

Mineral Industry Surveys

For information, contact:

John F. Papp, Chromium Commodity Specialist
National Minerals Information Center
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4963, Fax: (703) 648-7757
Email: jpapp@usgs.gov

Benjamin N. Bryden (Data)
Telephone: (703) 648-7953
Fax: (703) 648-7975
Email: bbryden@usgs.gov

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

CHROMIUM IN MARCH 2016

On the basis of gross quantity, consumption of chromium ferroalloys and metal in March 2016 decreased slightly compared with that of February 2016. Consumption in March 2016 was 7% less than that of March 2015.

According to CRU Group, U.S. high-carbon (60%–70% chromium) ferrochromium (FeCr) price was 93.70 cents per pound of contained chromium in March 2016, compared with 93.81 cents per pound of contained chromium in February 2016. U.S. charge-grade FeCr (47%–55% chromium) price was 9.00 cents per pound of contained chromium in March 2016, compared with 89.75 cents per pound of contained chromium in February 2016 (CRU Group, 2016).

List services and Web feed subscribers are the first to receive notification of USGS minerals information publications and data releases. For information on how to subscribe, go to <http://minerals.usgs.gov/minerals/>.

Reference Cited

CRU Group, 2016, CRU Prices_Chrome_Historical Data_01 Jun 2016 (May Avg.): CRU Group, June 1. (Accessed June 3, 2016, via <http://www.crugroup.com/>.)

TABLE 1
U.S. SALIENT CHROMIUM STATISTICS¹

(Metric tons, gross weight)

	2015	2016			
	January– December ^p	January	February	March	January– March ²
Production, stainless steel ³	2,350,000	191,000	165,000	173,000	530,000
Components of U.S. supply:					
Stainless steel scrap receipts	919,000	75,000	77,100 ^r	62,900	215,000
Stainless steel scrap consumption	1,340,000	114,000	111,000 ^r	92,800	318,000
Imports for consumption:					
Chromite ore	131,000	10,100	7,060	24,600	41,800
Ferrochromium:					
More than 4% carbon	347,000	11,100	89,500	10,600	111,000
More than 3% but not more than 4% carbon	2,590	--	405	--	405
More than 0.5% but not more than 3% carbon	3,960	478	1,880	617	2,970
Not more than 0.5% carbon	48,400	1,810	1,500	3,750	7,060
Ferrochromium silicon	5,810	--	3,730	1,400	5,130
Total ferroalloy imports	408,000	13,400	97,000	16,400	127,000
Chromium metal ⁴	12,900	1,100	978	960	3,040
Stainless steel	700,000	44,300	44,800	58,000	147,000
Stainless steel scrap	192,000	16,900	17,900	22,600	57,400
Distribution of U.S. supply:					
Consumption, industry, chromium ferroalloys and metal	419,000	35,100	34,000	33,600	103,000
Exports:					
Chromite ore	7,210	186	227	257	670
Chromium ferroalloys:					
High-carbon ferrochromium	740	57	54	105	217
Low-carbon ferrochromium	279	25	19	156	200
Ferrochromium silicon	73	--	--	--	--
Total ferroalloy exports	1,090	83	73	261	417
Chromium metal	800	25	32	31	88
Stainless steel	809,000	64,900	64,400	60,900	190,000
Stainless steel scrap	520,000	52,800	104,000	37,200	194,000
Stocks at end of period:					
Consumer, industry, chromium ferroalloys and metal	10,300	9,670	10,100	10,000	10,000
Government stockpile:					
Chromium ferroalloys	95,700	94,600	94,400	93,900	93,900
Chromium metal	3,960	3,930	3,930	3,910	3,910

^pPreliminary. ^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)

	2016		
	February	March	January– March ³
Consumption by end use:			
Steel:			
Carbon steel	169 ^r	185	535
High-strength low-alloy steel	137 ^r	131	402
Stainless and heat-resisting steel	30,400	30,000	92,000
Unspecified steel ⁴	2,720	2,720	8,140
Superalloys	429	428	1,280
Other alloys and uses ⁵	104 ^r	116	308
Total	34,000	33,600	103,000
Total, chromium content	19,500	19,100	58,800
Consumption by material:			
Low-carbon ferrochromium	1,790	1,790	5,360
High-carbon ferrochromium	29,600	29,100	89,400
Ferrochromium silicon	W	W	W
Chromium metal	161	158	479
Chromite ore	18	W	W
Chromium-aluminum alloy	W	W	W
Other chromium materials	W	W	W
Total	34,000	33,600	103,000
Total, chromium content	19,500	19,100	58,800
Consumer stocks:			
Low-carbon ferrochromium	1,450	1,510	1,510
High-carbon ferrochromium	7,880	7,640	7,640
Ferrochromium silicon	722	755	755
Chromium metal	44	48	48
Chromium-aluminum alloy	W	W	W
Other chromium materials	W	W	W
Total	10,100	10,000	10,000
Total, chromium content	5,910	5,790	5,790

