

Mineral Industry Surveys

For information, contact:

Lisa A. Corathers, Silicon Commodity Specialist U.S. Geological Survey 989 National Center Reston, VA 20192

Telephone: (703) 648-4973, Fax: (703) 648-7757

E-mail: lcorathers@usgs.gov

Martha L. Jackson (Data) Telephone: (703) 648-7944 Fax: (703) 648-7975

E-mail: mjackson@usgs.gov

Internet: http://minerals.usgs.gov/minerals

SILICON IN OCTOBER 2008

Preliminary data for October 2008 indicate that domestic production and net shipments of silicon ferroalloys, on a grossweight basis, decreased by 2% and 13%, respectively, compared with those in September 2008, according to the U.S. Geological Survey. Ending stocks were 5% higher than those at the end of September. Stocks included adjustments in inventory and inplant consumption of ferrosilicon to produce magnesium ferrosilicon and other miscellaneous alloys.

Production and net shipments during the first 10 months of 2008 increased by 9% and 6%, respectively, compared with the revised amounts of those during the same period in 2007 [225,000 metric tons (t), production; and 183,000 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 September 2008 were 6% higher and 6% lower,

respectively, than those in August 2008. U.S. ferrosilicon and silicon metal exports in the first nine months of 2008 were 13,900 t and 26,200 t, respectively; these were 77% 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 September 2008 were 84% and 22% lower, respectively, than those in the prior month. U.S. ferrosilicon and silicon metal imports during the first nine months of 2008 were 244,000 t and 135,000 t, respectively; these were 3% lower and 24% higher, respectively, than those during the same period in 2007.

Prices

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

50% ferrosilicon prices¹

Price Range 110.00-123.00 Average Low-High Prices 114.44-118.56

75% ferrosilicon prices²

Price Range 98.00-115.00 Average Price 105.10

Silicon metal prices²

Price Range 150.00-170.00 **Average Price** 163.00

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

²Source: Platts Metals Week, dealer import price. Average prices reported for all transactions during the month.

 ${\it TABLE~1} \\ {\it U.S.~PRODUCTION, SHIPMENTS, AND~PRODUCER~STOCKS~OF~SILICON~ALLOYS~AND~METAL~IN~2008}^{1,\,2,\,3}$

(Metric tons)

	Gross prod	duction ⁴	Net shi	Stocks,	
Material	October	Year to date	October	Year to date	October 31
Ferrosilicon, all grades ^{5, 6}	25,100	246,000	18,700	195,000	23,800
Silicon metal, excludes semiconductor grades	W	W	W	W	W

W Withheld to avoid disclosing company proprietary data.

TABLE 2 U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN SEPTEMBER $2008^{1,2}$

(Metric tons, unless otherwise specified)

					Year to date	
	Gross	Contained		Gross	Contained	
Country	weight	weight	Value	weight	weight	Value
Ferrosilicon:						
More than 55% silicon:	_					
Brazil	114	74	\$203,000	375	236	\$663,000
Canada	1,300	779	1,920,000	7,250	4,350	11,100,000
Colombia				26	19	39,100
Costa Rica				3	2	10,000
Honduras				1	1	3,210
Italy	33	20	88,100	98	64	247,000
Japan				45	(3)	44,700
Malaysia				44	32	72,000
Mexico	138	83	255,000	1,910	1,180	3,320,000
Total	1,580	956	2,470,000	9,750	5,880	15,500,000
Other ferrosilicon:	_ <u></u>					
Belgium				160	85	282,000
Brazil	203	101	356,000	552	276	1,180,000
Canada	68	34	133,000	1,260	631	2,300,000
Colombia				69	32	117,000
Germany	67	34	152,000	367	185	692,000
Italy	33	15	80,600	131	63	284,000
Mexico	140	70	309,000	795	398	1,350,000
Netherlands				379	190	651,000
Turkey	123	62	197,000	223	109	400,000
United Kingdom				114	57	243,000
Other (5 countries)	15	7	26,300	115	53	212,000
Total	648	323	1,250,000	4,170	2,080	7,710,000
Total ferrosilicon	2,230	1,280	3,720,000	13,900	7,960	23,200,000

See footnotes at end of table.

