

Mineral Industry Surveys

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COBALT IN FEBRUARY 2007

U.S. cobalt consumption during January through February 2007 was slightly lower than consumption during the first 2 months of 2006, according to the U.S. Geological Survey. The amount of cobalt contained in U.S. imports of cobalt metals and chemicals was 11% lower in January 2007 than that of imports in December 2006. The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals was 14% lower in January 2007 than that of exports during December 2006.

Update

Prices for electrolytic cobalt, in dollars per pound from Platts Metals Week, are listed below.

<u>Month</u>	<u>Price range</u>	<u>Average price</u>
February	26.00-28.50	27.38

TABLE 1
U.S. REPORTED CONSUMPTION OF COBALT MATERIALS¹

(Metric tons, contained cobalt)

Period	Metal ²	Oxide and other chemical compounds ³	Scrap	Total
2006:				
February	318	229	163	710
March	323	231	168	722
April	301	224	171	696
May	317	239	176	732
June	311	234	164	709
July	306	227	158	691
August	311	235	175	721
September	305	229	168	702
October	321	232	158	711
November	308	222	166	696
December	297	229	162	688
January-February ^f	644	456	332	1,430
January-December ⁴	3,740	2,760	2,000	8,500
2007:				
January	309	226	172	707
February	299	225	162	685
January-February	607	451	334	1,390

^fRevised.

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

²Includes metal powder.

³Data may include other cobalt materials.

⁴Data based on monthly reports.

TABLE 2
U.S. REPORTED CONSUMPTION OF COBALT, BY END USE¹

(Metric tons, contained cobalt)

End use	2006			2007	
	January-February	January-December ²	Year ³	February	January-February ⁴
Steel	100 ^r	588	700	49	98
Superalloys	620 ^r	3,630	4,180	284	589
Magnetic alloys	50 ^r	299	386	26	51
Other alloys ⁵	W	W	224	W	W
Cemented carbides ⁶	135 ^r	796	796	66	131
Chemical and ceramic uses ⁷	482 ^r	2,910	2,920	238	477
Miscellaneous and unspecified	45 ^r	271	63	23	45
Total	1,430 ^r	8,500	9,270	685	1,390

^rRevised. W Withheld to avoid disclosing company proprietary data; included with "Miscellaneous and unspecified."

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

²Data based on monthly reports.

³Includes annual reports.

⁴Includes revisions to prior months' data.

⁵Includes nonferrous alloys, welding materials, and wear-resistant alloys.

⁶Includes diamond tool matrices, cemented and sintered carbides, and cast carbide dies or parts.

⁷Includes catalysts, driers in paints or related usages, feed or nutritive additives, glass decolorizer, ground coat frit, pigments, and other uses.

TABLE 3
U.S. REPORTED STOCKS OF COBALT MATERIALS¹

(Metric tons, contained cobalt)

Period	Industry ²			Total	U.S. Government, metal ⁵
	Metal ³	Oxide and other chemical compounds ⁴	Scrap		
2006:					
February	311	179	123	613	1,500
March	322	172	128	622	1,480
April	326	170	120	616	1,480
May	322	179	106	607	1,480
June	306	168	115	589	1,480
July	323	165	120	608	1,470
August	316	164	118	598	1,470
September	304	160	116	580	1,470
October	296	170	120	586	1,420
November	289	171	126	586	1,300
December	288	176	126	590	1,290
2007:					
January	293	180	125	598	1,250
February	331	177	129	637	1,180

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

²Stocks reported by cobalt processors and consumers.

³Includes metal powder.

⁴Data may include other cobalt materials.

⁵Data from Defense National Stockpile Center. Includes material committed for sale pending shipment.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF COBALT, BY COUNTRY¹

(Kilograms, gross weight of material, except as noted)

