

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

Maria Arguelles (Data)
Telephone: (703) 648-7990
Fax: (703) 648-7792
E-mail: marguell@usgs.gov

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

COBALT IN JANUARY 2010

Preliminary data indicate that U.S. cobalt consumption in January 2010 was 6% higher than consumption during December 2009, according to the U.S. Geological Survey. The amount of cobalt contained in U.S. imports of cobalt metals and chemicals was 28% lower in 2009 than that imported in 2008. The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals was 14% lower in 2009 than that of 2008.

Update

U.S. spot prices for electrolytic cobalt, minimum 99.8% cobalt, in dollars per pound from Platts Metals Week, are listed below.

<u>Month</u>	<u>Price range</u>	<u>Average price</u>
January 2010	22.00-24.00	23.25

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:				
January	270 ^r	180	149	599 ^r
February	282 ^r	181	143	606 ^r
March	275 ^r	180	146	601 ^r
April	269 ^r	178	146	594 ^r
May	255 ^r	177	148	580 ^r
June	265 ^r	195	143	603 ^r
July	264 ^r	185	143	592 ^r
August	263 ^r	187	145	595 ^r
September	277 ^r	188	151	615 ^r
October	266 ^r	182	157	605 ^r
November	257 ^r	183	156	596 ^r
December	255 ^r	178	157	590 ^r
January-December ⁴	3,200 ^r	2,200	1,780	7,180 ^r
2010, January	288	181	156	628

^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
	January	January-December ²	
Steel	48 ^r	576	48
Superalloys	270 ^r	3,220 ^r	301
Magnetic alloys	22 ^r	268	23
Other alloys ³	W	W	W
Cemented carbides ⁴	51 ^r	592 ^r	49
Chemical and ceramic uses ⁵	186 ^r	2,250	185
Miscellaneous and unspecified	22	270	22
Total	599 ^r	7,180 ^r	628

^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 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	Industry ²			Total	U.S. Government, metal ⁵
	Metal ³	Oxide and other chemical compounds ⁴	Scrap		
2009:					
January	250 ^r	191	87	527 ^r	455
February	303 ^r	186	81	570 ^r	455
March	283 ^r	182	105	570 ^r	455
April	281 ^r	181	104	565 ^r	455
May	286 ^r	181	101	568 ^r	455
June	283 ^r	166	114	563 ^r	380
July	285 ^r	164	109	558 ^r	310
August	280 ^r	168	104	551 ^r	310
September	261 ^r	165	92	517 ^r	304
October	248 ^r	169	85	502 ^r	304
November	244 ^r	172	69	485 ^r	295
December ⁶	237 ^r	174	67	479 ^r	293
2010, January	264	190	58	511	293

^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Stocks reported by cobalt processors and consumers.

³Includes metal powder.

⁴Data may include other cobalt materials.

⁵Data from Defense National Stockpile Center; uncommitted material only.

⁶Data based on monthly reports.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF COBALT BY COUNTRY¹

(Kilograms, 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		
2008:								
December	490,000	\$23,200,000	96,900	\$3,460,000	33,400	\$422,000	570,000	10,700,000
January-December	8,430,000	618,000,000	1,110,000	63,400,000	4,710,000	49,900,000	10,700,000	XX
2009:								
January	345,000	10,500,000	37,700	901,000	101,000	1,360,000	410,000	410,000
February	574,000	18,600,000	23,400	757,000	161,000	1,730,000	644,000	1,050,000
March	424,000	12,300,000	109,000	2,720,000	139,000	1,610,000	549,000	1,600,000
April	469,000	15,200,000	98,400	2,280,000	251,000	3,610,000	635,000	2,240,000
May	546,000	18,100,000	181,000	3,280,000	116,000	1,790,000	722,000	2,960,000
June	436,000	14,000,000	209,000	6,120,000	158,000	2,040,000	645,000	3,610,000
July	473,000	15,100,000	153,000	3,840,000	120,000	1,370,000	622,000	4,230,000
August	491,000	17,900,000	135,000	3,600,000	191,000	2,160,000	648,000	4,880,000
September	544,000	20,800,000	91,600	2,460,000	174,000	2,160,000	671,000	5,550,000
October	592,000	18,200,000	139,000	3,030,000	237,000	3,590,000	782,000	6,330,000
November	371,000	13,800,000	167,000	4,660,000	215,000	2,640,000	563,000	6,890,000
December:								
Australia	5,000	114,000	--	--	--	--	5,000	380,000
Belgium	2,260	112,000	47,300	1,630,000	--	--	36,300	505,000
Brazil	30,000	1,160,000	--	--	--	--	30,000	173,000
Canada	4,140	218,000	8,740	371,000	1,580	5,420	10,900	586,000
China	133,000	3,980,000	28,500	824,000	52,000	431,000	167,000	1,600,000
Congo (Kinshasa)	--	--	--	--	--	--	--	101,000
Finland	96,700	3,980,000	21,600	627,000	146,000	2,040,000	168,000	721,000
France	1,530	90,900	--	--	--	--	1,530	18,200
Germany	300	17,800	--	--	--	--	300	16,500
Hong Kong	--	--	--	--	--	--	--	9,720
India	401	9,550	--	--	--	--	401	57,700
Italy	--	--	--	--	--	--	--	1
Japan	20,200	1,100,000	--	--	45,000	374,000	32,400	287,000
Korea, Republic of	--	--	--	--	--	--	--	1,840
Mexico	--	--	--	--	--	--	--	2,880
Morocco	20,000	813,000	--	--	--	--	20,000	247,000
Norway	199,000	7,520,000	--	--	--	--	199,000	1,650,000
Peru	--	--	--	--	1,160	26,200	535	1,630
Philippines	--	--	--	--	--	--	--	120
Russia	91,500	3,670,000	--	--	--	--	91,500	851,000
South Africa	--	--	--	--	--	--	--	26,400
Spain	--	--	--	--	--	--	--	3,430
Sweden	4,270	158,000	--	--	--	--	4,270	5,270
Switzerland	--	--	--	--	--	--	--	1,870
Taiwan	2,130	45,600	--	--	--	--	2,130	14,100
Uganda	--	--	--	--	--	--	--	29,500
United Kingdom	141	4,520	12,000	414,000	23,000	408,000	16,800	204,000
Zambia	--	--	--	--	--	--	--	183,000
Total	610,000	23,000,000	118,000	3,860,000	269,000	3,280,000	785,000	7,680,000
January-December	5,870,000	198,000,000	1,460,000	37,500,000	2,130,000	27,300,000	7,680,000	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.

