



Mineral Industry Surveys

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CHROMIUM IN JUNE 2013

On the basis of gross weight, consumption of chromium ferroalloys and metal in June 2013 was about the same as that in May 2013. Consumption in June 2013 increased slightly compared with consumption in the June 2012.

Included in this Mineral Industry Surveys are U.S. salient chromium statistics, U.S. Government stockpile inventory of

chromium materials in June 2013, consumption by end use and consumer stocks of chromium ferroalloys and metal at the end of June 2013, and U.S. foreign trade data for selected chromium-containing materials in June 2013.

TABLE 1
U.S. SALIENT CHROMIUM STATISTICS¹

(Metric tons, gross weight)

	2012	2013			January– June ²
	January– December ²	April	May	June	
Production, stainless steel ³	1,980,000	168,000	166,000	151,000	976,000
Components of U.S. supply:					
Stainless steel scrap receipts	858,000	73,300 ^r	72,900 ^r	72,300	440,000
Stainless steel scrap consumption	1,300,000	110,000 ^r	109,000 ^r	108,000	657,000
Imports for consumption:					
Chromite ore	277,000	2,990	32,900	6,500	60,400
Ferrochromium:					
More than 4% carbon	449,000	28,100	50,200	37,200	207,000
More than 3% but not more than 4% carbon	411	133	--	39	370
More than 0.5% but not more than 3% carbon	7,580	120	3,160	--	8,900
Not more than 0.5% carbon	43,900	3,840	3,310	4,310	19,600
Ferrochromium silicon	25,800	--	3,010	--	6,620
Total ferroalloy imports	526,000	32,200	59,700	41,600	243,000
Chromium metal ⁴	15,300	1,410	978	996	7,110
Stainless steel	668,000	50,800	50,800	48,400	288,000
Stainless steel scrap	155,000	13,500	17,200	13,900	88,500
Distribution of U.S. supply:					
Consumption, industry, chromium ferroalloys and metal	421,000	35,900	36,000	36,000	212,000
Exports:					
Chromite ore	21,200	287	151	308	7,260
Chromium ferroalloys:					
High-carbon ferrochromium	4,460	607	406	370	2,570
Low-carbon ferrochromium	768	47	38	47	177
Ferrochromium silicon	64	9	--	--	9
Total ferroalloy exports	5,300	663	444	417	2,760
Chromium metal	462	100	71	89	402
Stainless steel	590,000	52,000	48,200	52,100	299,000
Stainless steel scrap	624,000	60,800	57,400	56,500	333,000
Stocks at end of period:					
Consumer, industry, chromium ferroalloys and metal	9,120	10,100	10,600	9,340	9,340
Government stockpile:					
Chromium ferroalloys	144,000	139,000	137,000	137,000	137,000
Chromium metal	4,090	4,090	4,090	4,090	4,090

^rRevised. -- Zero.

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

²May include revised data that are not broken out by specific month(s).

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 waste and scrap and other.

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

(Metric tons, gross weight unless otherwise noted)

	2013		
	May	June	January– June ³
Consumption by end use:			
Steel:			
Carbon steel	131	188	1,010
High-strength low-alloy steel	135	150	866
Stainless and heat-resisting steel	32,000	31,900	189,000
Unspecified steel ⁴	3,180	3,170	17,900
Superalloys	478	471	2,860
Other alloys and uses ⁵	96	102	573
Total	36,000	36,000	212,000
Total, chromium content	20,600	20,600	122,000
Consumption by material:			
Low-carbon ferrochromium	1,710	1,760	10,500
High-carbon ferrochromium	31,800	31,700	187,000
Ferrochromium silicon	W	W	W
Chromium metal	206	203	1,240
Chromite ore	W	W	W
Chromium-aluminum alloy	W	W	W
Other chromium materials	W	W	W
Total	36,000	36,000	212,000
Total, chromium content	20,600	20,600	122,000
Consumer stocks:			
Low-carbon ferrochromium	1,640	1,610	1,610
High-carbon ferrochromium	8,230	7,000	7,000
Ferrochromium silicon	W	W	W
Chromium metal	117	114	114
Chromium-aluminum alloy	W	W	W
Other chromium materials	W	W	W
Total	10,600	9,340	9,340
Total, chromium content	6,250	5,500	5,500

W Withheld to avoid disclosing company proprietary data; included in "Total."