Period and country of origin	Metals ²		Oxides and hydroxides		Salts and compounds ³		Total cobalt content for the month ⁵	Cobalt content, year to date ^{5,6}
	Quantity	Value ⁴	Quantity	Value ⁴	Quantity	Value ⁴		
2006:								
January	906,000	\$25,000,000	79,300	\$1,890,000	245,000	\$2,830,000	1,060,000	1,060,000
February	571,000	15,600,000	102,000	2,200,000	317,000	3,720,000	775,000	1,830,000
March	1,160,000	30,300,000	115,000	2,620,000	196,000	2,230,000	1,320,000	3,150,000
April	942,000	26,500,000	121,000	2,850,000	165,000	1,640,000	1,090,000	4,240,000
May	640,000	19,300,000	102,000	2,360,000	195,000	2,450,000	790,000	5,030,000
June	969,000	29,500,000	42,700	1,220,000	278,000	2,310,000	1,080,000	6,110,000
July	741,000	21,800,000	85,500	2,230,000	286,000	3,030,000	900,000	7,010,000
August	694,000	21,300,000	91,700	2,260,000	217,000	1,850,000	825,000	7,840,000
September	1,110,000	36,100,000	105,000	2,770,000	83,600	874,000	1,210,000	9,050,000
October	579,000	20,800,000	103,000	2,730,000	170,000	1,800,000	706,000	9,760,000
November	720,000	23,500,000	113,000	3,280,000	105,000	982,000	830,000	10,600,000
December	917,000	32,300,000	115,000	3,040,000	68,400	533,000	1,020,000	11,600,000
January-December	9,950,000	302,000,000	1,180,000	29,400,000	2,330,000	24,200,000	11,600,000	XX
2007:								
January:								
Australia	59,500	2,310,000	--	--	--	--	59,500	59,500
Belgium	4,220	155,000	33,700	1,410,000	3,000	42,700	29,300	29,300
Canada	126,000	5,080,000	--	--	--	--	126,000	126,000
China	22,900	997,000	30,400	762,000	99,500	1,020,000	72,600	72,600
Congo (Kinshasa)	22,000	528,000	--	--	--	--	22,000	22,000
Finland	11,900	560,000	20,600	558,000	39,600	336,000	37,000	37,000
France	2,070	153,000	1,000	38,500	--	--	2,790	2,790
Germany	116	5,660	648	42,000	--	--	583	583
India	--	--	--	--	16,200	102,000	4,370	4,370
Japan	17,200	629,000	--	--	--	--	17,200	17,200
Korea, Republic of	--	--	--	--	18,500	167,000	4,450	4,450
Morocco	57,000	2,630,000	--	--	--	--	57,000	57,000
Norway	194,000	9,240,000	--	--	--	--	194,000	194,000
Philippines	--	--	--	--	91	2,230	42	42
Russia	143,000	6,890,000	--	--	--	--	143,000	143,000
South Africa	500	21,000	--	--	--	--	500	500
Sweden	790	33,600	--	--	--	--	790	790
Uganda	42,100	1,620,000	--	--	--	--	42,100	42,100
United Kingdom	1,400	61,800	5,000	137,000	16,500	236,000	9,310	9,310
Zambia	83,000	3,920,000	--	--	--	--	83,000	83,000
Total	788,000	34,800,000	91,400	2,940,000	193,000	1,900,000	906,000	906,000

XX Not applicable. -- Zero.

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

²Unwrought cobalt, excluding alloys; includes cobalt cathode and cobalt metal powder; may include intermediate products of cobalt metallurgy.

³Includes cobalt acetates, cobalt carbonates, cobalt chlorides, and cobalt sulfates.

⁴Customs value.

⁵Estimated from gross weights.

⁶May include revisions to prior months.

Source: U.S. Census Bureau, with adjustments by the U.S. Geological Survey.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS, BY COUNTRY ¹

(Kilograms, gross weight of material, except as noted)

Period and country of origin	Unwrought cobalt alloys		Cobalt waste and scrap		Wrought cobalt and cobalt articles	
	Quantity	Value ²	Quantity	Value ²	Quantity	Value ²
2006:						
January	385	\$14,000	59,800	\$1,090,000	14,600	\$1,140,000
February	1,380	53,700	68,200	441,000	12,700	1,080,000
March	1,570	74,900	55,200	731,000	25,100	1,940,000
April	1,050	60,800	29,000	421,000	26,700	1,820,000
May	864	78,800	26,800	450,000	23,600	1,690,000
June	233	19,300	149,000	1,780,000	23,300	1,680,000
July	1,950	26,400	47,900	519,000	23,700	1,920,000
August	21,200	676,000	51,300	708,000	18,300	1,470,000
September	447	39,700	54,400	677,000	14,200	1,360,000
October	3,860	196,000	62,200	926,000	16,700	1,210,000
November	350	42,000	62,200	632,000	18,900	1,780,000
December	342	39,400	59,400	1,010,000	19,900	1,550,000
January-December	33,600	1,320,000	726,000	9,390,000	238,000	18,600,000
2007:						
January:						
Austria	90	3,330	--	--	--	--
Belgium	--	--	--	--	136	8,770
Canada	283	22,000	986	12,000	2,100	417,000
Finland	150	37,400	--	--	--	--
France	51	4,530	567	10,500	32	14,900
Germany	--	--	9,880	81,500	1,310	233,000
Ireland	--	--	17,400	249,000	--	--
Japan	200	12,000	3,330	42,700	2,040	77,100
Malaysia	--	--	--	--	3	12,500
Singapore	--	--	3,400	70,700	--	--
Switzerland	--	--	--	--	17	5,130
Taiwan	--	--	2,050	33,800	--	--
United Kingdom	3,440	56,500	23,600	183,000	8,470	582,000
Total	4,210	136,000	61,200	683,000	14,100	1,350,000