^rRevised. 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 MATERIALS¹

(metric tons)

	Chromium ferroalloys		Chromium metal
	High-carbon ferro- chromium	Low-carbon ferro- chromium	
2015:			
March	69,700	34,100	3,960
April	69,700	34,000	3,960
May	67,100	33,700	3,960
June	64,100	33,400	3,960
July	63,000	33,300	3,960
August	63,000	33,200	3,960
September	63,000	32,900	3,960
October	63,000	32,900	3,960
November	63,000	32,600	3,960
December	63,000	32,600	3,960
2016:			
January	62,100	32,500	3,930
February	62,100	32,300	3,930
March	61,600	32,300	3,910

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

Source: Defense Logistics Agency, DLA Strategic Materials.

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

	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)
2015:							
March	1,350	\$818	130	76	\$232	128	\$1,690
April	318	779	106	55	172	160	2,120
May	1,990	1,530	27	16	60	97	1,040
June	1,250	688	22	13	46	32	821
July	180	96	70	33	115	48	1,380
August	188	106	26	15	48	55	1,330
September	95	50	120	53	154	31	937
October	74	42	91	35	160	38	1,320
November	185	169	67	32	141	50	1,490
December	316	621	83	41	144	25	973
January–December ⁴	7,210	5,680	1,090	545	1,860	800	15,700
2016:							
January	186	121	83	50	114	25	1,100
February	227	124	73	35	108	32	1,000
March	257	173	261	160	409	31	970
January–March ⁴	670	418	417	245	632	88	3,080

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

²Includes low- and high-carbon 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)

	2015	2016		
	January– December	February	March	January– March ²
Chromite ore:				
More than 40% but less than 46% chromic oxide:				
Gross weight	34,600	1,600	38	1,640
Chromic oxide content	15,100	708	17	725
46% or more chromic oxide:				
Gross weight	96,100	5,460	24,600	40,100
Chromic oxide content	66,700	2,550	11,300	18,600
Total, all grades:				
Gross weight	131,000	7,060	24,600	41,800
Chromic oxide content	81,800	3,260	11,300	19,300
Ferrochromium:				
Low-carbon: ³				
Not more than 0.5% carbon:				
Gross weight	48,400	1,500	3,750	7,060
Chromium content	32,800	895	2,470	4,580
More than 0.5% but not more than 3% carbon:				
Gross weight	3,960	1,880	617	2,970
Chromium content	2,660	1,200	416	1,910
Total, low-carbon:				
Gross weight	52,400	3,380	4,370	10,000
Chromium content	35,500	2,090	2,880	6,490
Medium-carbon: ⁴				
Gross weight	2,590	405	--	405
Chromium content	1,320	218	--	218
High-carbon: ⁵				
Gross weight	347,000	89,500	10,600	111,000
Chromium content	189,000	51,200	7,210	64,700
Total, all grades:				
Gross weight	402,000	93,300	15,000	122,000
Chromium content	226,000	53,500	10,100	71,400
Chromium metal:				
Unwrought powders	4,840	600	508	1,500
Waste and scrap	153	7	5	12
Other than waste and scrap and unwrought powders	7,890	371	446	1,520
Total, all grades	12,900	978	960	3,040

-- 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 2016, BY GRADE AND COUNTRY¹

