

Mineral Industry Surveys

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COBALT IN OCTOBER 2010

Preliminary data indicate that U.S. cobalt consumption during January through October 2010 was 4% higher than consumption during the first 10 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 53% higher during January through September 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 September 2010 was 13% 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 October 2010 are listed below.

<u>Type</u>	<u>Price range</u>	<u>Average price</u>
U.S. spot ¹	19.50-21.75	20.53
LME cash mean ²	XX	17.65

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:				
October	247	172	156	575
November	238	172	156	566
December	236	168	157	560
January-October ^r	2,510	1,730	1,470	5,710
January-December ⁴	2,980	2,070	1,780	6,840
Year ⁵	3,540	2,130	1,790	7,460
2010:				
January	273 ^r	170	156	600 ^r
February	293 ^r	170	148	611 ^r
March	294 ^r	171	159	625 ^r
April	287 ^r	170	156	613 ^r
May	250 ^r	176	160	586 ^r
June	271 ^r	179 ^r	159	609 ^r
July	233 ^r	168	179 ^r	580 ^r
August ^r	242	172	162	575
September	248 ^r	181	159	588 ^r
October	252	174	154	580
January-October ⁴	2,640	1,730	1,590	5,970

^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.

⁵Includes annual reports.

TABLE 2
U.S. REPORTED CONSUMPTION OF COBALT, BY END USE¹

(Metric tons, contained cobalt)

End use	2009			2010	
	January- October	January- December ²	Year ³	October	January- October ⁴
Steel	416 ^r	499	510	48	480
Superalloys	2,660 ^r	3,180	3,680	257	2,740
Magnetic alloys	216 ^r	259	295	22	213
Other alloys ⁵	W	W	221	W	W
Cemented carbides ⁶	419 ^r	503	503	53	524
Chemical and ceramic uses ⁷	1,780 ^r	2,130	2,190	179	1,780
Miscellaneous and unspecified	225	270	63	22	225
Total	5,710 ^r	6,840	7,460	580	5,970

^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.

³Includes annual reports.

⁴May include revisions to prior months.

⁵Includes nonferrous alloys, welding materials, and wear-resistant alloys.

⁶Includes diamond tool matrices, cemented and sintered carbides, and cast carbide dies or parts.

⁷Includes 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.	Non-U.S.	Total
						warehouse	warehouse	
2009:								
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
Yearend ⁸	347	171	68	587	XX	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	305	166	65 ^r	537 ^r	301	--	113	113
June	295	161	69 ^r	525 ^r	301	20	132	152
July	281	159	83 ^r	522 ^r	301	25	163	188
August	283	176	91 ^r	550 ^r	301	50	162	212
September	284	172	91 ^r	546 ^r	301	42	132	174
October	259	173	97	530	301	32	174	206

^rRevised. 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 Logistics Agency, DLA Strategic Materials (formerly Defense National Stockpile Center); uncommitted material only.

⁷Data based on monthly reports.

⁸Includes annual 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:								
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-September	4,300	143,000	1,040	26,000	1,410	17,800	5,550	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	836	32,300	159	4,650	304	2,250	1,040	4,070
May	726	31,800	260	7,790	273	3,490	1,000	5,070
June	504	23,100	155	4,900	172	2,130	668	5,740
July	896	35,900	128	3,430	107	1,410	1,020	6,760
August	800	30,800	227	6,940	61	705	982	7,740
September:								
Australia	10	228	--	--	--	--	10	535
Belgium	5	216	31	1,020	--	--	27	390
Brazil	25	1,010	--	--	4	62	26	139
Canada	6	313	23	708	--	--	22	355
China	149	5,920	59	1,400	3	34	192	2,170
Congo (Kinshasa)	61	2,160	--	--	--	--	61	412
Finland	24	1,270	15	441	134	1,730	82	700
France	1	51	--	--	--	--	1	30
Germany	(7)	11	--	--	--	--	(7)	18
India	--	--	--	--	18	165	5	133
Japan	20	786	--	--	--	--	20	222
Morocco	40	1,530	--	--	--	--	40	185
Norway	84	3,190	--	--	--	--	84	840
Russia	36	1,400	--	--	--	--	36	1,220
South Africa	30	1,440	--	--	--	--	30	305
Uganda	--	--	--	--	--	--	--	133
United Kingdom	(7)	37	9	249	14	236	11	285
Zambia	80	3,040	--	--	--	--	80	346
Other	1	31	--	--	2	30	1	46
Total	571	22,600	138	3,820	175	2,250	729	8,470
January-September	6,650	270,000	1,500	43,800	2,330	24,700	8,470	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:						
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-September	385	10,100	467	6,470	136	12,900
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	20	860	46	642	12	1,180
May	1	79	79	1,080	7	1,040
June	(3)	22	83	1,340	16	1,460
July	22	925	62	1,010	17	1,640
August	12	537	94	1,180	17	1,780
September:						
Belgium	--	--	--	--	2	104
Canada	--	--	3	60	3	662
China	--	--	--	--	(3)	13
France	--	--	--	--	1	88
Germany	1	48	3	72	4	349
Ireland	--	--	7	110	--	--
Israel	--	--	--	--	(3)	16
Japan	--	--	7	125	1	79
Korea, Republic of	--	--	(3)	8	--	--
Mexico	--	--	(3)	14	--	--
Netherlands	--	--	5	72	--	--
Singapore	(3)	12	--	--	--	--
Taiwan	--	--	--	--	(3)	4
United Kingdom	--	--	--	--	5	435
Total	1	60	25	461	16	1,750
January-September	82	3,780	663	10,400	148	13,200

-- 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	Quantity	Value ⁴	Quantity	Value ⁴		
		(thousands)		(thousands)		(thousands)		
2009:								
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-September	1,620	59,400	185	4,340	515	4,980	1,880	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
May	173	6,040	11	349	61	609	196	1,220
June	190	6,120	3	113	37	399	202	1,420
July	198	7,440	6	164	30	326	209	1,630
August	235	7,150	2	51	1	17	236	1,860
September	254	6,090	(7)	14	49	512	266	2,130
January-September	1,870	59,700	254	2,250	324	4,940	2,130	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 prior months.

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)
2009:				
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-September	992	59,200	1,690	4,100
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
May	135	8,310	20	914
June	174	9,800	135	378
July	106	6,510	226	503
August	126	7,140	64	2,180
September	134	7,870	675	1,630
January-September	1,270	71,700	2,300	9,820

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.