-- Zero.

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

²Customs value.

Source: U.S. Census Bureau.

TABLE 6
U.S. EXPORTS OF COBALT MATERIALS¹

(Kilograms, gross weight of material, except as noted)

Period	Unwrought cobalt, powders, matte, waste and scrap ²		Oxides and hydroxides		Salts and compounds ³		Total cobalt content for the month ⁵	Cobalt content, year to date ^{3, 6}
	Quantity	Value ⁴	Quantity	Value ⁴	Quantity	Value ⁴		
2006:								
January	96,100	\$3,850,000	108,000	\$2,610,000	51,500	\$317,000	187,000	187,000
February	96,200	3,960,000	91,800	2,170,000	43,400	308,000	173,000	359,000
March	232,000	9,530,000	93,800	2,030,000	76,300	518,000	318,000	678,000
April	326,000	12,700,000	123,000	2,710,000	19,900	177,000	419,000	1,100,000
May	134,000	4,780,000	83,300	2,060,000	79,800	461,000	213,000	1,310,000
June	157,000	3,980,000	66,000	1,680,000	50,300	111,000	217,000	1,530,000
July	150,000	4,890,000	63,300	1,370,000	33,200	224,000	203,000	1,730,000
August	130,000	3,650,000	91,000	2,180,000	64,900	390,000	211,000	1,940,000
September	165,000	4,500,000	109,000	3,010,000	20,900	163,000	249,000	2,190,000
October	235,000	3,650,000	62,300	1,800,000	15,500	168,000	284,000	2,470,000
November	109,000	2,200,000	91,200	2,180,000	31,500	171,000	183,000	2,660,000
December	103,000	2,750,000	114,000	3,020,000	48,100	293,000	196,000	2,850,000
January-December	1,930,000	60,500,000	1,100,000	26,800,000	535,000	3,300,000	2,850,000	XX
2007, January	92,800	3,720,000	90,800	3,480,000	41,800	208,000	168,000	168,000

XX Not applicable.

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

²May include other intermediate products of cobalt metallurgy and unwrought cobalt alloys.

³Cobalt acetates and cobalt chlorides.

⁴Free alongside ship (f.a.s.) value.

⁵Estimated from gross weights.

⁶May include revisions to prior months.

Source: U.S. Census Bureau, with adjustments by the U.S. Geological Survey.

TABLE 7
U.S. EXPORTS OF WROUGHT COBALT, COBALT ORE, AND CONCENTRATES¹

(Kilograms, gross weight of material, except as noted)

Period	Wrought cobalt and cobalt articles		Cobalt ore and concentrates	
	Quantity	Value ²	Quantity	Value ²
2006:				
January	188,000	\$7,160,000	5,150	\$129,000
February	157,000	7,530,000	6,390	139,000
March	219,000	8,340,000	28,000	893,000
April	183,000	8,250,000	69,200	1,170,000
May	115,000	5,260,000	19,700	493,000
June	112,000	6,110,000	31,800	423,000
July	130,000	7,020,000	81,200	1,320,000
August	140,000	6,350,000	6,690	162,000
September	165,000	8,040,000	107,000	585,000
October	178,000	8,400,000	59,700	1,410,000
November	209,000	9,960,000	20,800	716,000
December	185,000	7,980,000	59,200	1,700,000
January-December	1,980,000	90,400,000	495,000	9,130,000
2007, January	155,000	8,360,000	10,400	436,000

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

²Free alongside ship (f.a.s.) value.

Source: U.S. Census Bureau, with adjustments by the U.S. Geological Survey.