

Mineral Industry Surveys

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SILICON IN SEPTEMBER 2010

Preliminary data for September 2010 indicate that domestic production and net shipments of silicon ferroalloys, on a gross-weight basis, were 3% higher and 7% higher, respectively, compared with those in August 2010, according to the U.S. Geological Survey. Ending stocks were 3% lower than those at the end of August. 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 in the third quarter of 2010 were 3% lower and slightly more than, respectively, those in the second quarter of 2010. Production and net shipments of silicon alloys during the first 9 months of 2010 both increased by 15% compared with those during the same period in 2009. 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 August 2010 were 21% higher and 35% higher, respectively, than those in July 2010. U.S. ferrosilicon and silicon metal exports in the first 8 months of 2010 were 88% higher and 70% higher, respectively, than those during the same period of 2009.

On a gross-weight basis, U.S. ferrosilicon and silicon metal imports in August 2010 were 53% higher and 41% lower, respectively, than those in July 2010. U.S. ferrosilicon and silicon metal imports in the first 8 months of 2010 were 150% higher and 64% higher, respectively, than those during the same period of 2009.

Prices

Prices for silicon materials in September 2010, in cents per pound, silicon content, are listed below.

50% Ferrosilicon prices¹

<u>Price Range</u>	<u>Average Low, Mid, and High Prices</u>
100.00-122.00	110.25-112.63-115.00

75% Ferrosilicon prices²

<u>Price Range</u>	<u>Average Price</u>
91.00-113.00	101.10

Silicon metal prices²

<u>Price Range</u>	<u>Average Price</u>
145.00-152.00	149.00

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 2010^{1, 2, 3}

(Metric tons)

Material	Gross production ⁴		Net shipments		Stocks,
	September	Year to date ⁵	September	Year to date ⁵	September 30
Ferrosilicon, all grades ^{6, 7}	24,500	209,000	22,000	186,000	28,700
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.

⁵May include 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 AUGUST 2010^{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	116	70	\$198,000	426	257	\$738,000
Canada	1,220	734	639,000	9,520	5,710	4,900,000
Ecuador	--	--	--	78	59	109,000
Germany	--	--	--	40	31	58,900
Japan	38	26	76,100	38	26	76,100
Mexico	199	119	430,000	1,320	805	2,620,000
Netherlands	--	--	--	1,190	909	1,980,000
Spain	8	7	20,700	28	19	58,700
Turkey	--	--	--	40	26	87,300
United Kingdom	--	--	--	67	48	72,800
Other (8 countries)	--	--	--	78	56	156,000
Total	1,580	956	1,360,000	12,800	7,940	10,900,000
Other ferrosilicon:						
Belgium	--	--	--	278	126	482,000
Canada	52	26	98,300	933	467	920,000
Colombia	--	--	--	53	24	82,200
Japan	--	--	--	272	136	373,000
Korea, Republic of	108	48	108,000	432	192	405,000
Luxembourg	19	10	24,400	119	62	82,700
Mexico	205	102	302,000	1,160	579	1,370,000
Netherlands Antilles	4	2	5,600	54	27	165,000
Turkey	40	18	74,200	160	72	302,000
United Kingdom	--	--	--	50	23	90,100
Other (11 countries)	16	9	40,000	190	77	373,000
Total	445	215	653,000	3,700	1,780	4,640,000
Total ferrosilicon	2,030	1,170	2,020,000	16,500	9,730	15,500,000

See footnotes at end of table.

TABLE 2—Continued
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN AUGUST 2010^{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	1,600	XX	\$60,900,000	10,900	XX	\$520,000,000
France	19	XX	828,000	246	XX	10,900,000
Germany	605	XX	28,300,000	3,810	XX	173,000,000
Hong Kong	91	XX	3,620,000	343	XX	10,300,000
Italy	13	XX	1,080,000	99	XX	8,050,000
Japan	935	XX	55,900,000	6,610	XX	429,000,000
Korea, Republic of	171	XX	11,100,000	1,600	XX	111,000,000
Norway	644	XX	32,900,000	3,420	XX	178,000,000
Singapore	269	XX	34,800,000	785	XX	59,800,000
Taiwan	265	XX	13,900,000	1,820	XX	108,000,000
Other (45 countries)	44	XX	6,080,000	386	XX	40,200,000
Total	4,650	4,650^c	249,000,000	30,000	30,000^c	1,650,000,000
99.00% - 99.99% silicon:						
Belgium	--	--	--	117	116	247,000
China	--	--	--	35	34	48,800
Egypt	300	297	825,000	300	297	825,000
Germany	281	279	843,000	746	739	2,180,000
Indonesia	14	14	19,700	84	83	118,000
Israel	--	--	--	50	50	90,000
Japan	140	139	325,000	1,050	1,040	2,840,000
Singapore	4	4	5,160	90	90	128,000
Spain	--	--	--	43	42	107,000
United Kingdom	--	--	--	64	64	151,000
Other (16 countries)	16	16	32,700	111	110	239,000
Total	755	749	2,050,000	2,690	2,660	6,970,000
Other silicon:						
Belgium	--	--	--	28	27	94,300
Canada	275	267	757,000	1,120	1,090	3,120,000
China	30	29	40,000	184	179	324,000
Finland	--	--	--	33	32	43,800
Germany	--	--	--	35	34	119,000
Hong Kong	149	145	220,000	513	498	884,000
Japan	923	896	1,220,000	3,610	3,490	9,700,000
Mexico	7	7	16,200	329	320	458,000
Taiwan	--	--	--	62	59	736,000
United Kingdom	--	--	--	264	259	474,000
Other (13 countries)	15	15	37,000	120	117	288,000
Total	1,400	1,360	2,290,000	6,300	6,100	16,200,000
Total silicon metal	6,810	6,760	254,000,000	39,000	38,800	1,670,000,000