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

²Includes estimates.

³May include revised data that are not broken out by specific month(s).

⁴Includes electrical, full alloy, tool, and unspecified steel end uses.

⁵Includes cast irons, 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	
2012:			
June	95,200	52,000	4,090
July	95,200	51,500	4,090
August	95,200	51,500	4,090
September	95,200	50,800	4,090
October	95,200	50,500	4,090
November	95,200	50,000	4,090
December	94,300	49,400	4,090
2013:			
January	93,400	48,400	4,090
February	92,500	48,100	4,090
March	92,000	47,600	4,090
April	91,200	47,600	4,090
May	90,200	47,200	4,090
June	90,200	46,500	4,090

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

²These Government stocks are reported by the Defense Logistics Agency, DLA Strategic Materials in Inventory of Stockpile Materials D-1, which reports uncommitted inventory. Uncommitted inventory is that inventory for which there is no sales contact. Committed inventory is that inventory for which there is a sales contract, however, the material has not yet been shipped. For chromium materials, the D-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 D-1 report excludes chromium materials that are committed and awaiting shipment.

Source: Defense Logistics Agency, DLA Strategic Materials.

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)
2012:							
June	11,400	\$3,550	528	315	\$687	34	\$1,240
July	886	538	309	155	498	43	1,240
August	1,410	1,030	105	43	148	48	1,250
September	605	427	503	268	788	36	1,090
October	542	330	442	221	644	66	1,330
November	1,210	782	893	332	1,050	19	746
December	1,300	644	680	271	910	18	630
January–December ⁴	21,200	9,870	5,300	2,610	7,250	462	13,000
2013:							
January	725	549	171	78	239	42	984
February	5,600	936	580	280	667	43	1,390
March	191	173	484	234	584	56	1,280
April	287	169	663	390	1,120	100	2,360
May	151	106	444	226	507	71	1,690
June	308	225	417	217	738	89	2,220
January–June ⁴	7,260	2,160	2,760	1,430	3,860	402	9,920

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

²Includes ferrochromium and ferrochromium silicon.

³Includes chromium metal, waste and scrap, and unwrought powders.

⁴May include revised data that are not broken out by specific month(s).

Source: U.S. Census Bureau.

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

(Metric tons)

	2012		2013	
	January– December ²	May	June	January– June ²
Chromite ore:				
Not more than 40% chromic oxide:				
Gross weight	--	--	--	--
Chromic oxide content	--	--	--	--
More than 40% but less than 46% chromic oxide:				
Gross weight	29,000	30,100	--	33,100
Chromic oxide content	12,900	13,700	--	15,100
46% or more chromic oxide:				
Gross weight	248,000	2,820	6,500	27,300
Chromic oxide content	120,000	1,340	3,010	13,100
Total, all grades:				
Gross weight	277,000	32,900	6,500	60,400
Chromic oxide content	133,000	15,100	3,010	28,200
Ferrochromium:				
Low-carbon: ³				
Not more than 0.5% carbon:				
Gross weight	43,900	3,310	4,310	19,600
Chromium content	30,300	2,280	2,940	13,200
More than 0.5% but not more than 3% carbon:				
Gross weight	7,580	3,160	--	8,900
Chromium content	5,150	2,170	--	6,030
Total, low-carbon:				
Gross weight	51,500	6,470	4,310	28,500
Chromium content	35,500	4,450	2,940	19,300
Medium-carbon: ⁴				
Gross weight	411	--	39	370
Chromium content	222	--	21	210
High-carbon: ⁵				
Gross weight	449,000	50,200	37,200	207,000
Chromium content	257,000	29,500	18,700	113,000
Total, all grades:				
Gross weight	500,000	56,700	41,600	236,000
Chromium content	293,000	33,900	21,600	133,000
Chromium metal:				
Unwrought powders	3,060	403	322	1,960
Waste and scrap	415	4	1	27
Other than waste and scrap and unwrought powders	11,800	571	674	5,130
Total, all grades	15,300	978	996	7,110

-- Zero.

