

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 MARCH 2012

Preliminary data indicate that U.S. cobalt consumption during January through March 2012 was 8% 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 March 2012 was 8% lower 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 March 2012 was 10% lower than that exported during the same period in 2011.

Prices

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

Type	Price range	Average price
U.S. spot ¹	14.00–15.20	14.67
LME cash mean ²	XX	13.99

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 MATERIALS¹

(Metric tons, contained cobalt)

Period	Metal ²	Oxide and other chemical compounds ³	Scrap	Total
2011:				
March	423 ^r	179	164	766 ^r
April	337	174	170	682 ^r
May	487 ^r	182	173	842
June	573 ^r	181	194	948
July	270 ^r	176	177	622
August	303	178	170	651
September	295 ^r	176	183	653
October	300	182	163	645
November	189	173	253	615 ^r
December	267	176	167	610
January–March ^r	918	535	591	2,040
January–December ⁴	3,940 ^r	2,130	2,240	8,310
2012:				
January	276	176	167	619
February	288	176	167	630
March	289	177	167	633
January–March	853	529	500	1,880

^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 USE¹

(Metric tons, contained cobalt)

End use	2011		2012	
	January–March	January–December ^{2,3}	March	January–March
Steel	134 ^r	536	45	134
Superalloys	1,030	4,250	295	871
Magnetic alloys	63 ^r	252	21	63
Other alloys ⁴	W	W	W	W
Cemented carbides ⁵	197 ^r	786	65	196
Chemical and ceramic uses ⁶	558 ^r	2,220 ^r	184	550
Miscellaneous and unspecified	68	270 ^r	22	68
Total	2,040 ^r	8,310 ^r	633	1,880

^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 ²			U.S. Government, metal ⁶	LME ³ , metal		
	Metal and scrap ⁴	Oxide and other chemical compounds ⁵	Total		U.S. warehouse	Non-U.S. warehouse	Total
2011:							
March	394	160	554	301	88	210	298
April	457	158	614	301	108	283	391
May	429	169	597	301	108	255	363
June	431	170	601	301	30	219	249
July	452	168	620	301	35	227	262
August	479	165	643	301	35	262	297
September	456	170	627	301	33	264	297
October	429	165	593	301	30	293	323
November	425	171	596	301	40	279	319
December	423	192	615	301	43	261	304
2012:							
January	425	184	609	301	26	285	311
February	419	180	598	301	20	273	293
March	422	181	603	301	27	318	345

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:								
March	876	\$35,400	113	\$3,630	280	\$2,560	1,050	3,080
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–March	2,500	96,600	473	14,600	741	8,060	3,080	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:								
Australia	95	2,840	--	--	--	--	95	254
Austria	--	--	--	--	--	--	--	5
Belgium	13	418	92	2,770	--	--	79	128
Brazil	35	1,110	--	--	-7	6	35	163
Canada	53	2,060	122	1,620	--	--	141	314
China	68	2,080	16	377	6	62	81	395
Congo (Kinshasa)	--	--	--	--	--	--	--	20
Finland	32	1,340	71	1,830	40	681	101	370
France	1	26	--	--	--	--	1	6
Germany	(7)	7	--	--	--	--	(7)	1
India	16	462	--	--	80	656	38	76
Japan	20	622	--	--	--	--	20	80
Korea, Republic of	10	308	--	--	--	--	10	10
Morocco	10	303	--	--	--	--	10	40
Netherlands	--	--	--	--	--	--	--	5
Norway	175	6,100	--	--	--	--	175	319
Russia	79	2,510	--	--	--	--	79	172
South Africa	26	928	--	--	--	--	26	97
Sweden	3	127	--	--	--	--	3	6
Taiwan	2	40	--	--	--	--	2	5
Uganda	--	--	--	--	--	--	--	18
United Kingdom	4	131	25	645	23	347	29	71
Zambia	100	3,230	--	--	--	--	100	291
Total	740	24,600	325	7,240	149	1,750	1,020	2,840
January–March	2,190	70,200	702	15,000	425	5,090	2,840	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:						
March	56	\$2,140	74	\$1,430	23	\$2,600
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–March	160	6,090	171	2,770	62	6,680
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:						
Belgium	(3)	13	7	177	--	--
Canada	58	1,880	2	15	3	763
China	--	--	--	--	3	404
France	1	38	5	50	6	355
Germany	(3)	16	13	196	3	523
Ireland	--	--	17	275	--	--
Japan	(3)	2	6	79	1	119
Mexico	--	--	(3)	6	--	--
Netherlands	--	--	6	127	--	--
Switzerland	--	--	--	--	1	34
Taiwan	--	--	--	--	(3)	16
Tunisia	--	--	1	28	--	--
United Kingdom	--	--	66	1,360	5	394
Total	59	1,950	124	2,310	21	2,610
January–March	214	7,130	246	4,500	80	6,710

-- 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:								
March	414	\$9,120	40	\$184	34	\$405	451	944
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–March	869	23,800	65	793	119	1,300	944	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
January–March	797	26,600	55	610	43	429	847	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:				
March	123	\$7,400	--	--
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–March	347	20,800	20	50
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
January–March	371	23,500	25	154

-- 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.