

Mineral Industry Surveys

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COBALT IN APRIL 2010

Preliminary data indicate that U.S. cobalt consumption during January through April 2010 was 5% higher than consumption during the first 4 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 89% higher during January through March 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 March 2010 was 20% higher than that exported during the same period in 2009.

London Metal Exchange stocks for April 2010 are included in table 3.

Price

U.S. spot prices for electrolytic cobalt, minimum 99.8% cobalt, in dollars per pound from Platts Metals Week, are listed below.

<u>Month</u>	<u>Price range</u>	<u>Average price</u>
April 2010	22.00-24.50	23.22

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:				
April	264	168	146	577
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-April [†]	1,070	678	583	2,330
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
January-April ⁴	1,140	682	620	2,440

[†]Revised.

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- April	January- December ²	April	January- April ³
Steel	166 [†]	499	48	192
Superalloys	1,090 [†]	3,180	293	1,170
Magnetic alloys	87 [†]	259	21	86
Other alloys ⁴	W	W	W	W
Cemented carbides ⁵	199 [†]	593	50	198
Chemical and ceramic uses ⁶	697 [†]	2,130	175	702
Miscellaneous and unspecified	90	270	22	90
Total	2,330 [†]	6,930	610	2,440

[†]Revised. 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
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.	Non-U.S.	Total
						warehouse	warehouse	
2009:								
April	308	169	103	580	455	XX	XX	XX
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

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	Quantity	Value ⁴	Quantity	Value ⁴		
		(thousands)		(thousands)		(thousands)		
2009:								
March	424	\$12,300	109	\$2,720	139	\$1,610	549	1,600
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-March	1,340	41,400	170	4,380	400	4,700	1,600	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:								
Australia	65	2,790	--	--	--	--	65	109
Belgium	7	465	26	998	10	110	28	121
Brazil	15	636	--	--	--	--	15	25
Canada	5	268	70	1,170	--	--	55	141
China	137	5,890	17	510	262	1,010	227	814
Congo (Kinshasa)	33	1,370	--	--	--	--	33	53
Finland	59	3,050	29	1,050	175	3,190	150	312
France	3	161	--	--	--	--	3	11
Germany	2	147	--	--	--	--	2	5
India	(7)	16	--	--	20	184	6	61
Japan	22	1,180	--	--	--	--	22	104
Lithuania	--	--	--	--	--	--	--	1
Morocco	--	--	--	--	--	--	--	50
Norway	80	3,800	--	--	--	--	80	239
Russia	130	5,670	--	--	--	--	130	666
South Africa	21	869	--	--	--	--	21	101
Sweden	7	306	--	--	--	--	7	11
Taiwan	1	22	--	--	--	--	1	2
Uganda	20	810	--	--	--	--	20	41
United Kingdom	--	--	26	903	46	1,140	38	115
Zambia	--	--	--	--	--	--	--	45
Total	606	27,500	168	4,640	513	5,640	902	3,030
January-March	2,320	93,100	438	12,300	1,240	12,500	3,030	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.

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)
2009:						
March	40	\$1,030	58	\$865	20	\$1,800
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-March	129	4,080	158	2,350	50	5,460
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:						
Belgium	--	--	--	--	20	903
Canada	(3)	7	2	11	11	731
China	1	65	--	--	1	131
Finland	(3)	16	--	--	--	--
France	(3)	33	6	66	2	169
Germany	--	--	13	277	7	396
Ireland	--	--	13	200	--	--
Japan	--	--	17	392	2	111
Mexico	--	--	1	9	--	--
Singapore	--	--	3	24	--	--
Tunisia	--	--	3	71	--	--
United Kingdom	(3)	8	35	851	4	355
Total	2	128	95	1,900	47	2,800
January-March	26	1,300	275	4,710	63	4,380

-- 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 MATERIALS ¹

(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	Quantity	Value ⁴	Quantity	Value ⁴		
		(thousands)		(thousands)		(thousands)		
2009:								
March	166	\$7,080	26	\$412	25	\$577	190	613
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-March	526	24,900	95	1,890	76	765	613	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
January-March	603	20,500	145	1,260	108	2,540	734	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:				
March	148	\$8,683	--	--
April	83	5,615	31	\$454
May	114	6,885	125	305
June	72	4,354	51	262
July	134	8,372	1,241	1,522
August	136	6,758	177	623
September	97	6,279	22	871
October	116	6,781	48	448
November	114	6,049	128	724
December	118	6,544	25	1,083
January-March	356	20,887	47	65
January-December	1,340	78,524	1,896	6,357
2010:				
January	141	7,440	269	2,048
February	142	7,075	890	1,900
March	147	8,090	22	263
January-March	429	22,606	1,181	4,211

-- Zero.

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

²Free alongside ship (f.a.s.) value.

Source: U.S. Census Bureau.