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

²May include revised data that are not broken out by specific month(s).

³Ferrochromium containing not more than 3% carbon.

⁴Ferrochromium containing more than 3% carbon but not more than 4% carbon.

⁵Ferrochromium containing more than 4% carbon.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF FERROCHROMIUM IN 2013, BY GRADE AND COUNTRY¹

Grade and country	June			January–June 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						
Albania	--	--	--	468	318	\$649
India	190	114	\$250	1,610	999	2,260
Kazakhstan	282	197	437	32,300	22,300	39,000
Netherlands	199	131	295	199	131	295
Russia	699	485	1,270	9,730	6,420	12,900
South Africa	33,500	16,500	30,300	143,000	70,900	128,000
Sweden	--	--	--	4,460	2,960	8,330
Turkey	--	--	--	10,900	7,140	14,900
Zimbabwe	2,320	1,290	2,420	4,090	2,310	4,340
Total	37,200	18,700	35,000	207,000	113,000	210,000
Medium-carbon ferrochromium:⁵						
Belgium	--	--	--	60	44	31
Russia	39	21	62	310	167	207
Total	39	21	62	370	210	238
Low-carbon ferrochromium:⁶						
More than 0.5% but not more than 3% carbon:						
Germany	--	--	--	2,040	1,350	2,960
Kazakhstan	--	--	--	1,790	1,230	4,610
Russia	--	--	--	4,660	3,220	12,500
South Africa	--	--	--	420	228	880
Total	--	--	--	8,900	6,030	20,900
Not more than 0.5% carbon:						
Brazil	--	--	--	60	37	147
China	--	--	--	20	13	106
France	--	--	--	1	1	4
Germany	600	418	2,370	3,010	2,120	12,700
India	20	12	103	22	14	114
Japan	308	213	1,290	1,020	711	4,530
Kazakhstan	--	--	--	405	106	585
Malta	--	--	--	20	14	69
Russia	2,800	1,900	7,770	12,500	8,530	36,000
South Africa	200	124	538	500	316	1,350
Taiwan	108	74	299	108	74	299
Turkey	270	195	903	1,840	1,310	5,960
Total	4,310	2,940	13,300	19,600	13,200	61,800
All grades:						
Albania	--	--	--	468	318	649
Belgium	--	--	--	60	44	31
Brazil	--	--	--	60	37	147
China	--	--	--	20	13	106
France	--	--	--	1	1	4
Germany	600	418	2,370	5,050	3,470	15,600
India	210	127	353	1,630	1,010	2,370
Japan	308	213	1,290	1,020	711	4,530
Kazakhstan	282	197	437	34,500	23,600	44,200
Malta	--	--	--	20	14	69
Netherlands	199	131	295	199	131	295
Russia	3,540	2,410	9,100	27,200	18,300	61,600
South Africa	33,700	16,600	30,800	144,000	71,400	130,000
Sweden	--	--	--	4,460	2,960	8,330
Taiwan	108	74	299	108	74	299
Turkey	270	195	903	12,700	8,450	20,800
Zimbabwe	2,320	1,290	2,420	4,090	2,310	4,340
Total	41,600	21,600	48,300	236,000	133,000	293,000

-- Zero.

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

²May include revised data that are not broken out by specific month(s).

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.

