

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: ksheddd@usgs.gov

Annie Hwang (Data)
Telephone: (703) 648-7952
Fax: (703) 648-7995
E-mail: ahwang@usgs.gov

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

COBALT IN APRIL 2012

Preliminary data indicate that U.S. cobalt consumption during January through April 2012 was 7% lower than consumption during the same period in 2011. The amount of cobalt contained in U.S. imports of cobalt metals and chemicals during January through April 2012 was 9% higher than that imported during the same period in 2011. The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals during January through April 2012 was 7% lower than that exported during the same period in 2011.

Prices

Prices for cobalt metal, in dollars per pound, in April 2012 are listed below.

Type	Price range	Average price
U.S. spot ¹	14.80–16.10	15.44
LME cash mean ²	XX	13.87

XX Not applicable.

¹Source: Platts Metals Week, minimum 99.8% cobalt cathode.

²London Metal Exchange, mean of the cash buyer price and the cash seller and settlement price, minimum 99.3% cobalt briquettes, cathode, ingot, or rounds (converted from dollars per metric ton and rounded to the nearest cent).

TABLE 1
U.S. REPORTED CONSUMPTION OF COBALT MATERIALS^{p, 1}

(Metric tons, contained cobalt)

Period	Metal ²	Oxide and other chemical compounds ³	Scrap	Total
2011:				
April	340 ^r	174	170	684 ^r
May	490 ^r	182	173	845 ^r
June	575 ^r	181	194	951 ^r
July	273 ^r	176	177	625 ^r
August	306 ^r	178	170	654 ^r
September	298 ^r	176	183	656 ^r
October	303 ^r	182	163	648 ^r
November	192 ^r	173	253	617 ^r
December	270 ^r	176	167	613 ^r
January–April	1,270	709 ^r	762 ^r	2,740
January–December ⁴	3,970 ^r	2,130	2,240	8,350 ^r
2012:				
January	282 ^r	176	169 ^r	627 ^r
February	287 ^r	176	175 ^r	638 ^r
March	258 ^r	177	193 ^r	628 ^r
April	281	178	191	650
January–April	1,110	707	729	2,540

^pPreliminary. ^rRevised.

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 USE^{p, 1}

(Metric tons, contained cobalt)

End use	2011		2012	
	January–April	January–December ^{2,3}	April	January–April
Steel	179 ^r	536	45	179
Superalloys	1,380 ^r	4,280 ^r	311	1,190
Magnetic alloys	84	252	21	84
Other alloys ⁴	W	W	W	W
Cemented carbides ⁵	262	786	65	261
Chemical and ceramic uses ⁶	739 ^r	2,220	185	736
Miscellaneous and unspecified	90	270	22	90
Total	2,740	8,350 ^r	650	2,540

^pPreliminary. ^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.

³May include revisions to previously published data.

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

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

⁶Includes 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	U.S. industry ^{p, 2}			U.S. Government, metal ⁶	LME ³ , metal		Total
	Metal and scrap ⁴	Oxide and other chemical compounds ⁵	Total		U.S. warehouse	Non-U.S. warehouse	
2011:							
April	564 ^r	158	722 ^r	301	108	283	391
May	537 ^r	169	706 ^r	301	108	255	363
June	540 ^r	170	709 ^r	301	30	219	249
July	560 ^r	168	728 ^r	301	35	227	262
August	586 ^r	165	751 ^r	301	35	262	297
September	565 ^r	170	735 ^r	301	33	264	297
October	537 ^r	165	702 ^r	301	30	293	323
November	533 ^r	171	704 ^r	301	40	279	319
December	531 ^r	192	750 ^r	301	43	261	304
2012:							
January	523 ^r	184	707 ^r	301	26	285	311
February	500 ^r	180	680 ^r	301	20	273	293
March	538 ^r	180 ^r	719 ^r	301	27	318	345
April	555	181	736	301	22	328	350

^pPreliminary. ^rRevised.

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

²Stocks reported by cobalt processors and consumers.

³London Metal Exchange.

⁴Includes metal powder.

⁵Data may include other cobalt materials.

⁶Data from Defense Logistics Agency, DLA Strategic Materials; uncommitted material only.

