

Mineral Industry Surveys

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COBALT IN MARCH 2013

U.S. cobalt consumption during January through March 2013 was slightly lower than consumption during the same period in 2012. The amount of cobalt contained in U.S. imports of cobalt metals and chemicals during January through March 2013 was 8% less than that imported during the same period in 2012. The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals during January through March 2013 was 9% more than that exported during the same period in 2012.

Prices

Prices for cobalt metal, in dollars per pound, in March 2013 are listed below.

Type	Price range	Average price
U.S. spot ¹	11.20–12.40	11.78
LME cash mean ²	XX	11.49

XX Not applicable.

¹Source: Platts Metals Daily, 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
2012: ^p				
March	256	180	193	629
April	294	179	176	649
May	260	181	195	636
June	263	183	187	632
July	294	178	183	655
August	277	188	166	631
September	262	185	191	638
October	296	183	181	660
November	276	180	181	637
December	268	177	181	627
January–March ^r	821	538	536	1,900
January–December	3,310	2,170	2,180	7,660
2013:				
January	272 ^r	180	182	634
February	265	180 ^r	182	627 ^r
March	266	181	182	629
January–March	803	541	546	1,890

^pPreliminary. ^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.

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

(Metric tons, contained cobalt)

End use	2012 ^p		2013	
	January–March	January–December ^{2,3}	March	January–March
Steel	134	536	45	134
Superalloys	878 ^r	3,570	292	880
Magnetic alloys	63	252	21	64
Other alloys ⁴	W	W	W	W
Cemented carbides ⁵	194 ^r	779	60	181
Chemical and ceramic uses ⁶	558 ^r	2,250	188	564
Miscellaneous and unspecified	79 ^r	271	23	68
Total	1,900 ^r	7,660	629	1,890

^pPreliminary. ^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 previously published data.

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 ^{p,2}			U.S. Government, metal ⁶	LME, ³ metal		Total
	Metal and scrap ⁴	Oxide and other chemical compounds ⁵	Total		U.S. warehouse	Non-U.S. warehouse	
2012:							
March	541	181	722	301	27	318	345
April	546	182	729	301	22	328	350
May	529	178	706	301	22	330	352
June	524	173	697	301	21	334	355
July	509	181	690	301	21	335	356
August	508	167	676	301	21	340	361
September	496	167	663	301	31	350	381
October	483	170	653	301	31	367	398
November	501	170	670	301	51	367	418
December	507	167	674	301	51	378	429
2013:							
January	490	179	669	301	48	387	435
February	487	169	655	301	44	386	430
March	490	166	656	301	44	407	451

^pPreliminary.

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; uncommitted material only.

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)		
2012:								
March	740	\$24,600	325	\$7,240	149	\$1,750	1,020	2,840
April	1,010	31,200	353	7,610	187	2,040	1,320	4,160
May	839	25,700	118	2,490	172	2,130	987	5,150
June	579	18,500	269	5,420	180	2,450	843	5,990
July	624	18,300	93	2,420	164	1,910	749	6,740
August	840	24,000	194	4,730	235	2,690	1,070	7,810
September	671	18,900	112	2,420	124	1,470	796	8,600
October	774	22,200	208	4,940	78	798	948	9,550
November	622	18,700	144	3,410	144	1,500	770	10,300
December	611	16,700	124	2,750	98	881	732	11,100
January–March	2,190	70,200	702	15,000	425	5,090	2,840	XX
January–December	8,750	264,000	2,320	51,200	1,810	20,900	11,100	XX
2013:								
January	684	17,300	149	3,260	85	793	816	816
February	758	18,500	141	2,690	163	2,310	917	1,730
March:								
Australia	52	1,210	--	--	--	--	52	97
Austria	--	--	--	--	--	--	--	2
Belgium	1	28	50	1,010	--	--	37	98
Brazil	24	592	--	--	1	9	24	147
Canada	31	1,120	--	--	--	--	31	66
China	102	2,460	45	758	2	20	135	414
Finland	7	281	43	890	56	462	55	267
France	3	143	--	--	6	59	4	12
Germany	(7)	3	2	162	--	--	1	1
India	--	--	--	--	--	--	--	7
Ireland	(7)	12	--	--	--	--	(7)	(7)
Japan	91	2,210	--	--	--	--	91	191
Korea, Republic of	--	--	--	--	--	--	--	10
Madagascar	--	--	--	--	--	--	--	146
Morocco	20	518	--	--	--	--	20	50
Norway	148	3,810	--	--	--	--	148	454
Russia	101	2,250	--	--	--	--	101	254
South Africa	16	569	--	--	--	--	16	72
Sweden	2	107	--	--	--	--	2	2
Taiwan	--	--	--	--	32	196	9	9
United Kingdom	1	43	86	1,670	20	177	68	186
Zambia	79	2,090	--	--	--	--	79	123
Total	677	17,400	225	4,490	117	923	873	2,610
January–March	2,120	53,300	515	10,400	365	4,030	2,610	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 previously published data.