Grade and country	March			January–March 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	107	72	\$120	215	145	\$254
Brazil	375	195	245	618	327	400
India	120	74	121	1,740	1,090	1,730
Kazakhstan	8,510	5,890	11,200	22,000	18,600	21,700
Russia	46	31	92	3,000	1,950	4,020
South Africa	--	--	--	78,100	39,300	56,800
Sweden	651	436	717	651	436	717
Turkey	805	513	779	1,690	1,080	1,670
Zimbabwe	--	--	--	3,170	1,820	3,200
Total	10,600	7,210	13,300	111,000	64,700	90,400
Medium-carbon ferrochromium, South Africa ⁵	--	--	--	405	218	216
Low-carbon ferrochromium:⁶						
More than 0.5% but not more than 3% carbon:						
Brazil	--	--	--	1,760	1,080	3,390
China	290	188	619	490	315	1,020
Kazakhstan	328	228	882	728	513	2,140
Total	617	416	1,500	2,970	1,910	6,560
Not more than 0.5% carbon:						
Brazil	1,110	604	2,150	2,020	1,050	3,650
China	228	144	446	351	219	743
Germany	240	168	955	1,200	838	4,730
India	--	--	--	33	21	162
Japan	80	56	334	239	168	927
Kazakhstan	1,540	1,110	4,300	1,540	1,110	4,300
Russia	198	137	530	828	591	2,420
Turkey	357	246	949	849	588	2,340
Total	3,750	2,470	9,670	7,060	4,580	19,300
All grades:						
Albania	107	72	120	215	145	254
Brazil	1,490	799	2,400	4,390	2,450	7,440
China	518	332	1,070	840	534	1,770
Germany	240	168	955	1,200	838	4,730
India	120	74	121	1,770	1,110	1,890
Japan	80	56	334	239	168	927
Kazakhstan	10,400	7,230	16,400	24,300	20,200	28,100
Russia	243	168	622	3,830	2,540	6,440
South Africa	--	--	--	78,500	39,500	57,000
Sweden	651	436	717	651	436	717
Turkey	1,160	759	1,730	2,540	1,670	4,010
Zimbabwe	--	--	--	3,170	1,820	3,200
Total	15,000	10,100	24,500	122,000	71,400	116,000

-- 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.

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 2016, BY GRADE AND BY COUNTRY¹

Grade and country	March		January–March ²	
	Gross weight (metric tons)	Value ³ (thousands)	Gross weight (metric tons)	Value ³ (thousands)
Unwrought powders:				
China	131	\$1,820	281	\$3,910
France	143	1,610	409	4,530
Germany	--	--	5	127
Japan	(4)	21	(4)	21
Russia	6	104	66	536
United Kingdom	228	2,410	739	7,630
Total	508	5,960	1,500	16,800
Waste and scrap:				
Canada	1	2	1	2
Japan	1	39	1	39
United Kingdom	4	60	11	134
Total	5	101	12	175
Other than waste and scrap and unwrought powders:				
Canada	20	1,200	76	5,530
China	1	17	185	1,420
France	152	1,710	286	3,050
Germany	33	214	209	1,220
Hong Kong	--	--	(4)	2
Japan	2	46	3	93
Malaysia	(4)	6	(4)	6
Netherlands	(4)	40	(4)	40
New Zealand	--	--	(4)	15
Russia	205	1,440	664	4,700
Spain	24	164	72	493
Switzerland	(4)	21	(4)	21
Taiwan	(4)	2	(4)	2
United Kingdom	8	106	28	371
Total	446	4,960	1,520	17,000
All grades:				
Canada	21	1,200	76	5,530
China	133	1,840	466	5,330
France	295	3,320	695	7,590
Germany	33	214	213	1,350
Hong Kong	--	--	(4)	2
Japan	4	105	5	153
Malaysia	(4)	6	(4)	6
Netherlands	(4)	40	(4)	40
New Zealand	--	--	(4)	15
Russia	211	1,540	730	5,240
Spain	24	164	72	493
Switzerland	(4)	21	(4)	21
Taiwan	(4)	2	(4)	2
United Kingdom	239	2,570	777	8,140
Total	960	11,000	3,040	33,900

-- 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 2016¹

Stainless steel product	March		January–March ²	
	Gross weight (metric tons)	Value ³ (thousands)	Gross weight (metric tons)	Value ³ (thousands)
Exports:				
Ingot	3,780	\$13,100	9,120	\$37,100
Flat-rolled (width > 600 mm)	41,600	72,500	138,000	240,000
Flat-rolled (width < 600 mm)	6,720	26,000	19,900	74,200
Bars and rods in irregular coils	1,050	3,150	3,300	10,300
Other bars and rods	3,320	25,900	8,640	69,800
Wire	807	10,900	2,340	30,100
Tubes, pipes, hollow profiles	3,700	31,600	9,220	83,000
Total	60,900	183,000	190,000	545,000
Stainless steel scrap	37,200	34,400	194,000	109,000
Grand total	98,200	218,000	384,000	653,000
Imports:				
Ingot	9,530	40,600	21,800	112,000
Flat-rolled (width > 600 mm)	29,800	60,700	74,400	152,000
Flat-rolled (width < 600 mm)	6,620	20,900	16,500	53,000
Bars and rods in irregular coils	2,580	6,990	7,610	20,800
Other bars and rods	651	2,660	1,260	5,730
Wire	704	4,300	2,380	12,500
Tubes, pipes, hollow profiles	8,080	45,900	23,100	133,000
Total	58,000	182,000	147,000	489,000
Stainless steel scrap	22,600	12,100	57,400	31,700
Grand total	80,600	194,000	204,000	520,000

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.