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Mineral Industry Surveys

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CHROMIUM IN FEBRUARY 2007

On the basis of gross weight, consumption of chromium ferroalloys and metal in February 2007 decreased 6% compared with that in January 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 February 2007, consumption by end use and consumer stocks of chromium ferroalloys and metal at the end of February 2007, and U.S. foreign trade data for selected chromium-containing materials in January 2007.

TABLE 1
U.S. SALIENT CHROMIUM STATISTICS[1]

(Metric tons, gross weight)

	2006			2007		
	December	Fourth quarter	January-December[2]	January	February	January-February[2]
Production:						
Stainless steel production[3]	154,000	565,000	2,460,000 [4]	219,000	185,000	403,000 [4]
Components of U.S. supply:						
Stainless steel scrap receipts	NA	NA	NA	NA	NA	NA
Stainless steel scrap consumption	NA	NA	NA	NA	NA	NA
Imports for consumption:						
Chromite ore	26,500	53,300	150,000	36,400	NA	36,400
Ferrochromium:						
More than 4% carbon	28,100	97,200	393,000	30,100	NA	30,100
More than 0.5%, but not more than 3% carbon	19	19	29	1,300	NA	1,300
Not more than 0.5% carbon	2,340	5,490	28,100	2,270	NA	2,270
Ferrochromium silicon	770	6,670	38,300	763,000	NA	763,000
Total ferroalloy imports	31,200	109,000	459,000	797,000	NA	797,000
Chromium metal[5]	1,500	3,440	10,900	654	NA	654
Stainless steel	73,000	227,000	872,000	75,800	NA	75,800
Stainless steel scrap	12,800	38,600	180,000	9,710	NA	9,710
Distribution of U.S. supply:						
Consumption, industry, chromium ferroalloys and metal	32,500	101,000	422,000	37,300	35,000	72,300
Exports:						
Chromite ore	286	23,400	53,900	455	NA	455
Chromium ferroalloys:						
High-carbon ferrochromium	2,060	3,100	18,800	2,130	NA	2,130
Low-carbon ferrochromium	5,310	8,860	16,600	3,270	NA	3,270
Ferrochromium silicon	--	25	248	--	NA	--
Total ferroalloy exports	7,380	12,000	35,700	5,410	NA	5,410
Chromium metal	62	242	1,020	107	NA	107
Stainless steel	30,500	93,200	410,000	35,000	NA	35,000
Stainless steel scrap	44,600	122,000	1,350,000	59,200	NA	59,200
Stocks at end of period:						
Consumer, industry, chromium ferroalloys and metal	12,900	XX	XX	11,400	12,300	XX
Government stockpile:						
Chromium ferroalloys	334,000	XX	XX	334,000	323,000	XX
Chromium metal	5,280	XX	XX	5,280	5,280	XX

NA Not available. XX Not applicable. -- Zero.

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

[2]May include revised data.

[3]Data 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.

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

[5]Includes 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)

	2006	2007		
	January-December	January	February	January-February[3]
Consumption by end use:				
Alloy uses:				
Iron alloys:				
Steel:				
Carbon steel	3,650	301	268	569
High-strength low-alloy steel	6,420	460	474	933
Stainless and heat-resisting steel	366,000	33,400	30,400	63,700
Full alloy steel	19,300	978	1,750	2,730
Electrical steel	W	W	W	W
Tool steel	4,870	454	423	876
Unspecified steel	W	W	W	W
Cast irons	W	W	W	W
Superalloys	9,620	733	773	1,510
Other alloys[4]	635	64	48	112
Total	422,000	37,300	35,000	72,300
Total, chromium content	248,000	22,100	20,500	42,600
Consumption by material:				
Low-carbon ferrochromium	22,900	2,070	1,890	3,960
High-carbon ferrochromium	358,000	31,500	29,800	61,300
Ferrochromium silicon	36,200	3,280	2,910	6,190
Chromium metal	4,870	406	398	805
Chromite ore	W	W	W	W
Chromium-aluminum alloy	275	W	17	W
Other chromium materials	W	W	W	W
Total	422,000	37,300	35,000	72,300
Total, chromium content	248,000	22,100	20,500	42,600
Consumer stocks:				
Low-carbon ferrochromium	XX	2,010	2,030	XX
High-carbon ferrochromium	XX	8,060	8,740	XX
Ferrochromium silicon	XX	1,060	1,280	XX
Chromium metal	XX	177	173	XX
Chromite ore	XX	W	W	XX
Chromium-aluminum alloy	XX	24	25	XX
Other chromium materials	XX	W	W	XX
Total	XX	11,400	12,300	XX
Total, chromium content	XX	6,840	7,290	XX

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

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

[2]Includes estimates.

