



# Mineral Industry Surveys

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## SILICON IN JULY 2010

Preliminary data for July 2010 indicate that domestic production and net shipments of silicon ferroalloys, on a gross-weight basis, were 10% lower and 9% lower, respectively, compared with those in June 2010 [21,200 metric tons (t), revised net shipments], according to the U.S. Geological Survey. Ending stocks were 3% lower than the revised amount at the end of June (31,500 t). 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 the first 7 months of 2010 both increased by 14% 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 June 2010 were 21% lower and 10% higher,

respectively, than those in May 2010. U.S. ferrosilicon and silicon metal exports in the first 6 months of 2010 were 148% 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 June 2010 were 46% lower and 5% lower, respectively, than those in May 2010. U.S. ferrosilicon and silicon metal imports in the first 6 months of 2010 were 185% higher and 62% higher, respectively, than those during the same period of 2009.

### Prices

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

### 50% Ferrosilicon prices<sup>1</sup>

<u>Price Range</u>	<u>Average Low, Mid, and High Prices</u>
99.00-105.00	99.00-102.00-105.00

### 75% Ferrosilicon prices<sup>2</sup>

<u>Price Range</u>	<u>Average Price</u>
90.00-94.00	92.00

### Silicon metal prices<sup>2</sup>

<u>Price Range</u>	<u>Average Price</u>
138.00-145.00	141.25

<sup>1</sup>Source: Ryan's Notes, North American transaction price. Average prices reported for the price range.

<sup>2</sup>Source: 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<sup>1,2,3</sup>

(Metric tons)

Material	Gross production <sup>4</sup>		Net shipments		Stocks,
	July	Year to date <sup>5</sup>	July	Year to date <sup>5</sup>	July 31
Ferrosilicon, all grades <sup>6,7</sup>	21,100	161,000	19,200	143,000	30,400
Silicon metal, excludes semiconductor grades	W	W	W	W	W

W Withheld to avoid disclosing company proprietary data.

<sup>1</sup>Data are rounded to no more than three significant digits.

<sup>2</sup>Includes U.S. Geological Survey estimates.

<sup>3</sup>Data for silvery pig iron (less than 25% silicon) withheld to avoid disclosing company proprietary data.

<sup>4</sup>Includes in-plant consumption, as in production of magnesium ferrosilicon and other miscellaneous alloys.

<sup>5</sup>May include revisions to prior months' data.

<sup>6</sup>Ferrosilicon categories were aggregated to avoid disclosing company proprietary data.

<sup>7</sup>Includes miscellaneous silicon alloys and other silicon products.

TABLE 2  
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN JUNE 2010<sup>1,2</sup>

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
<b>Ferrosilicon:</b>						
<b>More than 55% silicon:</b>						
Australia	--	--	--	20	15	\$44,600
Brazil	39	23	\$64,200	268	161	462,000
Canada	840	504	618,000	7,730	4,640	3,770,000
Colombia	14	10	33,500	23	17	56,200
Ecuador	--	--	--	78	59	109,000
Germany	--	--	--	40	31	58,900
Mexico	78	47	169,000	1,020	628	1,970,000
Netherlands	580	442	970,000	1,170	894	1,950,000
Turkey	--	--	--	20	14	41,000
United Kingdom	27	21	44,200	67	48	72,800
Other (4 countries)	2	1	3,400	41	28	71,700
<b>Total</b>	<b>1,580</b>	<b>1,050</b>	<b>1,900,000</b>	<b>10,500</b>	<b>6,530</b>	<b>8,600,000</b>
<b>Other ferrosilicon:</b>						
Australia	--	--	--	40	20	78,600
Belgium	180	82	325,000	260	118	469,000
Canada	44	22	113,000	184	92	444,000
Colombia	24	11	45,500	53	24	82,200
Japan	57	29	81,100	272	136	373,000
Korea, Republic of	--	--	--	324	144	297,000
Luxembourg	--	--	--	81	43	33,900
Mexico	19	10	42,600	880	440	937,000
<b>Netherlands Antilles</b>	--	--	--	<b>45</b>	<b>22</b>	<b>154,000</b>
Turkey	--	--	--	60	27	121,000
Other (10 countries)	60	25	109,000	129	51	243,000
<b>Total</b>	<b>384</b>	<b>178</b>	<b>717,000</b>	<b>2,330</b>	<b>1,120</b>	<b>3,230,000</b>
<b>Total ferrosilicon</b>	<b>1,970</b>	<b>1,230</b>	<b>2,620,000</b>	<b>12,800</b>	<b>7,650</b>	<b>11,800,000</b>

See footnotes at end of table.