^cEstimated, 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.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN AUGUST 2010^{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	--	--	--	113	76	\$256,000
Brazil	90	55	\$193,000	122	69	286,000
Canada	--	--	--	1	1	2,680
China	268	200	321,000	966	711	1,220,000
France	17	14	39,600	554	353	1,410,000
Israel	--	--	--	38	23	82,000
Norway	--	--	--	15	10	44,500
Total	376	268	554,000	1,810	1,240	3,300,000
55% - 80% silicon, other:						
Brazil	200	150	330,000	1,190	904	2,000,000
Canada	945	694	2,160,000	7,400	5,470	15,400,000
China	4,730	3,580	6,650,000	25,300	19,200	33,300,000
France	78	56	196,000	891	650	2,460,000
Germany	49	36	304,000	478	348	2,280,000
Hong Kong	500	375	855,000	500	375	855,000
India	17	13	53,300	221	162	569,000
Norway	54	40	191,000	55	41	194,000
Russia	13,000	9,870	18,700,000	70,400	53,700	96,800,000
Venezuela	4,190	3,140	5,400,000	17,100	12,800	23,900,000
Other (1 country)	1	1	5,760	46	29	258,000
Total	23,700	17,900	34,900,000	124,000	93,600	178,000,000
80% - 90% ferrosilicon, Germany	17	12	118,000	143	117	243,000
Magnesium ferrosilicon:						
Argentina	--	--	--	241	80	639,000
Brazil	--	--	--	1,170	533	1,890,000
Canada	1,030	459	1,720,000	6,990	3,150	12,200,000
China	--	--	--	219	96	400,000
France	12	6	22,100	438	174	624,000
Japan	--	--	--	16	7	62,300
South Africa	--	--	--	19	8	18,900
Total	1,040	465	1,740,000	9,100	4,040	15,900,000
Other ferrosilicon:						
Brazil	--	--	--	35	16	13,700
Canada	722	161	901,000	4,330	1,020	5,290,000
China	160	83	325,000	8,870	1,290	4,430,000
France	--	--	--	9	5	22,500
Singapore	4	2	7,170	4	2	7,170
Total	887	246	1,230,000	13,200	2,330	9,760,000
Total ferrosilicon	26,100	18,900	38,500,000	148,000	101,000	207,000,000

See footnotes at end of table.

TABLE 3—Continued
 U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN AUGUST 2010^{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:						
Brazil	--	XX	--	56	XX	\$8,950,000
Canada	28	XX	\$359,000	220	XX	2,880,000
China	9	XX	266,000	85	XX	3,520,000
Germany	172	XX	12,400,000	1,560	XX	103,000,000
Italy	32	XX	2,210,000	206	XX	14,100,000
Japan	40	XX	2,770,000	327	XX	30,100,000
Korea, Republic of	82	XX	4,640,000	366	XX	21,300,000
Norway	--	XX	--	149	XX	4,870,000
Russia	--	XX	--	35	XX	2,210,000
Taiwan	4	XX	198,000	21	XX	987,000
Other (11 countries)	1	XX	197,000	18	XX	2,890,000
Total	368	368^c	23,000,000	3,040	3,040^c	195,000,000
99.00% - 99.99% silicon:						
Australia	469	466	1,300,000	7,910	7,860	20,200,000
Brazil	5,020	4,990	13,300,000	40,300	39,500	104,000,000
Canada	551	546	1,490,000	4,470	4,370	11,700,000
France	54	54	213,000	690	687	2,100,000
Laos	358	356	789,000	4,310	4,290	8,990,000
Norway	744	740	2,810,000	4,180	4,150	16,000,000
Philippines	29	29	117,000	436	433	1,020,000
South Africa	645	640	1,430,000	19,700	19,500	47,200,000
Spain	--	--	--	1,160	1,160	3,050,000
Thailand	636	633	1,480,000	2,640	2,630	5,990,000
Other (8 countries)	32	1	41,000	283	121	708,000
Total	8,540	8,450	23,000,000	86,100	84,800	221,000,000
Other silicon:						
Australia	--	--	--	96	95	243,000
Brazil	360	356	693,000	7,650	7,410	14,200,000
Canada	1,330	1,300	3,190,000	8,680	8,500	20,300,000
China	20	20	43,000	232	102	451,000
France	--	--	--	1,460	1,430	3,840,000
Germany	21	20	41,500	153	43	199,000
Japan	34	28	91,300	195	164	537,000
Norway	--	--	--	2,500	1,930	6,450,000
Philippines	--	--	--	84	83	152,000
South Africa	--	--	--	94	89	216,000
Other (5 countries)	88	71	218,000	114	73	249,000
Total	1,850	1,800	4,270,000	21,300	19,900	46,900,000
Total silicon metal	10,800	10,600	50,300,000	110,000	108,000	464,000,000

^cEstimated. 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.

Source: U.S. Census Bureau.