TABLE 6—Continued
U.S. IMPORTS FOR CONSUMPTION OF FERROCHROMIUM IN 2013, BY GRADE AND COUNTRY¹

⁵Ferrochromium containing more than 3% carbon but not more than 4% carbon.

⁶Ferrochromium containing not more than 3% carbon.

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF CHROMIUM METAL IN 2013, BY GRADE AND BY COUNTRY¹

Grade and country	June		January–June ²	
	Gross weight (metric tons)	Value ³ (thousands)	Gross weight (metric tons)	Value ³ (thousands)
Unwrought powders:				
Belgium	38	\$581	171	\$2,580
China	233	2,240	1,050	11,800
France	28	392	263	3,710
Germany	--	--	17	535
Korea, Republic of	--	--	(4)	9
Russia	1	75	300	3,400
Turkey	--	--	16	31
United Kingdom	22	327	140	2,030
Total	322	3,610	1,960	24,100
Waste and scrap:				
Canada	1	6	16	85
Japan	--	--	1	7
Singapore	--	--	2	6
United Kingdom	--	--	8	55
Total	1	6	27	154
Other than waste and scrap and unwrought powders:				
Canada	--	--	1	13
China	211	1,920	999	10,300
France	219	2,680	1,190	15,500
Germany	1	362	50	1,110
Japan	1	29	2	91
Liechtenstein	(4)	20	1	58
Netherlands	--	--	3	29
Russia	131	1,180	1,660	15,900
Spain	--	--	9	43
Switzerland	--	--	(4)	3
United Kingdom	110	1,390	1,210	15,000
Total	674	7,580	5,130	58,100
All grades:				
Belgium	38	581	171	2,580
Canada	1	6	16	99
China	444	4,150	2,050	22,100
France	247	3,070	1,460	19,200
Germany	1	362	67	1,650
Japan	1	29	3	98
Korea, Republic of	--	--	(4)	9
Liechtenstein	(4)	20	1	58
Netherlands	--	--	3	29
Russia	132	1,260	1,960	19,300
Singapore	--	--	2	6
Spain	--	--	9	43
Switzerland	--	--	(4)	3
Turkey	--	--	16	31
United Kingdom	132	1,720	1,360	17,100
Total	996	11,200	7,110	82,400

-- Zero.

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

²May include revised data that are not broken out by specific month(s).

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. STAINLESS STEEL TRADE, BY PRODUCT, IN 2013¹

Stainless steel product	June		January–June ²	
	Gross weight (metric tons)	Value ³ (thousands)	Gross weight (metric tons)	Value ³ (thousands)
Exports:				
Ingot	8,340	\$14,800	38,500	\$70,700
Flat-rolled (width > 600 mm)	26,700	80,800	163,000	497,000
Flat-rolled (width < 600 mm)	7,270	31,200	42,000	167,000
Bars and rods in irregular coils	1,030	2,980	4,550	14,000
Other bars and rods	3,410	28,000	21,400	164,000
Wire	1,360	9,590	7,400	51,600
Tubes, pipes, hollow profiles	4,050	38,500	21,900	192,000
Total	52,100	206,000	299,000	1,160,000
Stainless steel scrap	56,500	66,000	333,000	390,000
Grand total	109,000	272,000	632,000	1,550,000
Imports:				
Ingot	9,790	29,400	57,900	178,000
Flat-rolled (width > 600 mm)	23,000	62,300	140,000	384,000
Flat-rolled (width < 600 mm)	3,350	12,300	18,900	77,500
Bars and rods in irregular coils	2,370	9,850	13,600	49,700
Other bars and rods	236	1,360	2,100	12,900
Wire	615	3,770	3,710	23,200
Tubes, pipes, hollow profiles	9,060	66,100	51,800	408,000
Total	48,400	185,000	288,000	1,130,000
Stainless steel scrap	13,900	13,800	88,500	104,000
Grand total	62,400	199,000	377,000	1,240,000

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

²May include revised data that are not broken out by specific month(s).

³Export value is free alongside ship. 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.