

Mineral Industry Surveys

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COBALT IN OCTOBER, NOVEMBER, AND DECEMBER 2008

Preliminary data for 2008 indicate that U.S. cobalt consumption during 2008 was slightly less than that consumed during 2007, according to the U.S. Geological Survey. U.S. cobalt consumption during the quarter ending December 31, 2008, was slightly less than that consumed during the quarter ending September 30, 2008.

The amount of cobalt contained in U.S. imports of cobalt metals and chemicals was 7% greater during January through November 2008 than that imported during the same period in 2007. The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals during January through

November 2008 was 6% lower than that exported during the same period in 2007.

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>
October 2008	28.00-38.00	33.55
November 2008	15.00-28.00	19.63
December 2008	12.50-19.00	16.23

TABLE 1
U.S. REPORTED CONSUMPTION OF COBALT MATERIALS¹

(Metric tons, contained cobalt)

Period	Metal ²	Oxide and other chemical compounds ³	Scrap	Total
2007:				
October	328	226	167	721
November	333	221	160	714
December	332	227	156	715
January-October	3,280	2,250	1,600	7,130
January-November	3,610	2,470	1,760	7,850
January-December ⁴	3,940	2,700	1,920	8,560
Year ⁵	4,710	2,700	1,930	9,340
2008:				
January	338	223	158	720
February	329	219	160	708
March	321	223	167	711
April	301	226	170	697
May	341	223	162	726
June	319	225	164	708
July	318	221	150	688
August	315	226	166	707
September	317	224	154	695
October	312	222	170	704
November	335	219	151	704
December	307	217	154	679
January-October	3,210	2,230	1,620	7,070
January-November	3,550	2,450	1,770	7,770
January-December ⁴	3,850	2,670	1,930	8,450

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.

⁵Includes annual reports.

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

(Metric tons, contained cobalt)

End use	2007				2008					
	January- October	January- November	January- December ²	Year ³	October	November	December	January- October ⁴	January- November ⁴	January- December ^{2,4}
Steel	507 ^r	560 ^r	612	725	56	56	56	500	556	612
Superalloys	3,170 ^r	3,490 ^r	3,810	4,340	304	307	286	3,110	3,420	3,700
Magnetic alloys	248 ^r	272 ^r	297	385	25	26	26	244	271	297
Other alloys ⁵	W	W	W	225	W	W	W	W	W	W
Cemented carbides ⁶	606 ^r	666 ^r	725	726	61	61	57	621	682	739
Chemical and ceramic uses ⁷	2,370 ^r	2,610 ^r	2,850	2,880	235	231	230	2,370	2,600	2,830
Miscellaneous and unspecified	225 ^r	248	270	63	22	22	22	225	248	270
Total	7,130	7,850	8,560	9,340	704	704	679	7,070	7,770	8,450

^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 annual reports.

⁴Includes revisions to prior months' data.

⁵Includes nonferrous alloys, welding materials, and wear-resistant alloys.

⁶Includes diamond tool matrices, cemented and sintered carbides, and cast carbide dies or parts.

⁷Includes 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		
2007:					
October	354	173	71	598	925
November	356	168	60	585	784
December ⁶	320	158	58	536	676
Yearend ⁷	413	178	60	651	XX
2008:					
January	302	155 ^r	56	513 ^r	666
February	297	163 ^r	56	517 ^r	652
March	290	174 ^r	56	521 ^r	620
April	319	167 ^r	52	538 ^r	620
May	298	169 ^r	54	521 ^r	612
June	297	162 ^r	54	513 ^r	612
July	306	161 ^r	62	529 ^r	606
August	317	155 ^r	63	535 ^r	576
September	310	155 ^r	66	532 ^r	497
October	294	173	59	526	497
November	291	172	70	533	497
December	292	176	78	547	473

^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.

⁷Includes annual reports.

