



Mineral Industry Surveys

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CHROMIUM IN AUGUST 2007

On the basis of gross weight, consumption of chromium ferroalloys and metal in August 2007 decreased slightly compared with consumption in July 2007, according to the U.S. Geological Survey.

Included in this Mineral Industry Surveys are U.S. salient chromium statistics, U.S. Government stockpile inventory of chromium materials in August 2007, consumption by end use and consumer stocks of chromium ferroalloys and metal at the

end of August 2007, and U.S. foreign trade data for selected chromium-containing materials in July 2007.

Monthly price information for high-carbon ferrochromium, low-carbon ferrochromium, ferrochromium silicon, and chromium metal are included in this Mineral Industry Surveys.

TABLE 1
U.S. SALIENT CHROMIUM STATISTICS¹

(Metric tons, gross weight)

	2006	2007				
	January-December ²	June	Second quarter ²	July	August	January-August ²
Production:						
Stainless steel production ³	2,460,000	218,000	1,230,000	151,000	147,000	1,530,000 ⁴
Components of U.S. supply:						
Stainless steel scrap receipts	1,050,000	84,800	513,000	71,900	71,400	657,000
Stainless steel scrap consumption	1,500,000	123,000	747,000	114,000	113,000	973,000
Imports for consumption:						
Chromite ore	150,000	470	53,300	5,420	35,800	94,500
Ferrochromium:						
More than 4% carbon	393,000	14,500	201,000	18,400	29,000	248,000
More than 0.5%, but not more than 3% carbon	29	--	4,500	514	200	5,210
Not more than 0.5% carbon	28,100	1,200	16,000	1,750	1,930	19,700
Ferrochromium silicon	38,300	--	13,300	10,800	6,430	30,600
Total ferroalloy imports	459,000	15,700	235,000	31,400	37,600	304,000
Chromium metal ⁵	10,900	1,400	6,000	1,200	1,290	8,490
Stainless steel	872,000	76,900	435,000	74,000	66,400	575,000
Stainless steel scrap	180,000	11,400	70,200	5,380	5,550	81,200
Distribution of U.S. supply:						
Consumption, industry, chromium ferroalloys and metal	553,000	38,400	224,000	36,800	36,800	297,000
Exports:						
Chromite ore	53,900	790	28,100	844	874	29,800
Chromium ferroalloys:						
High-carbon ferrochromium	18,800	1,550	18,500	869	533	19,900
Low-carbon ferrochromium	16,600	248	12,000	238	715	12,900
Ferrochromium silicon	248	29	254	21	19	293
Total ferroalloy exports	35,700	1,830	30,800	1,130	1,270	33,200
Chromium metal	1,020	75	622	102	123	847
Stainless steel	410,000	43,400	263,000	35,400	35,100	334,000
Stainless steel scrap	506,000	77,300	428,000	70,700	69,200	568,000
Stocks at end of period:						
Consumer, industry, chromium ferroalloys and metal	XX	12,000	XX	11,900	12,400	XX
Government stockpile:						
Chromium ferroalloys	XX	264,000	XX	264,000	262,000	XX
Chromium metal	XX	5,280	XX	5,150	5,150	XX

XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include revised data.

³Data on stainless steel production reported by American Iron and Steel Institute; monthly, quarterly, and year-to-date production of stainless and heat-resisting raw steel.

⁴Includes revised data that are not broken out by specific month.

⁵Includes waste and scrap and other.