[3]May include revised data.

[4]Includes 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:			
February	308,000	166,000	5,590
March	276,000	145,000	5,590
April	275,000	145,000	5,590
May	271,000	139,000	5,280
June	270,000	139,000	5,280
July	270,000	137,000	5,280
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

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

[2]These 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 METAL[1]

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:							
January	462	$199	1,100	676	$1,300	69	$1,600
February	1,830	344	739	447	893	85	2,100
March	618	285	733	447	936	140	2,350
April	331	163	708	403	982	43	1,370
May	1,080	277	1,710	937	1,670	58	1,440
June	8,160	825	6,300	3,750	5,660	66	1,380
July	8,780	725	8,570	5,170	7,060	95	1,800
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

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

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

[3]Includes 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 METAL[1]

(Metric tons)

	2006			2007
	November	December	January-December[2]	January
Chromite ore:				
Not more than 40%:				
Gross weight	--	63	117	--
Chromic oxide content	--	25	45	--
More than 40% but less than 46% chromic oxide:				
Gross weight	48	72	3,810	24,100
Chromic oxide content	22	33	1,750	11,100
46% or more chromic oxide:				
Gross weight	5,010	26,400	146,000	12,300
Chromic oxide content	2,320	12,400	76,300	5,700
Total, all grades:				
Gross weight	5,060	26,500	150,000	36,400
Chromic oxide content	2,340	12,400	78,100	16,800
Ferrochromium:				
Low-carbon:[3]				
Not more than 0.5%:				
Gross weight	1,980	2,340	28,100	2,270
Chromium content	1,370	1,600	19,300	1,520
More than 0.5% but not more than 3%:				
Gross weight	--	19	29	1,300
Chromium content	--	16	23	687
Total, low-carbon:				
Gross weight	1,980	2,360	28,100	3,570
Chromium content	1,370	1,610	19,300	2,200
High-carbon:[4]				
Gross weight	30,900	28,100	393,000	30,100
Chromium content	18,600	15,400	230,000	20,000
Total, all grades:				
Gross weight	32,900	30,500	421,000	33,700
Chromium content	20,000	17,000	249,000	22,200
Chromium metal:				
Unwrought powders	108	106	1,250	160
Waste and scrap	5	23	90	2
Other than waste and scrap and unwrought powders	743	1,370	9,540	492
Total, all grades	856	1,500	10,900	654

-- Zero.

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

[2]May include revised data.

[3]Ferrochromium containing not more than 3% carbon.

[4]Ferrrochromium 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 COUNTRY[1]

Grade and country	January		
	Gross weight (metric tons)	Chromium content (metric tons)	Value[2] (thousands)
High-carbon ferrochromium:[3]			
Kazakhstan	22,600	16,100	$21,300
Russia	752	469	455
South Africa	6,780	3,450	4,140
Total	30,100	20,000	25,900
Low-carbon ferrochromium:[4]			
More than 0.5% but not more than 3%, South Africa	1,300	687	1,180
Not more than 0.5% carbon:			
China	60	40	125
Germany	240	168	540
Japan	233	157	495
Kazakhstan	800	559	1,250
Russia	670	445	890
South Africa	262	146	231
Total	2,270	1,520	3,530
All grades:			
China	60	40	125
Germany	240	168	540
Japan	233	157	495
Kazakhstan	23,400	16,600	22,600
Russia	1,420	915	1,350
South Africa	8,340	4,280	5,550
Total	33,700	22,200	30,600

[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Customs 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.
[3]Ferrochromium containing more than 4% carbon.
[4]Ferrochromium 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 COUNTRY[1]