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--Continued U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN SEPTEMBER 2008 $^{\rm 1,2}$

(Metric tons, unless otherwise specified)

				Year to date			
	Gross	Contained		Gross	Contained		
Country	weight	weight	Value	weight	weight	Value	
Metal:							
More than 99.99% silicon:							
Canada	(3)	XX	\$27,900	192	XX	\$13,300,000	
China	352	XX	42,900,000	2,640	XX	299,000,000	
Finland	18	XX	2,940,000	170	XX	26,400,000	
Germany	434	XX	27,900,000	3,460	XX	210,000,000	
Hong Kong	37	XX	13,200,000	110	XX	33,900,000	
Japan	619	XX	77,600,000	6,190	XX	585,000,000	
Korea, Republic of	100	XX	9,480,000	1,030	XX	86,300,000	
Malaysia	9	XX	1,600,000	109	XX	20,400,000	
Norway	274	XX	16,700,000	2,660	XX	149,000,000	
Taiwan	120	XX	9,740,000	1,130	XX	85,100,000	
Other (37 countries)	22	XX	3,030,000	495	XX	69,300,000	
Total	1,990	1,990 °	205,000,000	18,200	18,200 e	1,580,000,000	
99.00% - 99.99% silicon:							
China	16	16	47,500	543	539	1,570,000	
Dominican Republic				13	13	17,800	
Germany				12	11	16,200	
Hong Kong	4	4	59,600	45	44	163,000	
Italy				13	13	17,900	
Japan				46	46	112,000	
Korea, Republic of				15	15	21,000	
Mexico	15	15	21,700	44	44	70,000	
Singapore				43	43	78,600	
United Kingdom	15	15	26,100	505	501	1,120,000	
Other (9 countries)			, 	41	41	60,700	
Total	51	51	155,000	1,320	1,310	3,240,000	
Other silicon:			•				
Canada				484	470	526,000	
China	347	335	2,660,000	2,110	2,050	9,300,000	
Germany				137	133	190,000	
Hong Kong				326	316	551,000	
Japan	189	182	758,000	1,770	1,710	3,330,000	
Korea, Republic of	<u></u>			355	344	1,610,000	
Netherlands				110	105	828,000	
Singapore	1	1	16,700	117	114	186,000	
Taiwan	193	188	479,000	957	930	1,910,000	
United Kingdom	8	8	10,900	84	82	120,000	
Other (20 countries)	95	92	158,000	289	280	735,000	
Total	834	807	4,080,000	6,740	6,540	19,300,000	
Total silicon metal	2.870	2.840	209,000,000	26,200	26,000	1,600,000,000	
eFstimated XX Not applicable -	,	2,040	202,000,000	20,200	20,000	1,000,000,000	

^eEstimated. XX Not applicable. -- Zero.

Source: U.S. Census Bureau.

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.

TABLE 3 U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN SEPTEMBER $2008^{1,\,2}$

(Metric tons, unless otherwise specified)

