

Mineral Industry Surveys

For information, contact:

Kim B. Shedd, Cobalt Commodity Specialist

U.S. Geological Survey

989 National Center

Reston, VA 20192

Telephone: (703) 648-4974, Fax: (703) 648-7757

E-mail: kshedd@usgs.gov

Jo-Ann Sterling (Data)

Telephone: (703) 648-7953

Fax: (703) 648-7975

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

COBALT IN JANUARY 2002

U.S. consumption of cobalt in January 2002 was 7% lower than that during December 2001, according to the U.S. Geological Survey. The cobalt content of U.S. imports of cobalt metal and chemicals was 6% higher in 2001 than in 2000. The cobalt content of U.S. exports of unwrought cobalt and chemicals was 22% higher in 2001 than in 2000. Trade data for January 2002 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>
February 14	6.80-6.95
February 21	6.80-6.95
February 28	6.70-6.90
March 7	6.70-6.90
March 14	6.50-6.90

<u>Month</u>	<u>Average price</u>
February	6.91

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
2001:				
January	296	142	211	649
February	303	145	211	659
March	321	143	210	673
April	308	122	209	640
May	298	120	210	627
June	281	147	209	638
July	303	117	209	629
August	283	110	209	602
September	279	137	209	626
October	302	104	209	615
November	312	105	209	627
December	309	112	209	631
January-December 4/	3,600	1,500	2,520	7,620
2002:				
January	278	98	209	586

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	2001		2002
	January	January-December 2/	January
Steel	16 r/	207	15
Superalloys	290 r/	3,620	294
Magnetic alloys	63	683	48
Other alloys 3/	W	W	W
Cemented carbides 4/	68 r/	798	64
Chemical and ceramic uses 5/	184 r/	2,020	141
Miscellaneous and unspecified	27 r/	297	24
Total	649 r/	7,620	586

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

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

5/ 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/ Oxide and other chemical compounds 4/				U.S. Government, metal 5/
	Metal 3/	Scrap	Total		
2001:					
January	342	200	165	708	10,200
February	340	200	164	704	9,810
March	335	195	163	693	9,780
April	363	214	163	740	9,120
May	335	211	163	709	8,850
June	300	196	163	659	8,480
July	298	219	163	680	8,420
August	319	236	163	718	8,260
September	313	238	163	713	8,180
October	339	230	162	732	NA
November	325	223	163	711	NA
December 6/	335	212	163	710	NA
2002:					
January	358	242	163	762	NA

NA Not available.

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:								
December	700,000	\$19,200,000	144,000	\$3,400,000	211,000	\$1,320,000	860,000	8,770,000
January-December	7,210,000	213,000,000	1,540,000	37,100,000	1,710,000	11,000,000	8,770,000	XX
2001:								
January	563,000	15,600,000	185,000	4,400,000	80,400	457,000	717,000	717,000
February	714,000 7/	17,000,000 7/	136,000	3,140,000	124,000	699,000	843,000	1,560,000
March	615,000	16,700,000	96,400 7/	2,050,000 7/	256,000	1,320,000	753,000	2,310,000
April	679,000	18,600,000	106,000	2,400,000	234,000	1,240,000	817,000	3,130,000
May	836,000 7/	21,100,000 7/	50,600	1,210,000	80,400	518,000	896,000	4,030,000
June	687,000	16,300,000	152,000	2,820,000	84,700	486,000	820,000	4,850,000
July	525,000	12,500,000	119,000	2,090,000	184,000	966,000	658,000	5,500,000
August	646,000	14,300,000	106,000	1,910,000	174,000	872,000	768,000	6,270,000
September	569,000	12,300,000	64,600	1,310,000	198,000	973,000	668,000	6,940,000
October	826,000	16,400,000	91,900	1,760,000	332,000	1,690,000	982,000	7,920,000
November	603,000 7/	10,500,000 7/	81,000	1,330,000	142,000	654,000	700,000	8,620,000
December:								
Australia	15,000	150,000	--	--	--	--	15,000	168,000
Bahamas	172	3,720	--	--	--	--	172	172
Belgium	14,600	637,000	47,200	756,000	--	--	48,600	549,000
Brazil	--	--	--	--	--	--	--	286,000
Canada	27,200	574,000	--	--	--	--	27,200	818,000
China	--	--	200	3,750	3,000	23,500	894	66,800
Congo (Kinshasa)	--	--	--	--	--	--	--	682,000
Finland	30,500	801,000	43,300	544,000	251,000	1,050,000	131,000	2,020,000
France	1,240	49,000	1,180	35,300	--	--	2,090	39,900
Germany	1,980	49,900	--	--	--	--	1,980	36,400
India	--	--	--	--	--	--	--	267
Italy	--	--	--	--	--	--	--	6,600
Japan	1,440	85,300	--	--	--	--	1,440	36,500
Korea, Republic of	44	2,500	--	--	--	--	44	849
Morocco	18,000	252,000	--	--	--	--	18,000	210,000
Norway	156,000	2,340,000	--	--	--	--	156,000	1,390,000
Philippines	--	--	--	--	--	--	--	4,260
Russia	160,000	2,480,000	--	--	--	--	160,000	1,610,000
South Africa	61,100	825,000	--	--	--	--	61,100	661,000
Sweden	3,640	90,300	--	--	--	--	3,640	4,090
Switzerland	--	--	--	--	--	--	--	77
Taiwan	--	--	--	--	--	--	--	9,420
Uganda	--	--	--	--	--	--	--	59,700
United Kingdom	--	--	--	--	--	--	--	142,000
Zambia	61,900	864,000	--	--	--	--	61,900	497,000
Total	553,000	9,200,000	91,900	1,340,000	254,000	1,080,000	689,000	9,310,000

