

Mineral Industry Surveys

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COBALT IN AUGUST 2001

U.S. consumption of cobalt in January through August 2001 was 4% lower than that during the first 8 months of 2000, according to the U.S. Geological Survey. The cobalt content of U.S. imports of cobalt metal and chemicals was 16% higher during January through July 2001 than that of imports during the same period in 2000. The cobalt content of U.S. exports of unwrought cobalt and chemicals was 51% higher during January through July 2001 than that during the same period in 2000. Trade data for August 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>
September 13	9.40-9.90
September 20	9.00-9.50
September 27	8.00-8.50
October 4	8.00-8.50
October 11	7.75-8.20

<u>Month</u>	<u>Average price</u>
September	9.20

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:				
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-August r/	2,290	1,250	1,790	5,330
January-December 4/	3,460	1,850	2,680	7,980
2001:				
January	296 r/	142	211	649 r/
February	303 r/	145	211	659 r/
March	321 r/	143	210	673 r/
April	308 r/	122	209	640 r/
May	298 r/	120	210	627 r/
June	281 r/	147	209	638 r/
July	303 r/	117	209	629 r/
August	283	108	209	601
January-August	2,390	1,040	1,680	5,120

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- August	January- December 2/	August	January- August 3/
Steel	102 r/	137	16	148
Superalloys	2,330 r/	3,580	285	2,380
Magnetic alloys	502	752	53	471
Other alloys 4/	W	W	W	W
Cemented carbides 5/	547 r/	771	72	536
Chemical and ceramic uses 6/	1,650 r/	2,450	151	1,380
Miscellaneous and unspecified	193	290	24	200
Total	5,330 r/	7,980	601	5,120

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 tool 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/ Oxide and other chemical compounds 4/				U.S. Government, metal 5/
	Metal 3/		Scrap	Total	
<u>2000:</u>					
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
<u>2001:</u>					
January	344 r/	200	165	709 r/	10,200
February	341 r/	200	164	706 r/	9,810
March	338	195	163	696	9,780
April	365 r/	214	163	742 r/	9,120
May	337 r/	211	163	711 r/	8,850
June	302	196	163	661 r/	8,480
July	300 r/	219 r/	163	682 r/	8,420
August	319	238	163	720	8,260

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:								
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	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:								
Australia	19,000	440,000	--	--	--	--	19,000	111,000
Belgium	15,700	733,000	14,300	301,000	1,000	5,960	26,300	342,000
Brazil	20,000	451,000	--	--	--	--	20,000	185,000
Canada	72,500	1,840,000	--	--	--	--	72,500	550,000
China	5,000	103,000	--	--	--	--	5,000	58,800
Congo (Kinshasa)	76,400	1,350,000	--	--	--	--	76,400	443,000
Finland	48,600	1,290,000	89,200	1,410,000	133,000	631,000	148,000	1,190,000
France	665	52,900	4,410	214,000	--	--	3,840	29,000
Germany	--	--	--	--	--	--	--	28,600
India	--	--	--	--	--	--	--	267
Italy	--	--	--	--	1,020	8,250	467	6,600
Japan	1,430	84,800	222	17,700	200	3,620	1,640	12,800
Korea, Republic of	137	9,610	--	--	--	--	137	679
Morocco	20,000	478,000	--	--	--	--	20,000	145,000
Norway	119,000	2,740,000	--	--	--	--	119,000	642,000
Russia	95,100	2,300,000	--	--	--	--	95,100	954,000
South Africa	21,100	451,000	--	--	--	--	21,100	406,000
Switzerland	--	--	--	--	--	--	--	77
Taiwan	--	--	--	--	16,500	100,000	3,960	9,420
Uganda	--	--	--	--	--	--	--	47,100
United Kingdom	--	--	10,500	145,000	32,800	218,000	15,600	84,500
Zambia	9,820	160,000	--	--	--	--	9,820	257,000
Total	525,000	12,500,000	119,000	2,090,000	184,000	966,000	658,000	5,500,000

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:						
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	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:						
Belgium	--	--	1,800 4/	44,300 4/	315	20,000
Canada	--	--	1,620	15,900	1,090	180,000
France	360	16,000	4,380 4/	196,000 4/	530	63,500
Germany	--	--	588	4,900	836	19,700
India	--	--	--	--	1,460	86,200
Japan	350	25,000	7,150	75,100	4,510	330,000
Sweden	5,530	95,000	272	6,000	--	--
Switzerland	--	--	818	9,980	--	--
United Kingdom	328	11,200	40,800	185,000	5,740	290,000
Total	6,570	147,000	57,400	537,000	14,500	989,000

-- 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:								
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
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

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:				
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	--	--
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/

-- 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.