Grade and country	January	
	Gross weight (metric tons)	Value[2] (thousands)
Unwrought powders:		
China	20	$121
Germany	12	71
Japan	3	130
Russia	104	914
United Kingdom	20	211
Total	160	1,450
Waste and scrap, Taiwan	2	28
Other than waste and scrap and unwrought powders:		
China	140	1,730
France	95	828
Germany	3	87
Japan	(3)	12
Russia	240	1,970
United Kingdom	14	99
Total	492	4,730
All grades:		
China	160	1,850
France	95	828
Germany	15	158
Japan	4	143
Russia	345	2,880
Taiwan	2	28
United Kingdom	33	310
Total	654	6,200

[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Customs 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.
[3]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 8

U.S. STAINLESS STEEL TRADE, BY PRODUCT, IN 2007[1]

Stainless steel product	January	
	Gross weight (metric tons)	Value[2] (thousands)
Exports:		
Ingot	992	$6,690
Flat-rolled (width > 600 mm)	17,700	56,000
Flat-rolled (width < 600 mm)	8,510	45,100
Bars and rods in irregular coils	704	2,770
Other bars and rods	2,750	19,100
Wire	666	4,260
Tubes, pipes, hollow profiles	3,660	27,000
Total	35,000	161,000
Stainless steel scrap	59,200	128,000
Grand total	94,200	289,000
Imports:		
Ingot	9,120	41,200
Flat-rolled (width > 600 mm)	32,700	119,000
Flat-rolled (width < 600 mm)	4,870	24,500
Bars and rods in irregular coils	2,700	11,400
Other bars and rods	9,620	46,900
Wire	4,250	21,900
Tubes, pipes, hollow profiles	12,600	83,800
Total	75,800	349,000
Stainless steel scrap	9,710	13,600
Grand total	85,500	362,000

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

[2]Export 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

2006-07 CHROMITE ORE PRICES AVERAGE MONTHLY AND ANNUAL PRICES[1]

(Dollars per metric ton, gross weight unless otherwise noted)

	Turkey[2]		South Africa[3]							
Month	1	2	1	2	3	4	5	6	Philippines[4]	Sand[5]
2006:										
January	103	105	NA	NA	100 - 120	170 - 190	100 - 120	60 - 90	125 - 145	NA
February	119	126	NA	NA	90 - 110	155 - 170	100 - 120	60 - 80	125 - 145	NA
March	143	153	NA	NA	140 - 160	195 - 210	210 - 230	100 - 120	125 - 145	NA
April	178	185	NA	NA	140 - 160	195 - 210	210 - 230	100 - 120	125 - 145	NA
May	185	198	NA	NA	140 - 160	195 - 210	210 - 230	100 - 120	125 - 145	NA
June	193	203	117 - 122	114 - 120	150 - 165	195 - 225	210 - 230	100 - 145	125 - 145	170 - 175
July	200	210	138 - 145	135 - 144	150 - 165	195 - 225	210 - 230	100 - 145	125 - 145	170 - 175
August	190	200	115 - 124	114 - 119	175 - 188	145 - 175	210 - 230	100 - 145	125 - 145	170 - 175
September	187	197	114 - 119	110 - 115	175 - 188	195 - 225	215 - 240	100 - 145	125 - 145	170 - 175
October	178	188	111 - 116	110 - 114	175 - 188	195 - 225	215 - 240	100 - 145	125 - 145	170 - 175
November	177	183	108 - 113	109 - 114	175 - 183	195 - 220	215 - 235	100 - 145	125 - 140	170
December	208	218	123 - 129	123 - 131	175 - 183	195 - 220	215 - 235	100 - 145	125 - 140	170
2007:										
January	244	239	150 - 160	149 - 160	165 - 173	185 - 210	225 - 245	100 - 145	125 - 140	170
February	260	280	181 - 191	178 - 188	165 - 173	185 - 210	225 - 245	100 - 145	125 - 140	170
March	300	320	250 - 262	250 - 262	165 - 173	185 - 210	225 - 245	100 - 145	125 - 140	170

NA Not available.