TABLE 2
U.S. REPORTED CONSUMPTION AND STOCKS OF CHROMIUM PRODUCTS IN 2007^{1,2}

(Metric tons, gross weight unless otherwise noted)

	July	August	January- August ³
Consumption by end use:			
Alloy uses:			
Iron alloys:			
Steel:			
Carbon steel	381	337	2,680
High-strength low-alloy steel	499	502	3,760
Stainless and heat-resisting steel	32,200	30,700	261,000
Full alloy steel	1,690	1,740	12,000
Electrical steel	W	W	W
Tool steel	419	427	3,470
Unspecified steel	W	W	W
Cast irons	W	W	W
Superalloys	620	748	5,530
Other alloys ⁴	44	33	281
Total	36,800	35,400	296,000
Total, chromium content	21,400	20,800	173,000
Consumption by material:			
Low-carbon ferrochromium	1,980	2,040	15,800
High-carbon ferrochromium	31,900	30,400	254,000
Ferrochromium silicon	W	W	W
Chromium metal	356	409	2,900
Chromite ore	W	W	W
Chromium-aluminum alloy	W	W	W
Other chromium materials	W	W	W
Total	36,800	35,400	296,000
Total, chromium content	21,400	20,800	173,000
Consumer stocks:			
Low-carbon ferrochromium	1,930	1,920	XX
High-carbon ferrochromium	8,810	9,240	XX
Ferrochromium silicon	933	1,070	XX
Chromium metal	154	160	XX
Chromite ore	5	W	XX
Chromium-aluminum alloy	W	W	XX
Other chromium materials	W	15	XX
Total	11,900	12,500	XX
Total, chromium content	7,030	7,390	XX

W Withheld to avoid disclosing company proprietary data; included in "Total." XX Not applicable.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes estimates.

³May include revised data.

⁴Includes welding and alloy hard-facing rods and materials; wear- and corrosion-resistant alloys; and aluminum, copper, magnetic, nickel, and other alloys.

TABLE 3
U.S. GOVERNMENT STOCKPILE INVENTORY OF
CHROMIUM MATERIALS^{1,2}

(Metric tons)

Period	Chromium ferroalloys		Chromium metal
	High-carbon ferro-chromium	Low-carbon ferro-chromium	
2006:			
August	267,000	137,000	5,280
September	265,000	135,000	5,280
October	263,000	133,000	5,280
November	255,000	132,000	5,280
December	229,000	118,000	5,280
2007:			
January	223,000	111,000	5,280
February	215,000	108,000	5,280
March	204,000	98,900	5,280
April	191,000	94,900	5,280
May	177,000	91,300	5,280
June	177,000	86,700	5,280
July	177,000	86,700	5,150
August	170,000	92,200	5,150

¹Data are rounded to no more than three significant digits.

²These Government stocks are reported by the Defense National Stockpile Center in Inventory of Stockpile Materials R-1, which reports uncommitted inventory. Uncommitted inventory is that inventory for which there is no sales contract. Committed inventory is that inventory for which there is a sales contract, however, the material has not yet been shipped. For chromium materials, the R-1 report includes chromium materials that (1) meet specifications and are held in excess of goal and (2) do not meet specifications and are held in excess of goal. The R-1 report excludes chromium materials that are committed and awaiting shipment.

Source: Defense National Stockpile Center.

TABLE 4
U.S. EXPORTS OF CHROMITE ORE, CHROMIUM FERROALLOYS, AND METAL¹

Period	Chromite ore		Chromium ferroalloys ²			Chromium metal ³	
	Gross weight (metric tons)	Value (thousands)	Gross weight (metric tons)	Chromium content (metric tons)	Value (thousands)	Gross weight (metric tons)	Value (thousands)
2006:							
August	6,940	5,550	2,380	1,410	3,000	109	2,270
September	2,280	309	1,440	801	2,060	109	1,910
October	445	157	2,050	1,240	2,360	95	1,830
November	22,700	1,240	2,560	1,610	3,650	85	1,720
December	286	116	7,380	4,410	8,550	62	1,490
January-December	53,900	10,200	35,700	21,300	38,100	1,020	21,300
2007:							
January	455	185	5,410	3,330	6,050	107	1,990
February	821	361	16,300	11,100	15,500	115	1,600
March	899	368	1,320	745	1,620	80	1,600
April	12,000	748	1,820	1,070	2,310	140	2,490
May	13,100	1,150	4,060	2,540	5,740	105	1,440
June	790	308	1,830	1,040	2,680	75	1,520
July	844	350	1,130	657	1,760	102	1,760
January-July	28,900	3,470	31,900	20,500	35,600	724	12,400

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes low-, medium-, and high-carbon ferrochromium and ferrochromium silicon.