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)
2012:						
March	59	\$1,950	124	\$2,310	21	\$2,610
April	81	2,770	41	733	22	2,670
May	59	1,870	86	1,060	19	2,610
June	91	3,230	38	433	27	2,820
July	67	2,090	97	1,530	28	3,020
August	67	1,990	59	884	26	2,570
September	55	1,780	55	690	24	2,480
October	56	1,990	54	777	21	2,410
November	89	2,620	88	1,470	20	1,750
December	76	2,140	57	751	13	1,360
January–March	214	7,130	246	4,500	80	6,710
January–December	856	27,600	820	12,800	279	28,400
2013:						
January	87	2,650	43	565	15	1,560
February	80	2,300	58	709	15	1,910
March:						
Austria	(3)	11	--	--	--	--
Belgium	6	198	--	--	--	--
Canada	42	1,100	--	--	1	396
China	--	--	--	--	5	504
Finland	(3)	69	--	--	--	--
France	(3)	8	--	--	7	345
Germany	1	84	--	--	2	519
India	--	--	2	25	--	--
Ireland	--	--	17	195	--	--
Japan	--	--	19	300	(3)	44
Mexico	--	--	1	13	--	--
Switzerland	--	--	--	--	(3)	4
Taiwan	--	--	1	10	(3)	8
United Kingdom	--	--	6	92	1	137
Total	50	1,470	45	635	17	1,960
January–March	216	6,420	145	1,910	47	5,430

-- 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)		
2012:								
March	325	\$10,800	16	\$347	1	\$22	337	847
April	258	8,400	33	159	1	10	281	1,130
May	353	10,700	70	323	20	1,750	408	1,540
June	229	8,210	18	65	3	32	243	1,780
July	215	7,350	73	245	22	198	273	2,050
August	345	10,000	80	490	1	10	403	2,460
September	392	10,600	36	229	19	158	423	2,880
October	279	9,010	(7)	9	40	320	289	3,170
November	265	7,410	(7)	12	58	526	279	3,450
December	287	8,090	33	397	20	154	316	3,760
January–March	797	26,600	55	610	43	429	847	XX
January–December	3,420	106,000	397	2,540	226	3,580	3,760	XX
2013:								
January	276	8,200	32	108	--	--	299	299
February	252	6,850	6	81	20	164	261	560
March	319	9,270	48	875	23	189	360	919
January–March	847	24,300	86	1,060	42	353	919	XX

XX Not applicable. -- Zero.

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 previously published data.

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)
2012:				
March	127	\$7,850	20	\$83
April	141	8,330	2	48
May	132	8,800	3	58
June	110	7,250	(3)	16
July	190	10,300	1	42
August	152	8,910	1	39
September	117	7,570	--	--
October	198	10,900	1	36
November	180	9,400	1	35
December	231	11,300	--	--
January–March	371	23,500	25	154
January–December	1,820	106,000	35	428
2013:				
January	152	8,390	1	30
February	206	9,230	--	--
March	236	11,900	63	95
January–March	594	29,600	64	125

-- Zero.

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.