

Mineral Industry Surveys

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COBALT IN MARCH 2001

U.S. consumption of cobalt in January through March 2001 was approximately the same as that during the first 3 months of 2000, according to the U.S. Geological Survey. The cobalt content of U.S. imports of cobalt metal and chemicals was 10% higher during January through February 2001 than that of imports during the same period in 2000. The cobalt content of U.S. exports of unwrought cobalt and chemicals was 103% higher during January through February 2001 than that during the same period in 2000. Trade data for March 2001 will be available in a subsequent issue.

Note

With the exception of prices, all data in this report have been rounded to no more than three significant digits. Totals and percentages were calculated by using unrounded data.

Price

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

<u>Date</u>	<u>Price range</u>
April 12	11.75-12.75
April 19	11.50-12.25
April 26	11.00-12.00
May 3	10.00-11.00
May 10	10.00-11.00

<u>Month</u>	<u>Average price</u>
April	12.22

TABLE 1
U.S. REPORTED CONSUMPTION OF COBALT MATERIALS 1/

(Metric tons, contained cobalt)

Period	Metal 2/	Oxide and other chemical compounds 3/	Scrap	Total
2000:				
March	283	158	233	674
April	304	161	226	691
May	299	166	225	689
June	272	157	226	655
July	290	149	216	654
August	280	137	221	638
September	285	147	217	649
October	288	153	224	666
November	306	151	223	680
December	290	144	219	653
January-December 4/	3,460	1,850	2,680	7,980
2001:				
January	292 r/	142	211 r/	645 r/
February	300 r/	145	211 r/	657 r/
March	308	143	210	661
January-March	901	429	632	1,960

r/ Revised.

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

2/ Includes metal powder.

3/ Data may include other cobalt materials.

4/ Data based on monthly reports.

TABLE 2
U.S. REPORTED CONSUMPTION OF COBALT, BY END USE 1/

(Metric tons, contained cobalt)

End use	2000		2001	
	January- March	January- December 2/	March	January- March 3/
Steel	38	137	17	52
Superalloys	867 r/	3,580	307	885
Magnetic alloys	186 r/	752	66	194
Other alloys 4/	W	W	W	W
Cemented carbides 5/	208 r/	771	63	196
Chemical and ceramic uses 6/	631 r/	2,450	185	557
Miscellaneous and unspecified	72 r/	290	24	78
Total	2,000 r/	7,980	661	1,960

r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Miscellaneous and unspecified."

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

2/ Data based on monthly reports.

3/ May include revisions to prior months.

4/ Includes nonferrous alloys, welding materials, and wear-resistant alloys.

5/ Includes diamond bit matrices, cemented and sintered carbides, and cast carbide dies or parts.

6/ Includes catalysts, driers in paints or related usage, feed or nutritive additive, glass decolorizer, ground coat frit, pigments and other uses.

TABLE 3
U.S. REPORTED STOCKS OF COBALT MATERIALS 1/

(Metric tons, contained cobalt)

Period	Industry 2/				U.S. Government, metal 5/
	Metal 3/	Oxide and other chemical compounds 4/	Scrap	Total	
2000:					
March	381	204	160	745	12,100
April	375	207	150	732	12,100
May	339	209	156	704	12,100
June	335	212	150	697	11,700
July	388	220	155	762	11,700
August	348	190	157	695	11,600
September	372	224	159	755	11,100
October	363	206	171	740	11,100
November	368	207	168	742	10,200
December 6/	362	215	166	743	10,200
2001:					
January	346 r/	200 r/	165	711 r/	10,200
February	344 r/	200	164	709 r/	9,810
March	344	196	163	703	9,780

r/ Revised.

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

2/ Stocks reported by cobalt processors and consumers.

3/ Includes metal powder.

4/ Data may include other cobalt materials.