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

(Metric tons, 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 period ⁵	Cobalt content, year to date ^{5,6}
	Quantity	Value ⁴ (thousands)	Quantity	Value ⁴ (thousands)	Quantity	Value ⁴ (thousands)		
2011:								
April	502	\$20,400	189	\$3,930	280	\$3,990	735	3,820
May	575	22,000	284	6,880	117	1,490	815	4,630
June	715	27,800	207	4,860	144	2,030	918	5,550
July	305	12,200	281	5,430	247	2,890	586	6,140
August	804	28,600	118	3,030	143	1,600	932	7,070
September	637	22,000	222	5,980	131	1,270	835	7,900
October	773	27,900	288	6,100	161	1,370	1,030	8,930
November	577	18,700	235	4,750	124	1,330	784	9,710
December	632	19,900	294	5,610	105	1,220	878	10,600
January–April	3,000	117,000	663	18,500	1,020	12,100	3,820	XX
January–December	8,020	296,000	2,590	61,200	2,190	25,300	10,600	XX
2012:								
January	636	20,100	175	3,260	90	662	785	785
February	812	25,500	201	4,470	186	2,670	1,040	1,820
March	740	24,600	325	7,240	149	1,750	1,020	2,840
April:								
Australia	127	3,550	--	--	--	--	127	381
Austria	--	--	--	--	--	--	--	5
Belgium	16	517	63	1,690	--	--	62	190
Brazil	60	1,640	--	--	8	112	63	226
Canada	58	1,840	123	1,560	--	--	146	461
China	240	7,570	36	881	5	71	268	663
Congo (Kinshasa)	20	551	--	--	--	--	20	40
Finland	31	1,330	122	3,220	115	1,170	156	525
France	1	91	--	--	--	--	1	8
Germany	(7)	9	--	--	--	--	(7)	1
India	--	--	--	--	20	200	5	81
Japan	41	1,300	--	--	--	--	41	121
Korea, Republic of	7	208	--	--	--	--	7	17
Morocco	10	286	--	--	--	--	10	50
Netherlands	--	--	--	--	19	95	5	9
Norway	61	2,010	--	--	--	--	61	380
Peru	--	--	--	--	6	126	3	3
Russia	229	7,130	--	--	--	--	229	401
South Africa	31	977	--	--	--	--	31	128
Sweden	(7)	18	--	--	--	--	(7)	6
Taiwan	--	--	--	--	--	--	--	5
Uganda	--	--	--	--	--	--	--	18
United Kingdom	1	63	10	259	15	265	14	85
Zambia	70	2,170	--	--	--	--	70	361
Total	1,010	31,200	353	7,610	187	2,040	1,320	4,160
January–April	3,190	101,000	1,050	22,600	612	7,130	4,160	XX

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 previously published data.

⁷Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS, BY COUNTRY¹

(Metric tons, 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 (thousands)	Quantity	Value ² (thousands)	Quantity	Value ² (thousands)
2011:						
April	44	\$1,520	119	\$2,040	21	\$2,410
May	52	1,990	87	1,200	16	1,820
June	68	2,570	43	891	20	1,950
July	50	1,670	53	938	24	2,230
August	77	2,880	55	996	16	2,400
September	94	3,500	40	519	25	2,530
October	67	2,390	71	1,240	26	2,510
November	63	2,110	47	817	19	2,420
December	81	2,560	44	669	18	2,070
January–April	203	7,620	289	4,810	83	9,090
January–December	754	27,300	730	12,100	247	27,000
2012:						
January	82	2,680	67	1,080	36	1,900
February	73	2,500	54	1,110	22	2,200
March	59	1,950	124	2,310	21	2,610
April:						
Australia	--	--	--	--	4	134
Belgium	--	--	--	--	-3	12
Canada	47	1,440	--	--	3	792
China	--	--	--	--	1	118
Finland	-3	13	--	--	--	--
France	--	--	7	74	3	179
Germany	1	41	--	--	1	395
Ireland	--	--	15	288	--	--
Israel	--	--	1	8	--	--
Japan	(3)	6	10	172	1	63
Korea, Republic of	--	--	(3)	7	--	--
Malaysia	--	--	4	69	--	--
Mexico	--	--	1	15	--	--
United Kingdom	34	1,270	4	100	9	975
Total	81	2,770	41	733	22	2,670
January–April	295	9,910	286	5,230	102	9,380

-- Zero.

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

²Customs value.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. EXPORTS OF COBALT MATERIALS¹

(Metric tons, 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 period ⁵	Cobalt content, year to date ^{5,6}
	Quantity	Value ⁴ (thousands)	Quantity	Value ⁴ (thousands)	Quantity	Value ⁴ (thousands)		
2011:								
April	228	\$7,950	49	\$958	42	\$417	273	1,220
May	340	9,470	(7)	17	25	300	346	1,560
June	204	8,070	18	55	27	312	223	1,790
July	282	9,380	47	120	65	736	332	2,120
August	194	7,440	(7)	20	33	368	202	2,320
September	246	7,550	6	199	14	160	253	2,570
October	225	8,300	71	229	38	413	285	2,860
November	249	6,860	55	246	38	555	298	3,160
December	220	7,460	21	63	2	25	236	3,390
January–April	1,100	31,700	114	1,750	161	1,720	1,220	XX
January–December	3,060	96,300	332	2,700	403	4,590	3,390	XX
2012:								
January	234	7,450	35	183	19	182	264	264
February	238	8,380	3	81	23	225	246	510
March	325	10,800	16	347	1	22	337	847
April	258	8,400	33	159	1	10	281	1,130
January–April	1,050	35,000	87	770	44	439	1,130	XX

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 previously published data.

⁷Less than ½ unit.

Source: U.S. Census Bureau.

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

(Metric tons, gross weight of material, except as noted)

Period	Wrought cobalt and cobalt articles		Cobalt ore and concentrates	
	Quantity	Value ² (thousands)	Quantity	Value ² (thousands)
2011:				
April	124	\$7,200	600	\$1,050
May	115	6,560	4	141
June	98	5,960	3	119
July	128	7,340	40	163
August	98	6,260	2	4
September	111	6,670	--	--
October	117	7,370	38	42
November	99	5,920	--	--
December	123	7,780	--	--
January–April	471	28,000	619	1,100
January–December	1,360	81,800	707	1,570
2012:				
January	118	7,190	-3	4
February	125	8,450	5	68
March	127	7,850	20	83
April	141	8,330	2	48
January–April	512	31,800	27	203

-- Zero.

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

²Free alongside ship (f.a.s.) value.

³Less than ½ unit.

Source: U.S. Census Bureau.