³Includes chromium metal waste and scrap and unwrought powders.

Source: U.S. Census Bureau.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF CHROMITE ORE, FERROCHROMIUM, AND CHROMIUM METAL¹

(Metric tons)

	2006	2007		
	January- December ²	June	July	January- July ²
Chromite ore:				
Not more than 40%:				
Gross weight	117	--	--	5
Chromic oxide content	45	--	--	2
More than 40% but less than 46% chromic oxide:				
Gross weight	3,810	96	48	26,100
Chromic oxide content	1,750	44	22	12,000
46% or more chromic oxide:				
Gross weight	146,000	374	5,380	32,600
Chromic oxide content	76,300	176	2,500	15,200
Total, all grades:				
Gross weight	150,000	470	5,420	58,700
Chromic oxide content	78,100	220	2,520	27,200
Ferrochromium:				
Low-carbon: ³				
Not more than 0.5%:				
Gross weight	28,100	1,200	1,750	17,800
Chromium content	19,300	801	1,210	12,100
More than 0.5% but not more than 3%:				
Gross weight	29	--	514	5,010
Chromium content	23	--	358	2,890
Total, low-carbon:				
Gross weight	28,100	1,200	2,260	22,800
Chromium content	19,300	801	1,560	15,000
High-carbon: ⁴				
Gross weight	393,000	14,500	18,400	219,000
Chromium content	230,000	7,210	11,300	124,000
Total, all grades:				
Gross weight	421,000	15,700	20,600	242,000
Chromium content	249,000	8,010	12,800	139,000
Chromium metal:				
Unwrought powders	1,250	81	15	593
Waste and scrap	90	71	15	110
Other than waste and scrap and unwrought powders	9,540	1,250	1,170	6,500
Total, all grades	10,900	1,400	1,200	7,200

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include revised data.

³Ferrochromium containing not more than 3% carbon.

⁴Ferrochromium containing more than 4% carbon.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF FERROCHROMIUM IN 2007,
BY GRADE AND BY COUNTRY¹

Grade and country	July			January-July ²		
	Gross weight (metric tons)	Chromium content (metric tons)	Value ³ (thousands)	Gross weight (metric tons)	Chromium content (metric tons)	Value ³ (thousands)
High-carbon ferrochromium:⁴						
India	86	53	\$85	463	283	\$460
Kazakhstan	10,400	7,180	15,900	61,800	43,400	70,800
Mexico	--	--	--	20	14	32
Russia	2,000	1,250	3,090	12,000	7,550	11,800
South Africa	5,900	2,780	3,720	133,000	65,800	84,500
Sweden	20	14	53	41	28	105
Switzerland	--	--	--	3,500	1,680	2,130
Tajikistan	--	--	--	5	3	9
Zimbabwe	--	--	--	8,070	4,840	8,130
Total	18,400	11,300	22,800	219,000	124,000	178,000
Low-carbon ferrochromium:⁵						
Not more than 0.5% carbon:						
Brazil	--	--	--	2	1	6
China	--	--	--	225	148	479
Germany	300	210	701	3,640	2,550	8,270
Japan	353	237	107	2,840	1,910	5,600
Kazakhstan	--	--	--	1,700	118	2,870
Russia	1,070	738	2,480	8,540	5,840	15,000
South Africa	--	--	--	718	427	1,050
Sweden	25	20	92	93	66	230
Turkey	--	--	--	8	5	26
Total	1,750	1,210	3,380	17,800	11,100	33,600
More than 0.5% but not more than 3%:						
Kazakhstan	514	358	999	1,110	777	2,090
South Africa	--	--	--	3,900	2,120	3,860
Total	514	358	999	5,010	2,890	5,950
All grades:						
Brazil	--	--	--	2	1	6
China	--	--	--	225	148	479
Germany	300	210	701	3,640	2,550	8,270
India	86	53	85	463	283	460
Japan	353	237	707	2,840	1,910	5,600
Kazakhstan	10,900	7,540	16,900	64,700	45,300	75,700
Mexico	--	--	--	20	14	32
Russia	3,060	1,990	5,570	20,500	13,400	26,800
South Africa	5,900	2,780	3,720	138,000	68,400	89,400
Sweden	45	34	144	134	94	336
Switzerland	--	--	--	3,500	1,680	2,130
Tajikistan	--	--	--	5	3	9
Turkey	--	--	--	8	5	26
Zimbabwe	--	--	--	8,070	4,840	8,130
Total	20,600	12,800	27,800	242,000	139,000	217,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include revised data.