[1]Data obtained from Ryan's Notes refer to monthly averages of weekly reports; data obtained from Industrial Minerals refer to monthly reports.

[2]Source for Turkey 1 is Ryan's Notes; Turkey 1 is called 38% - 40% Cr_2O_3 before 07/07/06 and 40% - 42%, cost and freight (cfr) China on and after 07/07/06 by Ryan's Notes. Source for Turkey 2 is Ryan's Notes; Turkey 2 is called 44% Cr_2O_3, cfr China by Ryan's Notes.

[3]Source for South Africa 1 is Ryan's Notes; South Africa 1 is called 39% Cr_2O_3, free on board (f.o.b.) South Africa by Ryan's Notes. Source for South Africa 2 is Ryan's Notes; South Africa 2 is called 44% Cr_2O_3, f.o.b. South Africa by Ryan's Notes. Source for South Africa 3 is Industrial Minerals; South Africa 3 is called chemical grade, 46% Cr_2O_3, wet bulk, f.o.b. by Industrial Minerals. Source for South Africa 4 is Industrial Minerals; South Africa 4 is called foundry grade, 46% Cr_2O_3, wet bulk, f.o.b. by Industrial Minerals. Source for South Africa 5 is Industrial Minerals; South Africa 5 is called refractory grade, 46% Cr_2O_3, wet bulk, f.o.b. by Industrial Minerals. Source for South Africa 6 is Industrial Minerals; South Africa 6 is called Northwest, metallurgical grade, friable lumpy, basis 40% Cr_2O_3, f.o.b. by Industrial Minerals.

[4]Source for Philippines is Industrial Minerals; Philippines is called refractory grade, f.o.b. by Industrial Minerals.

[5]Source for Sand is Industrial Minerals; Sand is called molding grade, 98% < 30 mesh, delivered UK by Industrial Minerals; reported in British pounds.

TABLE 10

HIGH-CARBON FERROCHROMIUM AVERAGE MONTHLY AND ANNUAL PRICES

(Cents per pound, contained chromium)

	United States[1]				
Month	1	2	3	4	5
2006:					
January	59.25 - 62.00	53.50 - 55.50	57.00 - 59.00	52.19 - 54.25	53 - 57
February	60.75 - 62.75	57.25 - 60.25	57.00 - 59.00	56.63 - 58.50	57 - 60
March	61.00 - 63.20	59.80 - 62.80	57.00 - 59.00	59.60 - 62.00	59 - 61
April	66.50 - 71.25	62.31 - 65.88	62.00 - 64.00	60.63 - 62.50	62 - 64
May	67.00 - 72.00	63.19 - 66.50	62.00 - 64.00	62.25 - 63.56	63 - 65
June	67.80 - 72.80	64.20 - 67.40	62.00 - 64.00	63.00 - 64.70	64 - 66
July	71.00 - 76.00	63.13 - 65.75	62.75 - 64.50	62.88 - 64.50	65 - 68
August	71.00 - 76.00	63.88 - 66.00	63.50 - 65.00	63.25 - 64.50	65 - 68
September	71.00 - 76.00	63.80 - 66.60	63.50 - 65.00	62.00 - 64.30	66 - 68
October	71.00 - 76.00	63.00 - 66.00	63.50 - 65.00	61.13 - 63.63	66 - 68
November	71.00 - 76.00	63.00 - 65.88	65.38 - 68.75	71.50 - 64.00	63 - 65
December	71.00 - 76.00	64.40 - 67.20	63.38 - 65.13	62.98 - 65.25	63 - 65
2007:					
January	71.00 - 76.00	67.50 - 70.00	65.00 - 66.25	67.25 - 69.00	63 - 65
February	71.00 - 76.00	72.75 - 75.00	68.00 - 70.00	72.00 - 74.00	67 - 70
March	71.00 - 76.00	80.60 - 82.80	75.20 - 77.20	80.00 - 82.60	70 - 74

See footnotes at end of table.