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

6/ Data based on monthly reports.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF COBALT, BY COUNTRY 1/

(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/		
2000:								
February	592,000	\$17,200,000	109,000	\$2,700,000	213,000	\$1,380,000	728,000	1,420,000
March	450,000 7/	12,400,000 7/	206,000	4,960,000	90,100	605,000	622,000	2,050,000
April	571,000	16,500,000	61,500	1,560,000	21,000	128,000	621,000	2,670,000
May	656,000 7/	20,700,000 7/	122,000	3,010,000	18,100	145,000	749,000	3,420,000
June	624,000 7/	18,100,000 7/	136,000	3,610,000	164,000	1,140,000	766,000	4,180,000
July	390,000 7/	11,400,000 7/	121,000	2,990,000	102,000	675,000	505,000	4,690,000
August	476,000 7/	13,800,000 7/	111,000	2,450,000	179,000	1,160,000	603,000	5,290,000
September	892,000	25,800,000	105,000	2,500,000	77,400	459,000	987,000	6,280,000
October	677,000 7/	19,800,000 7/	98,100	2,170,000	168,000	988,000	792,000	7,070,000
November	558,000 7/	15,800,000 7/	125,000	2,920,000	83,500 7/	544,000 7/	670,000	7,740,000
December	689,000	18,600,000	140,000	3,310,000	211,000	1,320,000	847,000	8,590,000
January-December	7,040,000	204,000,000	1,510,000	36,400,000	1,710,000	11,000,000	8,590,000	XX
2001:								
January	563,000	15,600,000	185,000	4,400,000	80,400	457,000	717,000	717,000
February:								
Belgium	6,530	325,000	83,500	2,090,000	--	--	66,700	148,000
Brazil	44,000	1,030,000	--	--	--	--	44,000	70,000
Canada	88,100	2,450,000	--	--	--	--	88,100	176,000
China	31,900 7/	289,000 7/	607	18,200	--	--	32,300	33,100
Congo (Kinshasa)	69,600 7/	1,420,000 7/	--	--	--	--	69,600	99,600
Finland	54,700	1,500,000	45,500	835,000	105,000	555,000	115,000	325,000
France	57	3,550	3,960	156,000	--	--	2,910	4,740
Germany	3,920	258,000	2,000	44,200	--	--	5,360	18,700
India	--	--	--	--	--	--	--	27
Japan	4,010	184,000	--	--	--	--	4,010	4,890
Korea, Republic of	71	6,000	--	--	--	--	71	71
Morocco	39,800	884,000	--	--	--	--	39,800	59,800
Norway	74,000	1,710,000	--	--	--	--	74,000	127,000
Russia	115,000	3,080,000	--	--	--	--	115,000	244,000
South Africa	117,000	2,440,000	--	--	--	--	117,000	137,000
Switzerland	--	--	--	--	--	--	--	76
Taiwan	--	--	--	--	1,000	6,800	240	240
United Kingdom	900	32,300	--	--	18,100	136,000	5,250	15,800
Zambia	63,600	1,430,000	--	--	--	--	63,600	96,600
Total	714,000	17,000,000	136,000	3,140,000	124,000	699,000	843,000	1,560,000

XX Not applicable. -- Zero.

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

2/ Unwrought cobalt, excluding alloys; includes cobalt cathode and cobalt metal powder.

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

4/ Customs value.

5/ Estimated from gross weights.

6/ May include revisions to prior months.

7/ All or part of these data have been referred to the U.S. Census Bureau for verification.

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		Other cobalt: matte, waste and scrap 2/		Wrought cobalt and cobalt articles	
	Quantity	Value 3/	Quantity	Value 3/	Quantity	Value 3/
2000:						
February	26,900	\$640,000	52,300 4/	\$1,500,000 4/	24,100	\$1,030,000
March	9,010	399,000	87,100 4/	1,710,000 4/	22,500	1,200,000
April	4,010	132,000	148,000 4/	2,390,000 4/	23,600	1,340,000
May	22,900	562,000	57,900 4/	1,260,000 4/	17,900	1,120,000
June	66,300	1,700,000	71,600 4/	1,770,000 4/	19,200	1,430,000
July	5,290	137,000	55,000 4/	1,620,000 4/	29,500	1,160,000
August	2,600	85,700	52,200 4/	1,090,000 4/	16,600	1,030,000
September	12,000	359,000	83,000 4/	1,660,000 4/	17,500	1,390,000
October	7,490	211,000	96,300 4/	2,180,000 4/	43,400	1,440,000
November	14,000	472,000	58,400 4/	1,720,000 4/	21,500 4/	1,210,000 4/
December	6,270	141,000	40,500 4/	986,000 4/	17,100	1,100,000
January-December	188,000	5,190,000	831,000	18,300,000	290,000	15,400,000
2001:						
January	2,200	66,500	122,000 4/	1,880,000 4/	27,500	1,570,000
February:						
Belgium	--	--	6,400 4/	130,000 4/	1,020	50,200
Canada	--	--	975	9,040	1,510	206,000
Finland	--	--	7,000 4/	171,000 4/	--	--
France	--	--	4,580 4/	347,000 4/	2,570	190,000
Germany	100	3,300	90 4/	4,160 4/	1,900	94,600
Japan	--	--	21,400 4/	745,000 4/	6,640	265,000
Luxembourg	--	--	300 4/	12,000 4/	--	--
Netherlands	--	--	17,000	42,100	--	--
Sweden	3,150	58,200	--	--	--	--
Switzerland	--	--	1,120 4/	24,800 4/	--	--
United Kingdom	1,670	54,600	18,300 4/	139,000 4/	11,300	579,000
Total	4,920	116,000	77,200	1,620,000	24,900	1,380,000

