

Mineral Industry Surveys

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SILICON IN APRIL 2007

Preliminary data for April 2007 indicate that domestic production and shipments of silicon ferroalloys, on a gross-weight basis, increased by 8% and 13%, respectively, compared with those in March 2007, according to the U.S. Geological Survey. Ending stocks decreased by 3% compared with those at the end of the prior month. 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.

Based on a gross-weight comparison of March 2007 export data (table 2) with those of February 2007, ferrosilicon exports

increased by 55%, owing to an increase in the “More than 55% silicon” ferrosilicon trade category. Silicon metal exports increased by 30%, owing primarily to an increase in the “other silicon” metal trade category.

Based on a gross-weight comparison of March 2007 import data (table 3) with those of the prior month, ferrosilicon imports decreased by 45%, owing primarily to a decrease in the “55% - 80% silicon, Other” ferrosilicon trade category. Silicon metal imports increased by 15% during the same period, primarily because of an increase in the “99.00% - 99.99% silicon” metal trade category.

Prices, cents per pound, silicon content

	<u>50% Ferrosilicon¹</u>	<u>75% Ferrosilicon²</u>	<u>Silicon Metal²</u>
April 5	67.00-68.00	59.00-61.00	93.00-95.00
April 12	67.00-68.00	59.00-61.00	93.00-95.00
April 19	67.00-68.00	59.00-61.00	93.00-95.00
April 29	67.00-68.00	59.00-61.00	94.00-96.00

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,
	April	Year to date	April	Year to date	April 30
Ferrosilicon, all grades ^{5, 6}	24,900	89,700	21,500	76,700	23,700
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.

TABLE 2
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN MARCH 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	756	453	\$906,000	1,590	956	\$1,790,000
Colombia	--	--	--	5	4	7,800
Italy	--	--	--	16	10	30,200
Malaysia	--	--	--	11	8	15,600
Mexico	134	81	153,000	387	233	461,000
Spain	--	--	--	16	10	20,300
Thailand	--	--	--	16	10	16,100
Total	890	534	1,060,000	2,050	1,230	2,350,000
Other ferrosilicon:						
Canada	225	112	246,000	684	342	704,000
China	9	5	15,100	9	5	15,100
Colombia	--	--	--	14	6	19,500
India	--	--	--	3	1	4,810
Indonesia	--	--	--	16	8	23,800
Italy	--	--	--	16	9	30,200
Mexico	35	18	41,800	154	78	193,000
Peru	15	8	28,800	15	8	28,800
Spain	--	--	--	16	8	23,800
Total	284	143	331,000	927	465	1,040,000
Total ferrosilicon	1,170	677	1,390,000	2,970	1,700	3,390,000

See footnotes at end of table.

TABLE 2--Continued
 U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN MARCH 2007^{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:						
China	271	XX	\$25,300,000	653	XX	\$73,600,000
Denmark	8	XX	971,000	16	XX	1,740,000
Germany	220	XX	16,000,000	614	XX	45,600,000
Italy	4	XX	504,000	21	XX	2,300,000
Japan	670	XX	62,100,000	1,910	XX	179,000,000
Korea, Republic of	113	XX	9,310,000	330	XX	26,800,000
Malaysia	17	XX	2,730,000	42	XX	6,610,000
Norway	283	XX	15,200,000	914	XX	40,500,000
Taiwan	92	XX	10,000,000	189	XX	21,300,000
United Kingdom	11	XX	1,630,000	32	XX	4,580,000
Other (30 countries)	30	XX	4,510,000	60	XX	7,010,000
Total	1,720	1,720^e	148,000,000	4,780	4,780^e	409,000,000
99.00% - 99.99% silicon:						
Brazil	86	85	219,000	232	230	600,000
China	--	--	--	28	28	77,100
France	6	6	8,500	6	6	8,500
Indonesia	5	5	6,960	5	5	6,960
Mexico	2	2	3,840	3	3	6,470
Peru	--	--	--	3	3	4,500
Singapore	6	6	8,500	9	9	12,400
Taiwan	8	7	10,600	8	7	10,600
United Kingdom	4	4	5,900	7	7	9,690
Venezuela	--	--	--	3	3	3,300
Other (Costa Rica)	--	--	--	1	1	3,840
Total	117	115	263,000	305	302	744,000
Other silicon:						
Canada	50	48	52,400	75	73	82,500
China	43	42	76,900	137	133	258,000
El Salvador	--	--	--	10	10	13,200
Germany	--	--	--	6	6	8,090
Japan	67	64	329,000	269	259	744,000
Korea, Republic of	325	316	430,000	325	316	430,000
Mexico	1	1	5,260	8	8	38,500
Netherlands	144	139	548,000	208	202	856,000
Russia	--	--	--	7	7	9,200
United Kingdom	--	--	3,370	11	10	24,600
Other (5 countries)	9	9	35,600	19	18	60,100
Total	639	619	1,480,000	1,080	1,040	2,520,000
Total silicon metal	2,480	2,460	150,000,000	6,160	6,120	412,000,000