TABLE 2—Continued  
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN JUNE 2010<sup>1,2</sup>

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
<b>Metal:</b>						
<b>More than 99.99% silicon:</b>						
China	2,000	XX	\$96,200,000	8,220	XX	\$407,000,000
France	18	XX	843,000	170	XX	7,590,000
Germany	492	XX	23,100,000	2,830	XX	126,000,000
Hong Kong	11	XX	346,000	229	XX	5,840,000
Italy	9	XX	1,050,000	71	XX	5,930,000
Japan	836	XX	53,900,000	5,010	XX	329,000,000
Korea, Republic of	203	XX	13,900,000	1,180	XX	84,000,000
Norway	567	XX	28,300,000	2,280	XX	122,000,000
Singapore	150	XX	7,450,000	448	XX	21,600,000
Taiwan	204	XX	11,400,000	1,170	XX	74,400,000
Other (40 countries)	59	XX	5,090,000	304	XX	29,600,000
<b>Total</b>	<b>4,550</b>	<b>4,550<sup>c</sup></b>	<b>242,000,000</b>	<b>21,900</b>	<b>21,900<sup>c</sup></b>	<b>1,210,000,000</b>
<b>99.00% - 99.99% silicon:</b>						
Belgium	17	16	23,300	77	77	202,000
China	26	26	37,000	32	32	44,800
Germany	--	--	--	455	451	1,320,000
Indonesia	14	14	19,700	56	55	78,800
Israel	--	--	--	50	50	90,000
Japan	--	--	--	731	725	2,120,000
Poland	--	--	--	20	20	51,200
Singapore	7	7	10,300	80	79	112,000
<b>Spain</b>	<b>40</b>	<b>40</b>	<b>103,000</b>	<b>43</b>	<b>42</b>	<b>107,000</b>
United Kingdom	--	--	--	44	44	95,800
Other (11 countries)	2	2	10,400	57	56	114,000
<b>Total</b>	<b>106</b>	<b>105</b>	<b>204,000</b>	<b>1,640</b>	<b>1,630</b>	<b>4,340,000</b>
<b>Other silicon:</b>						
Canada	93	91	270,000	659	640	1,910,000
China	--	--	--	154	150	284,000
Finland	24	23	31,300	33	32	43,800
Germany	--	--	--	35	34	119,000
Hong Kong	13	13	17,300	212	206	464,000
Japan	639	615	1,840,000	1,800	1,730	6,660,000
Mexico	1	1	7,140	322	313	442,000
South Africa	9	9	11,800	25	25	40,600
Taiwan	--	--	--	62	59	736,000
United Kingdom	2	2	19,000	256	252	463,000
Other (13 countries)	9	8	73,500	98	95	279,000
<b>Total</b>	<b>789</b>	<b>761</b>	<b>2,270,000</b>	<b>3,660</b>	<b>3,540</b>	<b>11,400,000</b>
<b>Total silicon metal</b>	<b>5,440</b>	<b>5,410</b>	<b>244,000,000</b>	<b>27,200</b>	<b>27,100</b>	<b>1,230,000,000</b>

<sup>c</sup>Estimated. XX Not applicable. -- Zero.

<sup>1</sup>Countries listed are the leading exporters in terms of year-to-date quantities (gross weight).

<sup>2</sup>Data 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 JUNE 2010<sup>1,2</sup>

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
<b>Ferrosilicon:</b>						
55% - 80% silicon, more than 3% Ca:						
Argentina	--	--	--	95	58	\$205,000
Brazil	--	--	--	28	11	80,500
Canada	--	--	--	1	1	2,680
China	56	33	\$124,000	529	386	711,000
France	215	138	536,000	464	293	1,190,000
Israel	--	--	--	38	23	82,000
Norway	--	--	--	15	10	44,500
<b>Total</b>	<b>271</b>	<b>171</b>	<b>660,000</b>	<b>1,170</b>	<b>781</b>	<b>2,310,000</b>
55% - 80% silicon, other:						
Brazil	257	188	481,000	736	557	1,240,000
Canada	949	694	2,020,000	5,570	4,120	11,400,000
China	6,420	4,870	8,380,000	18,300	13,900	23,500,000
France	72	52	164,000	777	566	2,170,000
Germany	66	47	379,000	413	302	1,870,000
India	34	26	59,600	170	124	409,000
Norway	--	--	--	1	1	3,170
Russia	5,160	3,910	8,090,000	46,000	35,200	61,600,000
United Kingdom	(3)	(3)	2,520	17	11	95,600
Venezuela	3,400	2,550	5,450,000	12,900	9,680	18,500,000
<b>Total</b>	<b>16,400</b>	<b>12,300</b>	<b>25,000,000</b>	<b>85,000</b>	<b>64,400</b>	<b>121,000,000</b>
80% - 90% ferrosilicon, Germany	--	--	--	3	3	13,100
<b>Magnesium ferrosilicon:</b>						
Argentina	--	--	--	241	80	639,000
Brazil	130	62	217,000	1,010	456	1,610,000
Canada	1,110	499	1,920,000	5,160	2,330	9,060,000
China	34	15	64,100	88	39	163,000
France	144	72	188,000	335	123	452,000
Japan	--	--	--	16	7	62,300
South Africa	--	--	--	19	8	18,900
<b>Total</b>	<b>1,420</b>	<b>647</b>	<b>2,380,000</b>	<b>6,870</b>	<b>3,040</b>	<b>12,000,000</b>
<b>Other ferrosilicon:</b>						
Brazil	--	--	--	35	16	13,700
Canada	538	119	653,000	3,050	726	3,700,000
China	40	21	50,400	8,690	1,200	4,020,000
France	--	--	--	9	5	22,500
<b>Total</b>	<b>578</b>	<b>139</b>	<b>704,000</b>	<b>11,800</b>	<b>1,940</b>	<b>7,750,000</b>
<b>Total ferrosilicon</b>	<b>18,600</b>	<b>13,300</b>	<b>28,800,000</b>	<b>105,000</b>	<b>70,100</b>	<b>143,000,000</b>