³Customs import value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the merchandise into the United States.

⁴Ferrochromium containing more than 4% carbon.

⁵Ferrochromium containing not more than 3% carbon.

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF CHROMIUM METAL IN 2007,
BY GRADE AND BY COUNTRY¹

Grade and country	July		January-July ²	
	Gross weight (metric tons)	Value ³ (thousands)	Gross weight (metric tons)	Value ³ (thousands)
Unwrought powders:				
China	12	\$249	102	\$1,920
France	--	--	6	43
Germany	--	--	12	71
Japan	3	147	34	1,160
Russia	--	--	199	1,980
Spain	--	--	16	86
United Kingdom	(4)	66	224	1,810
Total	15	462	593	7,060
Waste and scrap:				
Germany	--	--	16	63
Japan	8	133	16	191
Korea, Republic of	--	--	(4)	8
Mexico	7	19	72	398
Singapore	--	--	4	102
Taiwan	--	--	2	28
Total	15	151	109	789
Other than waste and scrap and unwrought powders:				
China	95	979	1,390	11,000
France	324	2,960	1,490	13,300
Germany	3	98	69	1,090
Hong Kong	--	--	(4)	8
Italy	(4)	3	(4)	18
Japan	1	17	18	115
Netherlands	--	--	7	31
Russia	561	4,030	2,670	18,200
Switzerland	--	--	(4)	5
Taiwan	--	--	5	9
United Kingdom	186	1,470	851	6,680
Total	1,170	9,550	6,500	50,400
All grades:				
China	107	1,230	1,490	12,900
France	324	2,960	1,490	13,300
Germany	3	98	97	1,220
Hong Kong	--	--	(4)	8
Italy	(4)	3	(4)	18
Japan	12	297	67	1,460
Korea, Republic of	--	--	(4)	8
Mexico	7	19	72	398
Netherlands	--	--	7	31
Russia	561	4,030	2,870	20,200
Singapore	--	--	4	102
Spain	--	--	16	86
Switzerland	--	--	(4)	5
Taiwan	--	--	6	38
United Kingdom	186	1,530	1,080	8,490
Total	1,200	10,200	7,200	58,200

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include revised data.

³Customs import value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the merchandise into the United States.

⁴Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 8
U.S. TRADE OF STAINLESS STEEL, BY PRODUCT, IN 2007¹

Stainless steel product	July		January-July	
	Gross weight (metric tons)	Value ² (thousands)	Gross weight (metric tons)	Value ² (thousands)
Exports:				
Ingot	862	\$5,290	8,820	\$60,300
Flat-rolled (width > 600 mm)	20,200	57,300	169,000	502,000
Flat-rolled (width < 600 mm)	6,180	35,700	61,000	326,000
Bars and rods in irregular coils	530	2,760	5,380	28,200
Other bars and rods	3,470	27,000	23,500	169,000
Wire	622	4,650	5,240	37,100
Tubes, pipes, hollow profiles	3,570	27,900	26,200	195,000
Total	35,400	161,000	299,000	1,320,000
Stainless steel scrap	70,700	113,000	499,000	1,070,000
Grand total	106,000	274,000	797,000	2,390,000
Imports:				
Ingot	11,800	64,300	80,000	399,000
Flat-rolled (width > 600 mm)	32,200	152,000	219,000	963,000
Flat-rolled (width < 600 mm)	3,960	21,900	25,800	144,000
Bars and rods in irregular coils	2,640	15,100	17,900	89,400
Other bars and rods	8,280	53,300	61,900	338,000
Wire	3,510	27,300	25,400	164,000
Tubes, pipes, hollow profiles	11,600	101,000	79,100	599,000
Total	74,000	435,000	509,000	2,700,000
Stainless steel scrap	5,380	8,050	75,600	122,000
Grand total	79,300	443,000	585,000	2,820,000