TABLE 10--Continued
HIGH-CARBON FERROCHROMIUM AVERAGE MONTHLY AND ANNUAL PRICES

(Cents per pound, contained chromium)

Month	Europe[2]				Japan[3]		Hong Kong[4]		China[5]
	1	2	3	4	1	2	1	2	
2006:									
January	60 - 64	57 - 60	63 - 65	53 - 56	50.00 - 56.50	68	53 - 57	60 - 63	4,925 - 5,200
February	60 - 64	57 - 60	62 - 64	55 - 58	54.25 - 56.50	68	53 - 57	60 - 63	5,075 - 5,250
March	60 - 64	57 - 60	62 - 64	57 - 60	56.80 - 58.60	68	57 - 61	NA	5,480 - 5,640
April	60 - 64	57 - 60	69 - 71	59 - 62	60.00 - 62.00	75	63 - 65	NA	5,625 - 6,050
May	67 - 71	57 - 60	69 - 71	60 - 62	60.00 - 62.00	75	68 - 70	NA	5,700 - 6,200
June	67 - 71	57 - 60	70 - 72	63 - 65	64.00 - 65.00	75	68 - 70	NA	6,100 - 6,460
July	67 - 71	57 - 60	74 - 76	65 - 67	64.00 - 65.00	78	68 - 70	NA	6,375 - 6,675
August	67 - 71	57 - 60	74 - 76	65 - 67	64.00 - 65.00	80	68 - 70	NA	6,075 - 6,388
September	67 - 71	57 - 60	74 - 76	64 - 66	64.00 - 65.00	80	68 - 70	NA	6,040 - 6,230
October	67 - 71	57 - 60	75 - 77	64 - 66	63.00 - 64.75	80	68 - 70	NA	5,913 - 6,200
November	67 - 71	57 - 60	77 - 79	65 - 68	60.00 - 64.00	82	68 - 70	NA	6,025 - 6,250
December	67 - 71	57 - 60	77 - 79	65 - 68	64.80 - 67.40	83	68 - 70	NA	6,340 - 6,540
2007:									
January	67 - 71	57 - 60	77 - 79	67 - 71	68.25 - 69.75	83	68 - 70	NA	6,900 - 7,063
February	75 - 77	72 - 74	NA - 78	71 - 77	72.00 - 73.00	83	68 - 70	NA	7,325 - 7,438
March	75 - 77	78 - 81	NA - 75	83 - 91	78.80 - 80.60	83	68 - 70	NA	7,600 - 7,770

NA Not available.

[1]Source for United States 1 is Platts Metals Week; United States 1 is called United States charge 50% - 55% chromium, imported, by Platts Metals Week. Source for United States 2 is Platts Metals Week; United States 2 is called United States 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, North American transaction by Ryan's Notes. Source for United States 4 is Ryan's Notes; United States 4 is called 60% - 65% chromium, imported, North American transaction 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.

[2]Source for Europe 1 is Platts Metals Week; Europe 1 is called high-carbon 52% chromium, by Platts Metals Week. Source for Europe 2 is Platts Metals Week; Europe 2 is called high-carbon 62% chromium, by Platts Metals Week. Source for Europe 3 is Metal Bulletin; Europe 3 is called lumpy chromium charge, basis 52% chromium, quarterly 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.

[3]Source 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.

[4]Source for Hong Kong 1 is Platts Metals Week; Hong Kong 1 is called high-carbon 60% chromium, by Platts Metals Week. Source for Hong Kong 2 is Metal Bulletin; Hong Kong 2 is called 8% carbon, 50% chromium, free on board main Chinese ports, by Metal Bulletin.

[5]Source for China is Metal Bulletin; China is called 6% - 8% carbon, basis 50% chromium, delivered duty paid China RMB/tonne (metric ton), by Metal Bulletin.

TABLE 11
LOW-CARBON FERROCHROMIUM AVERAGE MONTHLY AND ANNUAL PRICES

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

Month	United States[1]				
	1	2	3	4	5
2006:					
January	1.11 - 1.16	0.90 - 0.92	0.90 - 0.92	1.09 - 1.11	0.88 - 0.90
February	1.14 - 1.16	0.91 - 0.94	0.90 - 0.93	1.09 - 1.11	0.89 - 0.91
March	1.13 - 1.16	0.91 - 0.94	0.90 - 0.93	1.09 - 1.11	0.91 - 0.93
April	1.14 - 1.17	0.93 - 0.96	0.92 - 0.95	1.11 - 1.14	0.91 - 0.93
May	1.14 - 1.17	0.93 - 0.96	0.92 - 0.95	1.12 - 1.14	0.91 - 0.94
June	1.14 - 1.17	0.97 - 1.00	0.95 - 0.99	1.13 - 1.15	0.98 - 1.00
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

See footnotes at end of table.

