

Mineral Industry Surveys

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COBALT IN SEPTEMBER 2010

Preliminary data indicate that U.S. cobalt consumption during January through September 2010 was 4% higher than consumption during the first 9 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 59% higher during January through August 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 August 2010 was 12% 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 September 2010 are listed below.

<u>Type</u>	<u>Price range</u>	<u>Average price</u>
U.S. spot ¹	20.25-23.00	21.72
LME cash mean ²	XX	18.64

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:				
September	257 ^r	177	151	585 ^r
October	247 ^r	172	156	575 ^r
November	238 ^r	172	156	566 ^r
December	236 ^r	168	157	560 ^r
January-September ^f	2,260	1,560	1,310	5,140
January-December ⁴	2,980 ^r	2,070	1,780	6,840 ^r
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
June	268	178	159	605
July	250	168	159	577
August	241	171	159	572
September	245	181	159	585
January-September ⁴	2,390	1,560	1,420	5,360

^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	2009		2010	
	January-September	January-December ²	September	January-September ³
Steel	374 ^r	499	48	432
Superalloys	2,390 ^r	3,180	258	2,490
Magnetic alloys	195 ^r	259	21	191
Other alloys ⁴	W	W	W	W
Cemented carbides ⁵	378 ^r	503 ^r	50	445
Chemical and ceramic uses ⁶	1,600 ^r	2,130	186	1,600
Miscellaneous and unspecified	203	270	22	203
Total	5,140 ^r	6,840 ^r	585	5,360

^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 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:								
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
June	295 ^r	161	60	515 ^r	301	20	132	152
July	281 ^r	159	60	500 ^r	301	25	163	188
August	283 ^r	176	60	519	301	50	162	212
September	284	172	60	515	301	42	132	174

^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.

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:								
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-August	3,760	122,000	945	23,500	1,240	15,700	4,880	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:								
Australia	95	3,220	--	--	--	--	95	525
Belgium	13	723	45	1,780	--	--	46	363
Brazil	--	--	--	--	--	--	--	113
Canada	10	573	--	--	--	--	10	332
China	251	9,680	89	2,410	4	81	316	1,980
Congo (Kinshasa)	30	1,020	--	--	--	--	30	351
Finland	16	911	20	604	30	340	40	618
France	3	155	--	--	--	--	3	29
India	(7)	16	--	--	18	165	5	128
Japan	15	560	--	--	--	--	15	202
Morocco	20	699	--	--	--	--	20	145
Norway	100	3,870	--	--	--	--	100	756
Russia	107	4,120	--	--	--	--	107	1,190
South Africa	82	3,120	--	--	--	--	82	275
Uganda	--	--	--	--	--	--	--	133
United Kingdom	2	86	72	2,040	7	83	56	274
Zambia	50	1,770	--	--	--	--	50	266
Other	6	302	1	109	2	36	7	62
Total	800	30,800	227	6,940	61	705	982	7,740
January-August	6,080	247,000	1,370	40,000	2,160	22,400	7,740	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:						
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-August	385	10,100	435	5,970	117	11,800
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	1,470
July	22	925	62	1,010	17	1,640
August:						
Australia	(3)	5	--	--	--	--
Canada	--	--	2	36	3	611
China	--	--	--	--	(3)	5
France	--	--	--	--	3	269
Germany	--	--	--	--	1	271
India	--	--	7	86	(3)	4
Ireland	--	--	41	464	--	--
Japan	--	--	2	39	1	103
Korea, Republic of	--	--	4	70	--	--
Mexico	--	--	1	20	--	--
Singapore	--	--	1	12	--	--
Taiwan	--	--	4	70	--	--
Tunisia	--	--	11	85	--	--
United Kingdom	12	532	21	302	8	512
Total	12	537	94	1,180	17	1,780
January-August	81	3,720	639	9,970	132	11,500

-- 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:								
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-August	1,490	54,200	179	4,250	196	2,870	1,660	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
January-August	1,610	53,600	254	2,230	276	4,430	1,860	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:				
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-August	895	52,900	1,670	3,230
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
January-August	1,130	63,900	1,630	8,190

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.