Source: U.S. Census Bureau.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS BY COUNTRY¹

(Kilograms, 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	Quantity	Value ²	Quantity	Value ²
2008:						
December	21,000	\$1,030,000	60,400	\$836,000	48,800	\$2,450,000
January-December	115,000	6,340,000	1,110,000	22,700,000	345,000	30,400,000
2009:						
January	29,300	694,000	68,900	992,000	9,430	1,470,000
February	59,500	2,360,000	31,500	490,000	20,600	2,190,000
March	40,300	1,030,000	57,800	865,000	20,100	1,800,000
April	109,000	1,870,000	79,100	969,000	10,400	1,220,000
May	93,800	2,650,000	31,500	438,000	33,200	2,020,000
June	23,600	646,000	35,400	546,000	9,130	1,200,000
July	368	40,800	102,000	1,310,000	6,810	899,000
August	29,000	789,000	28,600	360,000	7,260	1,050,000
September	84	10,400	31,800	506,000	19,400	1,040,000
October	586	41,300	46,300	694,000	6,930	1,090,000
November	160	15,900	55,500	633,000	5,100	818,000
December:						
Belgium	--	--	--	--	158	12,200
Canada	--	--	569	9,850	653	128,000
China	--	--	--	--	384	58,600
Finland	130	32,200	--	--	--	--
France	--	--	--	--	99	104,000
Germany	--	--	--	--	2,420	353,000
Ireland	59	3,650	12,100	180,000	--	--
Israel	--	--	--	--	5	16,000
Japan	--	--	4,550	65,800	--	--
Mexico	--	--	2,150	18,200	--	--
Sweden	--	--	--	--	33	10,000
Thailand	--	--	3,570	27,700	--	--
Tunisia	--	--	1,750	37,100	--	--
United Kingdom	497	90,600	56,500	981,000	2,200	192,000
Total	686	126,000	81,200	1,320,000	5,950	873,000
January-December	387,000	10,300,000	650,000	9,120,000	154,000	15,700,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs value.

Source: U.S. Census Bureau.

TABLE 6
U.S. EXPORTS OF COBALT MATERIALS¹

(Kilograms, 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		
2008:								
December	174,000	\$10,900,000	31,800	\$929,000	43,600	\$658,000	207,000	2,850,000
January-December	2,380,000	112,000,000	531,000	19,400,000	346,000	6,320,000	2,850,000	XX
2009:								
January	222,000	12,600,000	49,900	1,120,000	28,100	12,300	264,000	264,000
February	138,000	5,180,000	19,500	357,000	23,600	176,000	158,000	423,000
March	166,000	7,080,000	25,600	412,000	24,600	577,000	190,000	613,000
April	164,000	5,560,000	15,300	337,000	5,800	83,300	176,000	789,000
May	261,000	7,070,000	15,000	506,000	33,600	155,000	280,000	1,070,000
June	222,000	6,130,000	11,300	158,000	8,750	69,500	232,000	1,300,000
July	118,000	4,080,000	24,000	746,000	13,800	381,000	139,000	1,440,000
August	195,000	6,500,000	18,600	622,000	57,800	1,410,000	222,000	1,660,000
September	135,000	5,220,000	5,630	90,000	319,000	2,120,000	216,000	1,880,000
October	182,000	6,930,000	6,230	158,000	69,100	2,640,000	203,000	2,080,000
November	171,000	5,500,000	25,800	676,000	18,000	170,000	194,000	2,280,000
December	144,000	5,420,000	7,990	373,000	56,900	576,000	163,000	2,440,000
January-December	2,120,000	77,300,000	225,000	5,550,000	659,000	8,370,000	2,440,000	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.

⁶Year to date may include revisions to prior months.

Source: U.S. Census Bureau.

TABLE 7
U.S. EXPORTS OF WROUGHT COBALT, COBALT ORE,
AND CONCENTRATES¹

(Kilograms, gross weight of material, except as noted)

Period	Wrought cobalt and cobalt articles		Cobalt ore and concentrates	
	Quantity	Value ²	Quantity	Value ²
2008:				
December	91,200	\$6,230,000	2,000	\$106,000
January-December	1,370,000	104,000,000	640,000	28,500,000
2009:				
January	90,300	5,710,000	5,710	10,500
February	118,000	6,500,000	41,500	54,100
March	148,000	8,680,000	--	--
April	82,800	5,620,000	30,500	454,000
May	114,000	6,890,000	125,000	305,000
June	71,900	4,350,000	50,500	262,000
July	134,000	8,370,000	1,240,000	1,520,000
August	136,000	6,760,000	177,000	623,000
September	97,200	6,280,000	22,400	871,000
October	116,000	6,780,000	48,100	448,000
November	114,000	6,050,000	128,000	724,000
December	118,000	6,540,000	25,100	1,080,000
January-December	1,340,000	78,500,000	1,900,000	6,360,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Free alongside ship (f.a.s.) value.

Source: U.S. Census Bureau.