-- Zero.

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

2/ Includes other intermediate products of cobalt metallurgy; may include other cobalt-bearing materials from which cobalt is extracted, or from which cobalt-containing chemical compounds are manufactured.

3/ Customs value.

4/ All or part of these data have been referred to the U.S. Census Bureau for verification.

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

TABLE 6
U.S. EXPORTS OF COBALT MATERIALS 1/

(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 5/ 6/
	Quantity	Value 4/	Quantity	Value 4/	Quantity	Value 4/		
2000:								
February	93,700	\$3,650,000	23,600	\$484,000	35,100	\$326,000	119,000	274,000
March	71,900	2,440,000	143,000	1,340,000	136,000	430,000	208,000	482,000
April	123,000	5,410,000	143,000 7/	1,060,000 7/	177,000	525,000	269,000	751,000
May	132,000	5,020,000	78,600 7/	577,000 7/	29,500	289,000	195,000	946,000
June	66,000	2,770,000	111,000 7/	837,000 7/	18,000	168,000	150,000	1,100,000
July	152,000	6,580,000	138,000 7/	1,230,000 7/	23,100	219,000	257,000	1,350,000
August	191,000	5,130,000	176,000 7/	1,370,000 7/	18,400	169,000	322,000	1,680,000
September	275,000	8,090,000	201,000 7/	1,780,000 7/	58,500	242,000	434,000	2,110,000
October	65,900	2,430,000	96,900 7/	978,000 7/	46,900	451,000	147,000	2,260,000
November	106,000	4,220,000	62,200 7/	415,000 7/	12,800	146,000	154,000	2,410,000
December	165,000	5,280,000	107,000 7/	646,000 7/	81,200	346,000	261,000	2,670,000
January-December	1,520,000	54,200,000	1,370,000	11,800,000	676,000	3,650,000	2,670,000	XX
2001:								
January	93,500	3,140,000	200,000	1,540,000	26,500	263,000	244,000	244,000
February	216,000	6,020,000	131,000	823,000	13,200	124,000	313,000	557,000

XX Not applicable.

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

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

3/ Cobalt acetates and cobalt chlorides.

4/ Free alongside ship (f.a.s.) value.

5/ Estimated from gross weights.

6/ Year to date may include revisions to prior months.

7/ All or part of these data have been referred to the U.S. Census Bureau for verification.

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

TABLE 7
U.S. EXPORTS OF WROUGHT COBALT, COBALT ORE, AND CONCENTRATES 1/

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

Period	Wrought cobalt and cobalt articles		Cobalt ore and concentrates	
	Quantity	Value 2/	Quantity	Value 2/
2000:				
February	104,000	\$2,520,000	--	--
March	72,900	3,090,000	--	--
April	116,000	2,790,000	132,000 3/	\$323,000 3/
May	49,900	2,200,000	300,000 3/	189,000 3/
June	65,300	2,940,000	34,800 3/	516,000 3/
July	59,700	2,560,000	47,800 3/	1,410,000 3/
August	147,000	5,550,000	31,100 3/	618,000 3/
September	40,300	2,630,000	--	--
October	127,000	5,910,000	91,400 3/	303,000 3/
November	66,600	3,680,000	3,610 3/	298,000 3/
December	50,200	1,650,000	54,300 3/	66,400 3/
January-December	963,000	37,800,000	695,000	3,730,000
2001:				
January	56,500	1,790,000	42,000 3/	169,000 3/
February	89,000	2,070,000	--	--

-- Zero.

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

2/ Free alongside ship (f.a.s.) value.

3/ All or part of these data have been referred to the U.S. Census Bureau for verification.

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