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Export value is free alongside ship (f.a.s.). Import value is Customs import value, which generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the merchandise into the United States.

Source: U.S. Census Bureau.

TABLE 9
HIGH-CARBON FERROCHROMIUM AVERAGE MONTHLY PRICES

(Cents per pound, contained chromium)

Month	United States ¹				
	1	2	3	4	5
2006:					
July	71 - 76	63 - 66	63 - 65	63 - 65	65 - 68
August	71 - 76	64 - 66	64 - 65	63 - 65	65 - 68
September	71 - 76	64 - 67	64 - 65	62 - 64	66 - 68
October	71 - 76	63 - 66	64 - 65	61 - 64	66 - 68
November	71 - 76	63 - 66	65 - 69	72 - 64	63 - 65
December	71 - 76	64 - 67	63 - 65	63 - 65	63 - 65
2007:					
January	71 - 76	68 - 70	65 - 66	67 - 69	63 - 65
February	71 - 76	73 - 75	68 - 70	72 - 74	67 - 70
March	71 - 76	81 - 83	75 - 77	80 - 83	70 - 74
April	81 - 83	96 - 100	86 - 93	94 - 100	80 - 85
May	81 - 83	102 - 106	89 - 98	98 - 105	91 - 97
June	114 - 123	126 - 130	102 - 114	124 - 129	110 - 120
July	124 - 131	133 - 138	100 - 113	127 - 133	120 - 130
August	107 - 115	125 - 131	102 - 115	120 - 126	120 - 130
September	101 - 108	130 - 135	107 - 116	127 - 131	120 - 130

See footnotes at end of table.

TABLE 9--Continued
HIGH-CARBON FERROCHROMIUM AVERAGE MONTHLY PRICES

(Cents per pound, contained chromium)

Monthly average	Europe ²				Japan ³		Hong Kong ⁴		China ⁵
	1	2	3	4	1	2	1	2	
2006:									
July	67 - 71	57 - 60	74 - 76	65 - 67	64 - 65	78	68 - 70	NA	6,380 - 6,680
August	67 - 71	57 - 60	74 - 76	65 - 67	64 - 65	80	68 - 70	NA	6,080 - 6,390
September	67 - 71	57 - 60	74 - 76	64 - 66	64 - 65	80	68 - 70	NA	6,040 - 6,230
October	67 - 71	57 - 60	75 - 77	64 - 66	63 - 65	80	68 - 70	NA	5,910 - 6,200
November	67 - 71	57 - 60	77 - 79	65 - 68	60 - 64	82	68 - 70	NA	6,030 - 6,250
December	67 - 71	57 - 60	77 - 79	65 - 68	65 - 67	83	68 - 70	NA	6,340 - 6,540
2007:									
January	67 - 71	57 - 60	77 - 79	67 - 71	68 - 70	83	68 - 70	NA	6,900 - 7,060
February	75 - 77	72 - 74	NA - 78	71 - 77	72 - 73	83	68 - 70	NA	7,330 - 7,440
March	75 - 77	78 - 81	NA - 75	83 - 91	79 - 81	83	68 - 70	NA	7,600 - 7,770
April	80 - 82	91 - 95	NA - 79	93 - 103	82 - 85	87	68 - 70	NA	8,290 - 8,450
May	84 - 86	100 - 105	81 - 83	98 - 108	85 - 90	90	77 - 83	NA	8,550 - 8,950
June	84 - 86	132 - 137	85 - 87	120 - 130	105 - 112	90	94 - 104	NA	8,640 - 9,020
July	102 - 104	140 - 145	99 - 101	128 - 138	120 - 125	90	100 - 110	NA	8,440 - 8,600
August	102 - 104	136 - 141	99 - 101	130 - 145	101 - 107	108	100 - 110	NA	8,300 - 8,580
September	102 - 104	135 - 140	99 - 101	131 - 146	94 - 99	108	100 - 110	NA	8,500 - 8,800

NA Not available.

