

Mineral Industry Surveys

For information, contact

Kim B. Shedd, Cobalt Commodity Specialist
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4974, Fax: (703) 648-7757
E-mail: ksheddd@usgs.gov

Annie Hwang (Data)
Telephone: (703) 648-7952
Fax: (703) 648-7995
E-mail: ahwang@usgs.gov

Internet: <http://minerals.usgs.gov/minerals>

COBALT IN JULY 2012

Preliminary data indicate that U.S. cobalt consumption during January through July 2012 was 13% less than consumption during the same period in 2011. The amount of cobalt contained in U.S. imports of cobalt metals and chemicals from January through July 2012 was 10% more than that imported during the same period in 2011. The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals from January through July 2012 was 3% less than that exported during the same period in 2011.

Prices

Prices for cobalt metal, in dollars per pound, in July 2012 are listed below.

Type	Price range	Average price
U.S. spot ¹	12.20–14.10	13.23
LME cash mean ²	XX	12.91

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 MATERIALS^{p, 1}

(Metric tons, contained cobalt)

Period	Metal ²	Oxide and other chemical compounds ³	Scrap	Total
2011:				
July	276	178	174	628
August	310	181	167	657
September	301	179	180	660
October	307	185	160	651
November	196	175	250	621
December	273	179	164	616
January–July ^r	2,630	1,270	1,280	5,180
January–December ⁴	4,010	2,170	2,200	8,390
2012:				
January	282	179	168	629
February	287	179	175	640
March	258	180	193	631
April	281	179	190	650
May	275	181	190	646
June	275	183	190	648
July	273	178	190	641
January–July	1,930	1,260	1,300	4,490

^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.

⁴Data based on monthly reports.

TABLE 2
U.S. REPORTED CONSUMPTION OF COBALT, BY END USE^{p, 1}

(Metric tons, contained cobalt)

End use	2011		2012	
	January–July	January–December ^{2, 3}	July	January–July
Steel	313 ^r	536	45	313
Superalloys	2,790	4,290	303	2,110
Magnetic alloys	147	252	21	147
Other alloys ⁴	W	W	W	W
Cemented carbides ⁵	459	786	65	458
Chemical and ceramic uses ⁶	1,320 ^r	2,260	185	1,310
Miscellaneous and unspecified	158	271	23	158
Total	5,180 ^r	8,390	641	4,490

^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 ^{b, 2}			U.S. Government, metal ⁶	LME, ³ metal		
	Metal and scrap ⁴	Oxide and other chemical compounds ⁵	Total		U.S.	Non-U.S.	Total
					warehouse	warehouse	
2011:							
July	550	169	718	301	35	227	262
August	576	165	741	301	35	262	297
September	554	171	725	301	33	264	297
October	526	165	691	301	30	293	323
November	522	172	694	301	40	279	319
December	521	193	713	301	43	261	304
2012:							
January	523	185	707	301	26	285	311
February	499	180	680	301	20	273	293
March	538	181	719	301	27	318	345
April	555	182	737	301	22	328	350
May	554	178	732	301	22	330	352
June	543	175	717	301	21	334	355
July	546	182	728	301	21	335	356

^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)		
2011:								
July	305	\$12,200	281	\$5,430	247	\$2,890	586	6,140
August	804	28,600	118	3,030	143	1,600	932	7,070
September	637	22,000	222	5,980	131	1,270	835	7,900
October	773	27,900	288	6,100	161	1,370	1,030	8,930
November	577	18,700	235	4,750	124	1,330	784	9,710
December	632	19,900	294	5,610	105	1,220	878	10,600
January–July	4,600	179,000	1,430	35,700	1,530	18,500	6,140	XX
January–December	8,020	296,000	2,590	61,200	2,190	25,300	10,600	XX
2012:								
January	636	20,100	175	3,260	90	662	785	785
February	812	25,500	201	4,470	186	2,670	1,040	1,820
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:								
Australia	46	1,200	--	--	--	--	46	490
Austria	2	94	--	--	--	--	2	10
Belgium	(7)	4	22	592	--	--	16	253
Brazil	76	2,030	--	--	5	50	78	365
Canada	22	800	--	--	--	--	22	732
China	141	4,160	--	--	5	33	143	1,160
Congo (Kinshasa)	--	--	2	48	--	--	1	62
Finland	9	418	4	87	82	1,250	48	753
France	3	147	--	--	--	--	3	12
Germany	(7)	7	2	205	--	--	2	3
India	--	--	--	--	60	464	16	119
Japan	20	618	--	--	--	--	20	301
Korea, Republic of	10	288	--	--	--	--	10	37
Morocco	20	551	--	--	--	--	20	100
Netherlands	--	--	--	--	--	--	--	9
Norway	26	778	--	--	--	--	26	530
Peru	--	--	--	--	--	--	--	4
Philippines	--	--	--	--	--	--	--	13
Russia	113	3,400	--	--	--	--	113	652
South Africa	30	996	--	--	--	--	30	256
Sweden	--	--	--	--	--	--	--	7
Taiwan	3	80	--	--	--	--	3	11
Uganda	--	--	--	--	--	--	--	18
United Kingdom	2	72	63	1,480	13	114	51	188
Zambia	101	2,650	--	--	--	--	101	653
Total	624	18,300	93	2,420	164	1,910	749	6,740
January–July	5,240	164,000	1,540	32,900	1,130	13,600	6,740	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 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)
2011:						
July	50	\$1,670	53	\$938	24	\$2,230
August	77	2,880	55	996	16	2,400
September	94	3,500	40	519	25	2,530
October	67	2,390	71	1,240	26	2,510
November	63	2,110	47	817	19	2,420
December	81	2,560	44	669	18	2,070
January–July	373	13,800	473	7,840	143	15,100
January–December	754	27,300	730	12,100	247	27,000
2012:						
January	82	2,680	67	1,080	36	1,900
February	73	2,500	54	1,110	22	2,200
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:						
Belgium	7	251	4	89	7	362
Canada	54	1,570	12	83	3	722
China	--	--	--	--	1	208
France	(3)	26	13	253	5	235
Germany	2	150	35	659	2	649
Ireland	--	--	19	180	--	--
Japan	(3)	3	(3)	6	2	205
Korea, Republic of	--	--	2	26	--	--
Singapore	--	--	9	175	--	--
United Kingdom	3	82	4	58	9	641
Total	67	2,090	97	1,530	28	3,020
January–July	512	17,100	507	8,260	175	17,800

-- 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)		
2011:								
July	282	\$9,380	47	\$120	65	\$736	332	2,120
August	194	7,440	(7)	20	33	368	202	2,320
September	246	7,550	6	199	14	160	253	2,570
October	225	8,300	71	229	38	413	285	2,860
November	249	6,860	55	246	38	555	298	3,160
December	220	7,460	21	63	2	25	236	3,390
January–July	1,920	58,600	179	1,940	278	3,070	2,120	XX
January–December	3,060	96,300	332	2,700	403	4,590	3,390	XX
2012:								
January	234	7,450	35	183	19	182	264	264
February	238	8,380	3	81	23	225	246	510
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
January–July	1,850	61,300	248	1,400	89	2,420	2,050	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 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)
2011:				
July	128	\$7,340	40	\$163
August	98	6,260	2	4
September	111	6,670	--	--
October	117	7,370	38	42
November	99	5,920	--	--
December	123	7,780	--	--
January–July	813	47,900	667	1,530
January–December	1,360	81,800	707	1,570
2012:				
January	118	7,190	(3)	4
February	125	8,450	5	68
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
January–July	944	58,200	32	318

-- 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.