See footnotes at end of table.

TABLE 3—Continued  
 U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN JUNE 2010<sup>1, 2</sup>

(Metric tons, unless otherwise specified)

	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
<b>Metal:</b>						
<b>More than 99.99% silicon:</b>						
Brazil	--	XX	--	56	XX	\$8,950,000
Canada	11	XX	\$412,000	130	XX	1,560,000
China	5	XX	358,000	71	XX	3,000,000
Germany	192	XX	10,900,000	1,220	XX	80,500,000
Italy	17	XX	1,320,000	150	XX	10,200,000
Japan	29	XX	3,230,000	248	XX	22,900,000
Korea, Republic of	75	XX	4,120,000	281	XX	16,600,000
Norway	33	XX	1,230,000	130	XX	4,790,000
Russia	(3)	XX	135,000	35	XX	2,210,000
Taiwan	5	XX	233,000	15	XX	709,000
Other (11 countries)	2	XX	372,000	15	XX	2,310,000
<b>Total</b>	<b>369</b>	<b>369<sup>e</sup></b>	<b>22,300,000</b>	<b>2,350</b>	<b>2,350<sup>e</sup></b>	<b>154,000,000</b>
<b>99.00% - 99.99% silicon:</b>						
Australia	621	617	1,620,000	5,680	5,650	13,900,000
Brazil	4,340	4,310	10,600,000	29,500	28,800	76,600,000
Canada	976	968	2,690,000	3,150	3,060	8,210,000
France	168	167	486,000	636	633	1,890,000
Laos	540	537	1,150,000	3,350	3,330	6,900,000
Norway	456	453	1,730,000	3,060	3,040	11,700,000
Philippines	--	--	--	407	404	899,000
South Africa	2,150	2,130	5,540,000	14,300	14,200	34,900,000
Spain	450	447	1,180,000	892	887	2,340,000
Thailand	1,080	1,080	2,430,000	1,260	1,250	2,830,000
Other (8 countries)	156	107	465,000	222	120	628,000
<b>Total</b>	<b>10,900</b>	<b>10,800</b>	<b>27,900,000</b>	<b>62,500</b>	<b>61,400</b>	<b>161,000,000</b>
<b>Other silicon:</b>						
Australia	--	--	--	96	95	243,000
Brazil	190	187	445,000	6,570	6,360	11,800,000
Canada	911	897	2,110,000	6,200	6,070	14,400,000
China	--	--	--	212	82	408,000
France	532	522	1,410,000	1,120	1,100	2,940,000
Germany	--	--	--	134	23	158,000
Hong Kong	--	--	--	12	(3)	12,800
Japan	19	18	56,000	132	109	356,000
Norway	493	119	1,340,000	1,890	1,350	5,130,000
Philippines	--	--	--	84	83	152,000
Other (1 country)	--	--	--	7	(3)	7,200
<b>Total</b>	<b>2,150</b>	<b>1,740</b>	<b>5,360,000</b>	<b>16,500</b>	<b>15,300</b>	<b>35,600,000</b>
<b>Total silicon metal</b>	<b>13,400</b>	<b>12,900</b>	<b>55,500,000</b>	<b>81,300</b>	<b>79,100</b>	<b>350,000,000</b>

<sup>e</sup>Estimated. XX Not applicable. -- Zero.

<sup>1</sup>Presentation of monthly data is based on the year-to-date quantities (gross weight) of the leading countries.

<sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.