¹Source for United States 1 is Platts Metals Week; United States 1 is called charge 50% - 55% chromium, imported, by Platts Metals Week. Source for United States 2 is Platts Metals Week; United States 2 is called 60% - 65% chromium, imported, by Platts Metals Week. Source for United States 3 is Ryan's Notes; United States 3 is called 50% - 52% chromium, imported, by Ryan's Notes. Source for United States 4 is Ryan's Notes; United States 4 is called 60% - 65% chromium, imported, by Ryan's Notes. Source for United States 5 is Metal Bulletin; United States 5 is called 6% - 8% carbon, basis 60% - 65% chromium, max. 2% silicon, by Metal Bulletin.

²Source for Europe 1 is Platts Metals Week; Europe 1 is called 52% chromium, by Platts Metals Week. Source for Europe 2 is Platts Metals Week; Europe 2 is called 62% chromium, by Platts Metals Week. Source for Europe 3 is Metal Bulletin; Europe 3 is called lumpy chromium charge, basis 52% chromium, by Metal Bulletin. Source for Europe 4 is Metal Bulletin; Europe 4 is called 6% - 8% carbon, basis 60% chromium, max. 1.5% silicon, by Metal Bulletin.

³Source for Japan 1 is Platts Metals Week; Japan 1 is called 50% - 55% chromium, spot, cost insurance freight (c.i.f.), by Platts Metals Week. Source for Japan 2 is Platts Metals Week; Japan 2 is called 50% - 55% chromium, regular, c.i.f., by Platts Metals Week.

⁴Source for Hong Kong 1 is Platts Metals Week; Hong Kong 1 is called 60% chromium, by Platts Metals Week. Source for Hong Kong 2 is Metal Bulletin; Hong Kong 2 is called 8% carbon, 60% chromium, free on board main Chinese ports, by Metal Bulletin.

⁵Source for China is Metal Bulletin; China is called 6% - 8% carbon, basis 60% chromium, delivered duty paid China RMB/tonne (metric ton), by Metal Bulletin.

TABLE 10
LOW-CARBON FERROCHROMIUM PRICES

(Dollars per pound, contained chromium, unless otherwise noted)

Monthly average	United States ¹				
	1	2	3	4	5
2006:					
July	1.14 - 1.19	1.00 - 1.04	0.99 - 1.02	1.13 - 1.16	0.99 - 1.02
August	1.14 - 1.19	1.03 - 1.08	1.01 - 1.05	1.13 - 1.16	0.99 - 1.01
September	1.14 - 1.19	1.03 - 1.06	1.02 - 1.05	1.13 - 1.16	1.01 - 1.03
October	1.15 - 1.19	1.05 - 1.07	1.04 - 1.06	1.13 - 1.16	1.05 - 1.08
November	1.15 - 1.17	1.06 - 1.09	1.04 - 1.07	1.14 - 1.16	1.03 - 1.06
December	1.15 - 1.18	1.07 - 1.10	1.06 - 1.09	1.15 - 1.17	1.04 - 1.07
2007:					
January	1.19 - 1.24	1.13 - 1.16	1.12 - 1.15	1.19 - 1.22	1.13 - 1.15
February	1.32 - 1.34	1.20 - 1.25	1.19 - 1.23	1.27 - 1.30	1.19 - 1.21
March	1.41 - 1.46	1.22 - 1.26	1.21 - 1.24	1.40 - 1.45	1.21 - 1.24
April	1.50 - 1.55	1.29 - 1.32	1.27 - 1.30	1.46 - 1.51	1.27 - 1.30
May	1.60 - 1.64	1.31 - 1.33	1.30 - 1.32	1.50 - 1.55	1.30 - 1.32
June	1.68 - 1.74	1.47 - 1.52	1.46 - 1.51	1.65 - 1.72	1.50 - 1.55
July	1.70 - 1.81	1.55 - 1.60	1.54 - 1.59	1.69 - 1.80	1.53 - 1.57
August	1.70 - 1.78	1.52 - 1.58	1.51 - 1.57	1.69 - 1.78	1.49 - 1.55
September	1.76 - 1.83	1.57 - 1.62	1.55 - 1.61	1.71 - 1.78	1.55 - 1.61

