

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

Cheryl J. Crawford (Data)
Telephone: (703) 648-7989
Fax: (703) 648-7792
E-mail: cjcrawfo@usgs.gov

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

COBALT IN MAY 2010

Preliminary data indicate that U.S. cobalt consumption during January through May 2010 was 4% higher than consumption during the first 5 months of 2009, according to the U.S. Geological Survey. The amount of cobalt contained in U.S. imports of cobalt metals and chemicals was 82% higher during January through April 2010 than that during the same period in 2009. The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals during January through April 2010 was 29% higher than that exported during the same period in 2009.

London Metal Exchange stocks are included in table 3.

Prices

Prices for cobalt metal, in dollars per pound, in May 2010 are listed below.

<u>Type</u>	<u>Price range</u>	<u>Average price</u>
U.S. spot ¹	19.20-22.25	21.08
LME cash mean ²	XX	18.03

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
2009:				
May	242	169	148	560
June	253	185	143	580
July	252	175	143	570
August	251	176	145	573
September	264	177	151	592
October	254	172	156	583
November	245	172	156	574
December	243	168	157	568
January-May ^f	1,310	848	731	2,890
January-December ⁴	3,070	2,070	1,780	6,930
2010:				
January	270	170	156	597
February	290	170	148	608
March	291	171	159	622
April	284	170	156	610
May	247	176	160	583
January-May ⁴	1,380	858	780	3,020

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	2009		2010	
	January-May ^f	January-December ²	May	January-May ³
Steel	208	499	48	240
Superalloys	1,340	3,180	262	1,430
Magnetic alloys	108	259	21	106
Other alloys ⁴	W	W	W	W
Cemented carbides ⁵	248	593	49	247
Chemical and ceramic uses ⁶	871	2,130	181	883
Miscellaneous and unspecified	112	270	22	112
Total	2,890	6,930	583	3,020

^fRevised. 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 prior months.

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 ⁴	Oxide and other chemical compounds ⁵	Scrap	Total		U.S. warehouse	Non-U.S. warehouse	Total
2009:								
May	305	169	100	574	455	XX	XX	XX
June	301	154	113	569	380	XX	XX	XX
July	304	152	108	564	310	XX	XX	XX
August	298	155	103	556	310	XX	XX	XX
September	279	152	91	522	304	XX	XX	XX
October	266	156	84	506	304	XX	XX	XX
November	262	159	68	489	295	XX	XX	XX
December ⁷	255	161	66	482	293	XX	XX	XX
2010:								
January	261	176	57	494	293	XX	XX	XX
February	270	172	66	507	293	--	--	--
March	313	167	65	545	301	--	--	--
April	313	173	62	548	301	--	38	38
May	306	166	60	532	301	--	113	113

XX Not applicable. -- Zero.

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 National Stockpile Center; uncommitted material only.

⁷Data based on monthly reports.

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)		
2009:								
April	469	\$15,200	98	\$2,280	251	\$3,610	635	2,240
May	546	18,100	181	3,280	116	1,790	722	2,960
June	436	14,000	209	6,120	158	2,040	645	3,610
July	473	15,100	153	3,840	120	1,370	622	4,230
August	491	17,900	135	3,600	191	2,160	648	4,880
September	544	20,800	92	2,460	174	2,160	671	5,550
October	592	18,200	139	3,030	237	3,590	782	6,330
November	371	13,800	167	4,660	215	2,640	563	6,890
December	610	23,000	118	3,860	269	3,280	785	7,680
January-April	1,810	56,600	268	6,660	651	8,310	2,240	XX
January-December	5,870	198,000	1,460	37,500	2,130	27,300	7,680	XX
2010:								
January	661	26,100	174	5,050	332	3,220	882	882
February	1,050	39,500	97	2,610	394	3,610	1,240	2,130
March	606	27,500	168	4,640	513	5,640	902	3,030
April:								
Argentina	--	--	--	--	16	53	4	4
Australia	97	4,060	--	--	--	--	97	206
Belgium	17	1,060	67	2,600	--	--	65	187
Brazil	12	513	--	--	--	--	12	37
Canada	13	689	70	1,330	--	--	63	204
China	256	11,500	4	139	197	1,050	317	1,130
Congo (Kinshasa)	134	1,940	--	--	--	--	134	186
Finland	--	--	--	--	20	431	9	321
France	3	215	--	--	--	--	3	14
Germany	1	54	--	--	--	--	1	5
India	14	492	--	--	58	532	30	91
Japan	29	1,530	--	--	--	--	29	133
Korea, Republic of	--	--	--	--	3	55	1	1
Lithuania	--	--	--	--	--	--	--	1
Morocco	10	401	--	--	--	--	10	60
Norway	40	1,730	--	--	--	--	40	279
Russia	62	2,280	--	--	--	--	62	728
South Africa	61	2,310	--	--	--	--	61	162
Sweden	3	146	--	--	--	--	3	14
Switzerland	1	54	--	--	--	--	1	1
Taiwan	--	--	--	--	--	--	--	2
Uganda	27	1,180	--	--	--	--	27	68
United Kingdom	1	26	18	578	10	121	16	131
Zambia	56	2,090	--	--	--	--	56	101
Total	836	32,300	159	4,650	304	2,250	1,040	4,070
January-April	3,160	125,000	597	16,900	1,540	14,700	4,070	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 prior months.