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:						
December	7,120	\$163,000	20,800	\$133,000	21,000	\$1,230,000
January-December	214,000	6,390,000	550,000	4,110,000	359,000	18,800,000
2001:						
January	2,200	66,500	122,000 4/	1,880,000 4/	27,500	1,570,000
February	4,920	116,000	77,200 4/	1,620,000 4/	24,900	1,380,000
March	4,090	87,100	49,200 4/	381,000 4/	26,700	1,490,000
April	4,250	91,900	67,000	1,550,000	13,100	839,000
May	8,030	193,000	22,600 4/	823,000 4/	25,100	813,000
June	22,200	445,000	67,400 4/	888,000 4/	14,600	980,000
July	6,570	147,000	57,400 4/	537,000 4/	14,500	989,000
August	3,480	64,600	46,400 4/	1,060,000 4/	13,200	845,000
September	1,140	51,500	18,500 4/	515,000 4/	15,400	947,000
October	3,410	105,000	32,000 4/	709,000 4/	19,400	1,170,000
November	10,800	250,000	22,400 4/	519,000 4/	17,000	1,030,000
December:						
Belgium	1,820	36,600	--	--	1,340	65,100
Canada	--	--	579	7,060	2,410	337,000
Congo (Kinshasa)	--	--	20,000	256,000	--	--
France	--	--	4,630 4/	168,000 4/	1,160	109,000
Germany	--	--	--	--	1,730	60,300
Ireland	--	--	10,200	112,000	--	--
Japan	--	--	13,200 4/	436,000 4/	2,770	157,000
Switzerland	--	--	177	2,160	--	--
United Kingdom	318	10,800	456	29,400	12,400	640,000
Total	2,130	47,500	49,200	1,010,000	21,800	1,370,000

-- 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:								
December	165,000	\$5,280,000	107,000	\$646,000	81,200	\$346,000	261,000	2,630,000
January-December	1,520,000	54,500,000	1,320,000	11,700,000	676,000	3,650,000	2,630,000	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
March	166,000	5,700,000	171,000	1,220,000	14,400	90,700	292,000	850,000
April	141,000	4,550,000	210,000	1,530,000	19,500	192,000	298,000	1,150,000
May	220,000	5,590,000	84,200	654,000	26,100	209,000	287,000	1,430,000
June	204,000	5,460,000	116,000 7/	1,070,000 7/	39,000	334,000	297,000	1,730,000
July	146,000	3,960,000	211,000 7/	1,160,000 7/	30,000	231,000	306,000	2,040,000
August	189,000	5,270,000	27,400 7/	241,000 7/	29,800	173,000	216,000	2,250,000
September	186,000	4,730,000	32,100	473,000	3,030	27,100	210,000	2,460,000
October	184,000	5,100,000	6,530	155,000	35,400	221,000	197,000	2,660,000
November	306,000	4,520,000	41,600	581,000	7,770	34,300	338,000	3,000,000
December	182,000	3,220,000	32,500	701,000	9,110	77,100	207,000	3,210,000
January-December	2,230,000	57,300,000	1,260,000	10,200,000	254,000	1,980,000	3,210,000	XX

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:				
December	50,200	\$1,650,000	54,300	\$61,500
January-December	971,000	37,800,000	691,000	3,430,000
2001:				
January	56,500	1,790,000	42,000 3/	169,000 3/
February	89,000	2,070,000	--	--
March	118,000	3,040,000	75,200 3/	477,000 3/
April	55,000	1,860,000	95,000 3/	677,000 3/
May	44,100	2,250,000	23,200 3/	54,900 3/
June	31,300	2,200,000	95,800 3/	63,100 3/
July	73,800	2,040,000	78,300 3/	342,000 3/
August	66,400	2,320,000	21,400 3/	321,000 3/
September	50,700	1,990,000	71,500 3/	446,000 3/
October	30,600	1,250,000	19,400 3/	411,000 3/
November	42,600	1,960,000	2,400 3/	58,700 3/
December	82,300	2,710,000	2,330 3/	72,000 3/
January-December	741,000	25,500,000	527,000	3,090,000

-- 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.