See footnotes at end of table.

TABLE 10--Continued
LOW-CARBON FERROCHROMIUM PRICES

(Dollars per pound, contained chromium, unless otherwise noted)

Monthly average	United States ¹				Europe ²		
	6	7	8	9	1	2	3
2006:							
July	0.95 - 0.99	1.15 - 1.17	0.97 - 0.98	0.91 - 0.93	1.03 - 1.13	1.08 - 1.11	1.11 - 1.17
August	0.95 - 0.99	1.15 - 1.17	0.97 - 0.98	0.91 - 0.93	1.03 - 1.13	1.10 - 1.13	1.15 - 1.20
September	0.98 - 1.01	1.16 - 1.18	0.99 - 1.03	0.94 - 0.96	1.03 - 1.13	1.12 - 1.17	1.16 - 1.22
October	1.02 - 1.05	1.16 - 1.18	1.00 - 1.04	0.95 - 0.97	1.03 - 1.13	1.12 - 1.17	1.16 - 1.22
November	1.01 - 1.04	1.16 - 1.18	1.05 - 1.08	1.02 - 1.06	1.03 - 1.13	1.15 - 1.20	1.17 - 1.23
December	1.02 - 1.05	1.16 - 1.18	1.05 - 1.08	1.02 - 1.06	1.03 - 1.13	1.15 - 1.20	1.18 - 1.24
2007:							
January	1.10 - 1.13	1.16 - 1.18	1.05 - 1.08	1.02 - 1.06	1.03 - 1.13	1.16 - 1.20	1.20 - 1.24
February	1.18 - 1.20	1.21 - 1.27	1.13 - 1.17	1.07 - 1.10	1.03 - 1.13	1.17 - 1.21	1.22 - 1.26
March	1.20 - 1.22	1.25 - 1.35	1.20 - 1.25	1.12 - 1.14	1.03 - 1.13	1.22 - 1.28	1.25 - 1.30
April	1.24 - 1.26	1.35 - 1.40	1.24 - 1.28	1.13 - 1.15	1.14 - 1.22	1.22 - 1.27	1.25 - 1.30
May	1.24 - 1.26	1.45 - 1.53	1.28 - 1.32	1.16 - 1.20	1.25 - 1.30	1.37 - 1.42	1.42 - 1.47
June	1.46 - 1.51	1.62 - 1.70	1.37 - 1.44	1.26 - 1.32	1.49 - 1.57	1.55 - 1.64	1.59 - 1.69
July	1.50 - 1.55	1.70 - 1.90	1.45 - 1.60	1.30 - 1.40	1.65 - 1.75	1.63 - 1.73	1.62 - 1.75
August	1.47 - 1.52	1.70 - 1.90	1.45 - 1.60	1.30 - 1.40	1.62 - 1.72	1.66 - 1.76	1.63 - 1.76
September	1.50 - 1.56	1.70 - 1.90	1.45 - 1.60	1.30 - 1.40	1.60 - 1.70	1.71 - 1.81	1.68 - 1.78

