

Mineral Industry Surveys

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COBALT IN AUGUST 2009

Preliminary data for 2009 indicate that U.S. cobalt consumption during January through August 2009 was 9% lower than that during the first 8 months of 2008, according to the U.S. Geological Survey. The amount of cobalt contained in U.S. imports of cobalt metals and chemicals was 36% lower during January through July 2009 than that during the same period in 2008. The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals during January through July

2009 was 15% lower than that exported during the same period in 2008.

Update

Prices for electrolytic cobalt, in dollars per pound from Platts Metals Week, are listed below.

<u>Month</u>	<u>Price range</u>	<u>Average price</u>
August 2009	19.00-22.00	20.52

TABLE 1
U.S. REPORTED CONSUMPTION OF COBALT MATERIALS¹

(Metric tons, contained cobalt)

Period	Metal ²	Oxide and other chemical compounds ³	Scrap	Total
2008:				
August	314 ^r	187	166	666 ^r
September	316 ^r	185	154	655 ^r
October	318 ^r	182	170	671 ^r
November	320 ^r	178	147	644 ^r
December	303 ^r	176	148	628 ^r
January-August ^r	2,600	1,470	1,300	5,370
January-December ^{r, 4}	3,850	2,190	1,920	7,960
2009:				
January	283 ^r	180	149	612 ^r
February	295 ^r	181	143	619 ^r
March	288 ^r	180	146	614 ^r
April	282 ^r	178	146	607 ^r
May	267 ^r	177	148	593 ^r
June	278 ^r	195	143	616 ^r
July	277 ^r	185	143	605 ^r
August	278	187	143	608
January-August	2,250	1,460	1,160	4,870

^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	2008		2009	
	January-August	January-December ²	August	January-August ³
Steel	352 ^r	534	53	428
Superalloys	2,500	3,700	267	2,170
Magnetic alloys	196	291	22	179
Other alloys ⁴	W	W	W	W
Cemented carbides ⁵	557 ^r	827 ^r	52	420
Chemical and ceramic uses ⁶	1,580 ^r	2,350	191	1,500
Miscellaneous and unspecified	180	270	22	180
Total	5,370 ^r	7,960 ^r	608	4,870

^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 revisions to prior months' 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	Industry ²			U.S. Government. metal ⁵	
	Metal ³	Oxide and other chemical compounds ⁴	Scrap		
2008:					
August	294	171	53	518	576
September	302	171	57	530	497
October	277	189	50	516	497
November	287	188	61	535	497
December ⁶	272 ^r	193	69	535	473
2009:					
January	273	191	87	551	455
February	327	186	81	594	455
March	306	182	88	577	455
April	304	181	104	589	455
May	310	181	101	592	455
June	306	166	114	587	380
July	309	164	101	574	310
August	303	168	101	571	310