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)
2009:						
April	109	\$1,870	79	\$969	10	\$1,220
May	94	2,650	31	438	33	2,020
June	24	646	35	546	9	1,200
July	(3)	41	102	1,310	7	899
August	29	789	29	360	7	1,050
September	(3)	10	32	506	19	1,040
October	1	41	46	694	7	1,090
November	(3)	16	55	633	5	818
December	1	126	81	1,320	6	873
January-April	238	5,950	237	3,310	60	6,680
January-December	387	10,300	650	9,120	154	15,700
2010:						
January	1	41	96	1,470	5	771
February	23	1,130	85	1,340	10	815
March	2	128	95	1,900	47	2,800
April:						
Canada	--	--	--	--	1	203
China	1	69	--	--	(3)	58
Finland	1	51	--	--	--	--
France	--	--	--	--	1	74
Germany	--	--	--	--	1	343
Ireland	--	--	14	218	--	--
Japan	--	--	8	81	(3)	49
Korea, Republic of	--	--	4	80	--	--
Mexico	--	--	4	56	--	--
Tunisia	--	--	2	33	(3)	8
Turkey	--	--	--	--	3	58
United Kingdom	18	740	14	174	5	386
Total	20	860	46	642	12	1,180
January-April	46	2,160	321	5,350	75	5,560

-- 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)		
2009:								
April	164	\$5,560	15	\$337	6	\$83	176	789
May	261	7,070	15	506	34	155	280	1,070
June	222	6,130	11	158	9	70	232	1,300
July	118	4,080	24	746	14	381	139	1,440
August	195	6,500	19	622	58	1,410	222	1,660
September	135	5,220	6	90	319	2,120	216	1,880
October	182	6,930	6	158	69	2,640	203	2,080
November	171	5,500	26	676	18	170	194	2,280
December	144	5,420	8	373	57	576	163	2,440
January-April	690	30,400	110	2,220	82	849	789	XX
January-December	2,120	77,300	225	5,550	659	8,370	2,440	XX
2010:								
January	183	6,030	75	253	31	1,340	244	244
February	211	6,990	12	444	43	825	230	474
March	210	7,490	58	562	34	380	260	734
April	216	6,340	87	296	39	535	287	1,020
January-April	819	26,900	232	1,550	147	3,080	1,020	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 prior months.

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)
2009:				
April	83	\$5,620	31	\$454
May	114	6,890	125	305
June	72	4,350	51	262
July	134	8,370	1,240	1,520
August	136	6,760	177	623
September	97	6,280	22	871
October	116	6,780	48	448
November	114	6,050	128	724
December	118	6,540	25	1,080
January-April	439	26,500	78	518
January-December	1,340	78,500	1,900	6,360
2010:				
January	141	7,440	269	2,050
February	142	7,080	890	1,900
March	147	8,090	22	263
April	162	9,490	(3)	8
January-April	591	32,100	1,180	4,220

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.