^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.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN MARCH 2007^{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	--	--	--	95	58	\$124,000
China	40	23	\$49,000	177	101	234,000
France	159	98	246,000	264	160	419,000
Sweden	4	2	11,300	4	2	11,300
Total	203	123	307,000	540	321	788,000
55% - 80% silicon, Other:						
Brazil	644	486	646,000	770	583	763,000
Canada	1,090	825	1,360,000	3,240	2,440	3,910,000
China	13,600	10,300	11,200,000	40,600	28,700	33,300,000
France	54	38	91,400	354	256	597,000
Germany	35	26	179,000	103	77	525,000
Iceland	11	8	11,300	345	257	340,000
Norway	223	165	297,000	571	418	835,000
Russia	8,670	6,500	7,710,000	18,400	13,800	15,800,000
Sri Lanka	--	--	--	19	14	34,400
Venezuela	--	--	--	9,880	7,410	7,870,000
Other (2 countries)	32	22	111,000	32	22	111,000
Total	24,400	18,400	21,600,000	74,300	53,900	64,100,000
80% - 90% silicon, Germany	--	--	--	17	12	88,300
Magnesium ferrosilicon:						
Argentina	186	81	353,000	414	192	726,000
Brazil	43	19	46,600	1,560	712	1,370,000
Canada	802	372	833,000	2,670	1,250	2,680,000
China	51	23	64,400	70	37	83,000
France	36	17	53,200	47	23	70,900
Germany	20	9	29,000	20	9	29,000
Japan	15	7	31,600	95	34	205,000
Netherlands	--	--	--	54	25	52,700
Norway	182	84	170,000	369	170	351,000
Russia	--	--	--	1,400	630	672,000
Other (South Africa)	18	9	22,800	18	9	22,800
Total	1,350	621	1,600,000	6,720	3,090	6,270,000
Other ferrosilicon:						
Canada	747	177	695,000	2,190	516	1,990,000
China	--	--	--	12,200	1,540	3,320,000
France	--	--	--	18	8	17,200
Russia	22	11	36,200	131	66	120,000
Total	769	188	731,000	14,500	2,130	5,450,000
Total ferrosilicon	26,700	19,300	24,300,000	96,000	59,500	76,700,000

See footnotes at end of table.

TABLE 3--Continued
 U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN MARCH 2007^{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	3	XX	\$271,000	3	XX	\$271,000
Canada	5	XX	149,000	5	XX	149,000
China	6	XX	230,000	8	XX	908,000
Germany	128	XX	11,600,000	282	XX	27,500,000
Italy	17	XX	1,430,000	70	XX	5,770,000
Japan	35	XX	4,700,000	99	XX	12,000,000
Korea, Republic of	5	XX	1,020,000	18	XX	4,170,000
Switzerland	--	XX	--	2	XX	254,000
Taiwan	5	XX	381,000	17	XX	1,230,000
Turkey	--	XX	--	13	XX	28,900
Other (10 countries)	4	XX	633,000	6	XX	781,000
Total	208	208 ^e	20,400,000	523	523 ^e	53,000,000
99.00% - 99.99% silicon:						
Australia	1,920	1,910	3,270,000	3,950	3,930	6,690,000
Brazil	3,850	3,820	6,650,000	11,000	11,000	18,100,000
Canada	1,960	1,940	3,420,000	5,400	5,360	9,410,000
Netherlands	--	--	--	312	310	567,000
Norway	673	668	1,840,000	1,900	1,860	4,620,000
Philippines	55	54	84,900	293	258	452,000
South Africa	3,010	2,980	5,110,000	7,590	7,500	12,000,000
Total	11,500	11,400	20,400,000	30,500	30,200	51,800,000
Other silicon:						
Brazil	--	--	--	1,270	1,250	2,250,000
Canada	329	323	580,000	1,330	1,290	2,200,000
China	--	--	--	10	10	35,100
France	(3)	(3)	2,660 ⁴	(3)	(3)	2,660
Japan	--	--	--	62	1	67,200
Norway	--	--	--	18	18	57,100
Philippines	90	88	133,000	173	167	262,000
Sweden	12	11	65,600	84	31	198,000
United Kingdom	59	57	102,000	138	135	240,000
Total	490	479	884,000	3,080	2,900	5,320,000
Total silicon metal	12,200	12,100	41,600,000	34,100	33,600	110,000,000

^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 Bureau for verification.

Source: U.S. Census Bureau.