¹Source for United States 1 is Platts Metals Week; United States 1 is called 0.05% carbon, imported, by Platts Metals Week. Source for United States 2 is Platts Metals Week; United States 2 called 0.10% carbon, imported, by Platts Metals Week. Source for United States 3 is Platts Metals Week; United States 3 is called 0.15% carbon, imported, by Platts Metals Week. Source for United States 4 is Ryan's Notes; United States 4 is called 0.05% carbon, imported, by Ryan's Notes. Source for United States 5 is Ryan's Notes; United States 5 is called 0.1% carbon, imported, by Ryan's Notes. Source for United States 6 is Ryan's Notes; United States 6 is called 0.15% carbon, imported, by Ryan's Notes. Source for United States 7 is Metal Bulletin; United States 7 is called 0.05% carbon, imported, 65% min. chromium, free on board (f.o.b.) Pittsburgh, by Metal Bulletin. Source for United States 8 is Metal Bulletin; United States 8 is called 0.10% carbon, 62% min. chromium, f.o.b. Pittsburgh, by Metal Bulletin. Source for United States 9 is Metal Bulletin; United States 9 is called 0.15% carbon, 60% min. chromium, f.o.b. Pittsburgh, by Metal Bulletin.

²Source for Europe 1 is Platts Metals Week; Europe 1 is called 0.1% carbon, by Platts Metals Week. Source for Europe 2 is Metal Bulletin; Europe 2 is called 0.1% carbon, average 68% - 70% chromium, by Metal Bulletin. Source for Europe 3 is Metal Bulletin; Europe 3 is called 0.06% carbon max., 65% chromium, by Metal Bulletin.

TABLE 11
FERROCHROMIUM SILICON AND CHROMIUM METAL PRICES

(Dollars per pound, gross weight, unless otherwise noted)

Monthly average	Ferrochromium silicon ¹	Chromium metal			
		United States		Europe	
		Electrolytic ²	Aluminothermic ³	Aluminothermic ⁴ 1	2
2006:					
July	0.610	4.50	2.78 - 2.83	2.99 - 3.08	4.65 - 4.83
August	0.590	4.50	2.71 - 2.76	3.06 - 3.15	4.65 - 4.83
September	0.570	4.50	2.64 - 2.72	3.08 - 3.18	4.65 - 4.83
October	0.550	4.50	2.56 - 2.63	3.08 - 3.18	4.65 - 4.83
November	0.420	4.50	1.91 - 1.95	3.06 - 3.15	4.65 - 4.83
December	0.550	4.50	2.50 - 2.60	3.04 - 3.13	4.65 - 4.83
2007:					
January	0.510	4.50	3.00 - 3.05	2.95 - 3.04	4.65 - 4.83
February	0.520	4.50	3.14 - 3.19	3.36 - 3.47	4.65 - 4.83
March	0.560	NA	3.40 - 3.48	3.43 - 3.55	4.65 - 4.83
April	0.620	NA	3.64 - 3.73	3.48 - 3.59	4.65 - 4.83
May	0.650	NA	3.65 - 3.75	3.45 - 3.63	4.65 - 4.83
June	0.780	NA	3.65 - 3.75	3.45 - 3.63	4.65 - 4.83
July	0.800	NA	3.65 - 3.75	3.45 - 3.63	4.65 - 4.83
August	0.760	NA	3.65 - 3.74	3.43 - 3.59	4.65 - 4.83
September	0.780	NA	3.65 - 3.70	3.49 - 3.61	4.65 - 4.83

¹Source for ferrochromium silicon is Ryan's Notes.

²Source for United States Electrolytic is Ryan's Notes; United States Electrolytic is called North American producer chrome metal, by Ryan's Notes.

³Source for United States Aluminothermic is Ryan's Notes; United States Aluminothermic is called aluminothermic imported metal, by Ryan's Notes.

⁴Source for Europe Aluminothermic 1 is Metal Bulletin; Europe Aluminothermic 1 is called aluminothermic, min. 99% metal, by Metal Bulletin; price converted from dollars per metric ton to dollars per pound. Source for Europe Aluminothermic 2 is Metal Bulletin; Europe Aluminothermic 2 is called western un-degassed AT, min. 99.4% metal, by Metal Bulletin; price converted from dollars per kilogram to dollars per pound.