Other (10 countries)	9	9	12,500	43	43	69,300
Total	128	127	363,000	2,010	1,990	5,330,000
Other silicon:						
Canada	98	95	105,000	384	373	409,000
China	64	62	84,400	717	696	1,970,000
France	--	--	--	37	36	49,000
Germany	--	--	--	37	36	57,100
Hong Kong	--	--	--	42	41	55,500
Japan	191	185	252,000	1,150	1,110	4,480,000
Korea, Republic of	198	193	262,000	847	822	1,120,000
Netherlands	20	19	232,000	681	662	3,200,000
Taiwan	3	3	23,500	93	89	687,000
United Kingdom	(3)	(3)	4,410	37	36	74,500
Other (19 countries)	22	21	71,600	176	171	480,000
Total	596	579	1,030,000	4,200	4,070	12,600,000
Total silicon metal	2,610	2,590	170,000,000	23,100	23,000	1,490,000,000

^eEstimated. XX Not applicable. -- Zero.

¹Countries listed are the 10 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^{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, over 3% Ca:						
Brazil	--	--	--	152	92	\$200,000
Canada	--	--	--	68	41	36,800
China	40	30	\$44,200	3,850	2,840	3,470,000
France	136	84	250,000	1,080	676	1,730,000
Sweden	--	--	--	4	2	11,300
Total	176	115	294,000	5,150	3,660	5,450,000
55% - 80% silicon, Other:						
Brazil	130	97	156,000	4,180	3,170	4,140,000
Canada	1,090	815	1,480,000	11,300	8,370	13,900,000
China	9,250	6,990	8,520,000	119,000	87,900	104,000,000
France	186	126	366,000	1,740	1,210	3,350,000
Germany	11	8	46,700	371	276	1,830,000
Iceland	--	--	--	503	375	494,000
India	--	--	--	88	63	112,000
Norway	142	104	217,000	1,900	1,400	2,710,000
Russia	5,200	3,960	5,930,000	45,300	33,800	43,400,000
Venezuela	--	--	--	35,100	26,400	29,300,000
Other (4 countries)	4	2	21,800	161	112	613,000
Total	16,000	12,100	16,700,000	220,000	163,000	204,000,000
80% - 90% silicon, Germany	--	--	--	34	25	184,000
More than 90% silicon, China	--	--	--	3,000	2,750	2,390,000
Magnesium Ferrosilicon:						
Argentina	169	73	339,000	1,290	546	2,420,000
Brazil	22	10	27,000	1,800	818	1,580,000
Canada	1,200	560	1,240,000	9,150	4,260	9,540,000
China	16	3	30,300	820	363	875,000
France	18	8	26,600	137	64	182,000
Germany	19	6	38,000	79	35	144,000
Japan	49	19	116,000	191	71	427,000
Netherlands	--	--	--	54	25	52,700
Norway	--	--	--	1,890	875	1,810,000
Russia	--	--	--	1,400	630	672,000
Other (2 countries)	--	--	--	71	40	96,200
Total	1,490	678	1,820,000	16,900	7,730	17,800,000
Other ferrosilicon:						
Canada	827	217	758,000	6,490	1,590	5,960,000
China	24	16	57,500	21,000	2,780	6,150,000
France	12	6	11,600	104	49	104,000
Russia	--	--	--	241	117	208,000
Total	862	240	827,000	27,900	4,530	12,400,000
Total ferrosilicon	18,500	13,100	19,700,000	269,000	179,000	240,000,000

See footnotes at end of table

TABLE 3--Continued
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN OCTOBER^{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	14	XX	\$535,000	42	XX	\$1,280,000
China	6	XX	463,000	74	XX	5,150,000
Germany	103	XX	9,170,000	1,060	XX	110,000,000
Italy	25	XX	2,010,000	233	XX	20,500,000
Japan	56	XX	7,530,000	455	XX	61,500,000
Korea, Republic of	(3)	XX	91,800	32	XX	7,240,000
Poland	--	XX	--	13	XX	590,000
Taiwan	(3)	XX	3,190	20	XX	1,520,000
Turkey	--	XX	--	13	XX	28,900
United Kingdom	13	XX	445,000	15	XX	570,000
Other (15 countries)	3	XX	353,000	27	XX	3,510,000
Total	221	221 ^e	20,600,000	1,980	1,980 ^e	212,000,000
99.00% - 99.99% silicon:						
Australia	1,280	1,270	2,510,000	12,500	12,500	22,000,000
Brazil	4,610	4,580	8,590,000	38,700	38,400	67,600,000
Canada	1,710	1,700	3,260,000	17,400	17,200	31,600,000
Germany	354	5 ⁴	460,000	354	5	460,000
Netherlands	--	--	--	312	310	567,000
Norway	1,310	1,300	3,020,000	7,150	7,090	18,500,000
Philippines	108	107	178,000	892	853	1,410,000
South Africa	1,150	1,140	2,080,000	31,500	31,300	53,700,000
Spain	700	695	1,610,000	1,750	1,740	3,740,000
United Kingdom	--	--	--	50	49	88,300
Other (2 countries)	--	--	--	14	4	30,000
Total	11,200	10,800	21,700,000	111,000	109,000	200,000,000
Other silicon:						
Brazil	203	200	393,000	1,820	1,780	3,390,000
Canada	716	704	1,260,000	5,030	4,930	8,930,000
China	--	--	--	17	14 ⁴	70,300
Germany	411	(3) ⁴	448,000	411	(3) ⁴	448,000
Japan	(3)	(3)	2,480	84	2	97,200
Norway	53	51	69,500	115	94	249,000
Philippines	36	35	56,400	358	351 ⁴	547,000
South Africa	--	--	--	40	39	77,600
Sweden	60	10	65,600	277	73	460,000
United Kingdom	59	59	107,000	386	379	683,000
Other (7 countries)	3	2	18,100	18	17	148,000
Total	1,540	1,060	2,430,000	8,560	7,680	15,100,000
Total silicon metal	13,000	12,100	44,800,000	121,000	119,000	427,000,000

^eEstimated. XX Not applicable. -- Zero.

¹Presentation of monthly data is based on the year-to-date quantities (gross weight) of the top 10 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 for verification.

Source: U.S. Census Bureau.