

Mineral Industry Surveys

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COBALT IN JANUARY 2011

Preliminary data indicate that U.S. cobalt consumption in January 2011 was slightly higher than consumption during December 2010, according to the U.S. Geological Survey. The amount of cobalt contained in U.S. imports of cobalt metals and chemicals was 44% higher in 2010 than that imported in 2009. The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals was 8% higher in 2010 than that of 2009.

London Metal Exchange stocks are included in table 3.

Prices

Prices for cobalt metal, in dollars per pound, in January 2011 are listed below.

<u>Type</u>	<u>Price range</u>	<u>Average price</u>
U.S. spot ¹	18.75-21.50	20.06
LME cash mean ²	XX	17.76

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
2010:				
January	282	170	156	608
February	301	170	148	620
March	302	171	159	633
April	295	170	156	621
May	259	176	160	595
June	279	179	159	617
July	241	168	179	588
August	250	172	162	583
September	256	181	159	596
October	261	174	154	588
November	293	176	164	633
December	218	185	203	606
January-December ⁴	3,240	2,090	1,960	7,290
2011, January ⁴	235	173	206	615

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	2010		2011 January
	January	January-December ²	
Steel	48	576	48
Superalloys	287	3,370	289
Magnetic alloys	21	256	22
Other alloys ³	W	W	W
Cemented carbides ⁴	55	660	55
Chemical and ceramic uses ⁵	176	2,150	178
Miscellaneous and unspecified	23	270	23
Total	608	7,290	615

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

⁴Includes diamond tool matrices, cemented and sintered carbides, and cast carbide dies or parts.

⁵Includes 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
2010:								
January	269	176	57	502	293	XX	XX	XX
February	278	172	66	515	293	--	--	--
March	321	167	65	553	301	--	--	--
April	320	173	62	554	301	--	38	38
May	313	166	65	545	301	--	113	113
June	303	161	69	533	301	20	132	152
July	289	159	83	530	301	25	163	188
August	291	176	91	558	301	50	162	212
September	292	172	91	554	301	42	132	174
October	267	173	97	538	301	32	174	206
November	273	168	101	542	301	31	183	214
December ⁷	323	153	98	574	301	23	255	278
2011, January	310	149	68	527	301	19	287	306

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:								
December	610	\$23,000	118	\$3,860	269	\$3,280	785	7,680
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	571	22,600	138	3,820	175	2,250	729	8,470
October	671	26,100	148	4,410	94	1,090	808	9,280
November	790	31,300	224	7,830	147	1,820	998	10,300
December:								
Australia	--	--	--	--	--	--	--	711
Belgium	78	833	67	2,350	18	93	130	601
Brazil	23	859	--	--	5	88	25	172
Canada	6	303	17	686	--	--	18	440
China	130	5,140	--	--	25	98	137	2,790
Congo (Kinshasa)	10	334	--	--	--	--	10	465
Finland	31	1,590	13	405	55	622	58	854
France	1	41	--	--	37	186	10	42
Germany	(7)	12	--	--	--	--	(7)	20
India	--	--	--	--	20	173	5	164
Japan	--	--	2	96	--	--	1	274
Morocco	10	342	--	--	--	--	10	235
Norway	130	5,210	--	--	--	--	130	1,240
Russia	111	4,220	--	--	--	--	111	1,520
South Africa	4	158	1	28	--	--	5	322
Uganda	--	--	--	--	--	--	--	148
United Kingdom	(7)	10	37	1,080	6	69	28	418
Zambia	95	3,450	--	--	--	--	95	576
Other	3	101	--	--	--	--	3	55
Total	632	22,600	137	4,650	166	1,330	776	11,100
January-December	8,750	350,000	2,010	60,700	2,740	28,900	11,100	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:						
December	1	\$126	81	\$1,320	6	\$873
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	1	60	25	461	16	1,750
October	56	2,200	36	669	29	2,670
November:	38	1,760	64	920	13	1,650
December:						
Belgium	--	--	--	--	1	69
Canada	23	967	1	31	2	468
China	--	--	--	--	1	170
France	(3)	6	12	103	1	79
Germany	1	56	--	--	4	368
Ireland	--	--	18	315	--	--
Japan	--	--	1	21	1	46
Korea, Republic of	--	--	--	--	(3)	15
Mexico	--	--	1	13	--	--
Netherlands	--	--	5	95	--	--
Switzerland	(3)	2	--	--	--	--
Taiwan	--	--	--	--	(3)	4
Tunisia	--	--	7	131	(3)	72
United Kingdom	2	123	11	164	3	282
Total	26	1,150	56	872	13	1,570
January-December	202	8,890	819	12,900	202	19,100

-- 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:								
December	144	\$5,420	8	\$373	57	\$576	163	2,440
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
October	222	6,510	3	87	41	764	234	2,360
November	143	4,530	1	32	34	387	152	2,520
December	113	4,300	(7)	12	37	412	122	2,640
January-December	2,350	75,000	258	2,380	436	6,510	2,640	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:				
December	118	\$6,540	25	\$1,080
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
October	148	8,190	31	2,150
November	139	8,250	4	229
December	125	8,050	277	801
January-December	1,680	96,200	2,610	13,000

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.