				Year to date		
	Gross	Contained		Gross	Contained	
Country	weight	weight	Value	weight	weight	Value
Ferrosilicon:						
55% - 80% silicon, more than 3% Ca:						
Argentina	40	24	\$136,000	80	48	\$272,000
Brazil				1	1	2,640
Canada				59	30	33,800
China				16,800	12,100	20,700,000
Egypt				21	12	21,100
France	144	87	329,000	737	441	1,390,000
Germany				31	19	50,900
Total	184	111	465,000	17,700	12,600	22,500,000
55% - 80% silicon, other:						
Brazil	65	48	148,000	642	478	1,190,000
Canada	1,060	787	1,980,000	9,270	6,900	14,900,000
China	5,080	3,890	10,100,000	111,000	82,900	156,000,000
Egypt				141	104	297,000
France	144	93	377,000	1,500	999	3,120,000
Germany	106	75	430,000	502	368	2,350,000
India	34	25	75,100	250	181	447,000
Norway	54	40	133,000	505	362	1,070,000
Russia				51,900	39,400	82,100,000
Venezuela				13,900	10,400	17,400,000
Other (5 countries)				281	173	619,000
Total	6,540	4,960	13,300,000	190,000	142,000	279,000,000
Magnesium ferrosilicon:						
Argentina	93	41	272,000	1,190	503	3,110,000
Canada	780	362	1,160,000	6,940	3,150	8,770,000
China	34	15	90,800	588	276	709,000
Germany				10	3	14,400
Japan				62	28	217,000
Norway	27	13	62,800	27	13	62,800
South Africa				75	34	147,000
Total	934	429	1,590,000	8,890	4,010	13,000,000
Other ferrosilicon:						
Brazil				98	46	129,000
Canada	937	371	1,020,000	7,490	2,650	7,710,000
China				17,800	2,390	8,590,000
France	1	(3)	2,580	19	9	28,800
Poland			·	12	5	21,900
Russia				2,580	1,220	3,330,000
Total	938	371	1,020,000	28,000	6,330	19,800,000
Total ferrosilicon	8,600	5,870	16,400,000	244,000	165,000	334,000,000
G C + + + 1 C+ 11	-,	-,	-,,	.,	, 0	,,,,,,,,,,,

See footnotes at end of table.

TABLE 3--Continued U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN SEPTEMBER 2008 $^{\rm 1,\,2}$

(Metric tons, unless otherwise specified)

				Year to date		
	Gross	Contained		Gross	Contained	
	weight	weight	Value	weight	weight	Value
Metal:						
More than 99.99% silicon:						
Canada	16	XX	\$570,000	264	XX	\$4,510,000
China	9	XX	317,000	110	XX	9,080,000
Denmark	(3)	XX	74,600	5	XX	2,540,000
Germany	109	XX	8,740,000	1,040	XX	99,400,000
Italy	3	XX	268,000	158	XX	12,100,000
Japan	34	XX	3,740,000	343	XX	57,900,000
Korea, Republic of	4	XX	469,000	52	XX	4,670,000
Poland		XX		12	XX	644,000
Taiwan	1	XX	233,000	46	XX	8,200,000
United Kingdom		XX	·	4	XX	546,000
Other (14 countries)	(3)	XX	43,100	16	XX	1,690,000
Total	175	175 °	14,500,000	2,050	2,050 e	201,000,000
99.00% - 99.99% silicon:			, ,	,	,	, , , , , , , , , , , , , , , , , , , ,
Australia	1,250	1,070 4	2,940,000	13,500	13,000	33,700,000
Belgium				280	278	560,000
Brazil	6,120	6,080 4	16,100,000	43,800	43,400	107,000,000
Canada	928	683	2,360,000	11,000	9,890	24,800,000
China	91	91	242,000	6,160	6,130	14,500,000
Korea, Republic of				323	6	420,000
Laos	90	90	214,000	2,520	2,510	5,890,000
Norway	576	572	1,690,000	5,320	5,290	15,800,000
Philippines	130	129	272,000	169	168	337,000
South Africa	1,480	1,470	3,820,000	28,600	28,400	72,800,000
Other (4 countries)	2	2	2,250	200	171	504,000
Total	10,700	10,200	27,700,000	112,000	109,000	276,000,000
Other silicon:						
Brazil	622	615	1,660,000	7,110	7,020	17,500,000
Canada	450	441	1,280,000	4,320	4,250	9,960,000
China				1,110	1,090	2,100,000
France				266	261	741,000
Japan	13	13	38,800	14	14	42,600
Norway	250	244	647,000	5,790	5,620	14,800,000
Philippines	90	89	212,000	970	948	1,480,000
Singapore	10	(3)	18,300	10	(3)	18,300
Sweden	178	25	194,000	575	106	711,000
United Kingdom	38	37	93,600	409	382	944,000
Other (7 countries)	(3)	(3)	8,490	20	1	50,800
Total	1,650	1,460	4,150,000	20,600	19,700	48,400,000
Total silicon metal	12,500	11,800	46,300,000	135,000	131,000	526,000,000

^eEstimated. XX Not applicable. -- Zero.

Source: U.S. Census Bureau.

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.

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