TABLE 11--Continued
LOW-CARBON FERROCHROMIUM AVERAGE MONTHLY AND ANNUAL PRICES

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

Month	United States[1]				Europe[2]		
	6	7	8	9	1	2	3
2006:							
January	0.87 - 0.90	1.12 - 1.15	0.94 - 0.96	0.95 - 0.98	1.03 - 1.13	0.95 - 0.98	1.05 - 1.15
February	0.87 - 0.90	1.12 - 1.14	0.92 - 0.95	0.95 - 0.98	1.03 - 1.13	0.95 - 0.98	1.03 - 1.13
March	0.88 - 0.91	1.15 - 1.17	0.91 - 0.93	0.90 - 0.92	1.03 - 1.13	0.95 - 0.98	1.00 - 1.10
April	0.90 - 0.92	1.15 - 1.17	0.93 - 0.95	0.91 - 0.92	1.03 - 1.13	0.97 - 0.99	1.00 - 1.10
May	0.91 - 0.93	1.15 - 1.17	0.93 - 0.96	0.91 - 0.93	1.03 - 1.13	1.00 - 1.02	1.00 - 1.10
June	0.95 - 0.98	1.15 - 1.17	0.96 - 0.97	0.91 - 0.93	1.03 - 1.13	1.04 - 1.07	1.00 - 1.10
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	1.01 - 1.05	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

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

[2]Source 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 European low-carbon, in warehouse, 0.06% carbon max., 65% chromium, by Metal Bulletin.

TABLE 12
FERROCHROMIUM SILICON AND CHROMIUM METAL AVERAGE MONTHLY AND ANNUAL PRICES

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

		Chromium metal			
		United States		Europe Aluminothermic[4]	
Month	Ferrochromium silicon[1]	Electrolytic[2]	Aluminothermic[3]	1	2
2006:					
January	0.4071	4.50	2.50 - 2.60	2.72 - 2.82	4.65 - 4.83
February	0.4210	4.50	2.50 - 2.60	2.49 - 2.63	4.65 - 4.83
March	0.4362	4.50	2.52 - 2.62	2.55 - 2.67	4.65 - 4.83
April	0.4418	4.50	2.70 - 2.80	2.67 - 2.76	4.65 - 4.83
May	0.4518	4.50	3.00 - 3.10	2.70 - 2.79	4.65 - 4.83
June	0.4886	4.50	3.12 - 3.19	2.91 - 3.00	4.65 - 4.83
July	0.4871	4.50	3.20 - 3.30	3.04 - 3.13	4.65 - 4.83
August	0.4803	4.50	3.15 - 3.24	3.08 - 3.18	4.65 - 4.83
September	0.4728	4.50	3.03 - 3.08	3.01 - 3.14	4.65 - 4.83
October	0.4705	4.50	3.05 - 3.10	2.90 - 3.04	4.65 - 4.83
November	0.4762	4.50	2.98 - 3.05	2.85 - 2.97	4.65 - 4.83
December	0.4882	4.50	3.00 - 3.05	2.81 - 2.95	4.65 - 4.83
2007:					
January	0.5063	4.50	3.00 - 3.05	2.81 - 2.95	4.65 - 4.83
February	0.5245	4.50	3.14 - 3.19	2.86 - 2.95	4.65 - 4.83
March	0.5591	NA	3.40 - 3.48	3.11 - 3.20	4.65 - 4.83

NA Not available.

[1]Source for ferrochromium silicon, North American transaction is Ryan's Notes.

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

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

[4]Source for Europe Aluminothermic 1 is Metal Bulletin; Europe Aluminothermic 1 is called alumino-thermic, 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.