^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:								
July	550,000	\$46,100,000	100,000	\$6,750,000	589,000	\$5,000,000	793,000	6,580,000
August	523,000	40,600,000	91,500	5,770,000	529,000	4,120,000	748,000	7,320,000
September	799,000	51,000,000	77,100	4,210,000	536,000	4,180,000	1,010,000	8,340,000
October	791,000	53,000,000	80,600	4,020,000	248,000	2,200,000	922,000	9,260,000
November	685,000	43,600,000	148,000	4,710,000	234,000	2,610,000	862,000	10,100,000
December	490,000	23,200,000	96,900	3,460,000	33,400	422,000	570,000	10,700,000
January-July	5,140,000	407,000,000	616,000	41,200,000	3,130,000	36,400,000	6,580,000	XX
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:								
Australia	70,000	2,100,000	--	--	--	--	70,000	267,000
Belgium	1,300	40,400	76,000	2,290,000	15,600	151,000	59,900	333,000
Brazil	20,000	717,000	--	--	--	--	20,000	110,000
Canada	1,070	57,900	62,600	1,070,000	--	--	46,100	425,000
China	155,000	4,600,000	51	6,780	40,500	520,000	168,000	795,000
Congo (Kinshasa)	--	--	--	--	--	--	--	91,000
Finland	450	22,400	450	11,400	52,800	504,000	17,500	338,000
France	2,330	123,000	--	--	--	--	2,330	7,440
Germany	1,260	97,200	780	61,400	--	--	1,820	3,670
Hong Kong	--	--	--	--	--	--	--	9,720
India	--	--	--	--	55	2,590	15	19,500
Italy	--	--	1	2,310	--	--	1	1
Japan	24,400	880,000	380	27,200	--	--	24,700	116,000
Korea, Republic of	--	--	--	--	--	--	--	1,840
Mexico	--	--	--	--	--	--	--	2,880
Morocco	40,900	1,330,000	--	--	--	--	40,900	166,000
Norway	122,000	3,880,000	--	--	--	--	122,000	766,000
Peru	--	--	--	--	--	--	--	234
Philippines	--	--	--	--	--	--	--	120
Russia	30,400	1,060,000	--	--	--	--	30,400	450,000
South Africa	1,000	35,400	1,000	29,000	--	--	1,720	5,760
Spain	--	--	--	--	119	6,080	32	3,430
Sweden	--	--	--	--	--	--	--	500
Taiwan	--	--	--	--	--	--	--	9,500
Uganda	--	--	--	--	--	--	--	19,400
United Kingdom	3,000	147,000	11,400	351,000	11,000	185,000	16,300	103,000
Zambia	--	--	--	--	--	--	--	183,000
Total	473,000	15,100,000	153,000	3,840,000	120,000	1,370,000	622,000	4,230,000
January-July	3,270,000	104,000,000	811,000	19,900,000	1,040,000	13,500,000	4,230,000	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:						
July	12,300	\$700,000	145,000	\$3,430,000	27,200	\$2,540,000
August	1,900	156,000	56,400	1,110,000	39,300	3,580,000
September	214	40,700	34,800	613,000	27,600	2,900,000
October	20,600	1,150,000	85,000	1,330,000	33,900	2,390,000
November	44	6,220	59,700	875,000	26,200	2,930,000
December	21,000	1,030,000	60,400	836,000	48,800	2,450,000
January-July	70,900	3,960,000	817,000	18,000,000	169,000	16,100,000
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:						
Canada	--	--	--	--	1,450	268,000
France	--	--	19,200	305,000	1,160	131,000
Germany	87	5,360	3,940	71,000	1,420	229,000
Ireland	--	--	22,700	328,000	--	--
Japan	--	--	15,500	155,000	--	--
Mexico	--	--	124	2,140	--	--
Singapore	--	--	1,010	11,000	--	--
Tunisia	--	--	1,830	42,200	56	42,800
United Kingdom	281	35,400	38,000	396,000	2,730	228,000
Total	368	40,800	102,000	1,310,000	6,810	899,000
January-July	356,000	9,290,000	406,000	5,610,000	110,000	10,800,000

-- 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:								
July	181,000	\$9,410,000	54,800	\$2,930,000	32,900	\$624,000	229,000	1,690,000
August	239,000	16,200,000	34,800	2,090,000	3,200	37,600	265,000	1,960,000
September	197,000	8,740,000	52,600	1,530,000	14,600	208,000	239,000	2,190,000
October	227,000	6,780,000	36,300	1,060,000	36,300	496,000	262,000	2,460,000
November	156,000	7,090,000	22,800	334,000	56,200	356,000	186,000	2,640,000
December	174,000	10,900,000	31,800	929,000	43,600	658,000	207,000	2,850,000
January-July	1,390,000	61,800,000	353,000	13,500,000	192,000	4,570,000	1,690,000	XX
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
January-July	1,290,000	47,700,000	161,000	3,630,000	138,000	1,450,000	1,440,000	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:				
July	93,600	\$7,990,000	4,610	\$300,000
August	109,000	8,800,000	6,190	307,000
September	98,200	8,120,000	147,000	4,360,000
October	133,000	9,580,000	158,000	843,000
November	146,000	10,500,000	17,000	436,000
December	91,200	6,230,000	2,000	106,000
January-July	789,000	60,600,000	309,000	22,500,000
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
January-July	759,000	46,100,000	1,490,000	2,610,000

-- 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.