TABLE 4a
U.S. IMPORTS FOR CONSUMPTION OF COBALT THROUGH SEPTEMBER 2008, 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
	Quantity	Value ⁴	Quantity	Value ⁴	Quantity	Value ⁴		
2007:								
September	669,000	\$36,500,000	60,800	\$2,640,000	79,900	\$1,560,000	741,000	7,290,000
October	859,000	43,600,000	54,300	2,310,000	178,000	2,570,000	954,000	8,240,000
November	1,100,000	66,800,000	82,700	3,870,000	160,000	2,860,000	1,210,000	9,450,000
December	740,000	47,500,000	70,200	3,760,000	208,000	4,200,000	866,000	10,300,000
January-September	6,260,000	329,000,000	818,000	34,500,000	1,410,000	21,400,000	7,290,000	XX
January-December	8,960,000	487,000,000	1,020,000	44,400,000	1,950,000	31,100,000	10,300,000	XX
2008:								
January	939,000	65,800,000	44,100	2,320,000	194,000	4,110,000	1,040,000	1,040,000
February	942,000	69,700,000	105,000	6,710,000	401,000	4,060,000	1,140,000	2,180,000
March	492,000	34,400,000	108,000	7,290,000	293,000	3,150,000	658,000	2,840,000
April	622,000	49,200,000	57,400	4,450,000	601,000	7,570,000	853,000	3,700,000
May	721,000	62,800,000	66,100	5,230,000	523,000	5,810,000	945,000	4,640,000
June	875,000	79,000,000	135,000	8,430,000	523,000	6,670,000	1,140,000	5,780,000
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:								
Argentina	--	--	--	--	80,000	300,000	20,000	33,500
Australia	144,000	9,410,000	--	--	--	--	144,000	514,000
Austria	--	--	--	--	--	--	--	1,770
Belgium	3,670	149,000	37,600	2,210,000	23,500	221,000	37,100	548,000
Brazil	--	--	--	--	13,100	59,700	3,540	153,000
Canada	107,000	6,490,000	--	--	--	--	107,000	1,100,000
China	153,000	8,450,000	16,700	839,000	3,600	62,500	166,000	1,080,000
Croatia	--	--	--	--	--	--	--	3
Finland	26,100	2,470,000	6,870	420,000	401,000	3,300,000	155,000	1,260,000
France	2,100	205,000	--	--	--	--	2,100	21,200
Germany	1,950	171,000	--	--	--	--	1,950	18,500
India	--	--	--	--	--	--	--	191,000
Italy	--	--	--	--	--	--	--	1
Japan	11,300	1,070,000	--	--	--	--	11,300	108,000
Korea, Republic of	2,020	25,300	--	--	--	--	2,020	15,400
Liechtenstein	--	--	--	--	--	--	--	3,250
Morocco	42,000	2,850,000	--	--	--	--	42,000	316,000
Netherlands	--	--	--	--	--	--	--	2,100
Norway	124,000	8,770,000	--	--	--	--	124,000	1,040,000
Peru	--	--	--	--	--	--	--	524
Philippines	--	--	--	--	--	--	--	1,410
Russia	96,400	6,150,000	--	--	--	--	96,400	1,140,000
South Africa	530	33,100	--	--	--	--	530	163,000
Switzerland	--	--	--	--	--	--	--	768
Uganda	--	--	--	--	--	--	--	20,000
United Arab Emirates	--	--	--	--	--	--	--	5,400
United Kingdom	5,300	271,000	16,000	742,000	14,900	236,000	20,700	260,000
Zambia	80,000	4,450,000	--	--	--	--	80,000	339,000
Total	799,000	51,000,000	77,100	4,210,000	536,000	4,180,000	1,010,000	8,340,000
January-September	6,460,000	499,000,000	785,000	51,200,000	4,190,000	44,700,000	8,340,000	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.

Source: U.S. Census Bureau.

TABLE 4b
U.S. IMPORTS FOR CONSUMPTION OF COBALT THROUGH OCTOBER 2008, 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
	Quantity	Value ⁴	Quantity	Value ⁴	Quantity	Value ⁴		
2007:								
October	859,000	\$43,600,000	54,300	\$2,310,000	178,000	\$2,570,000	954,000	8,240,000
November	1,100,000	66,800,000	82,700	3,870,000	160,000	2,860,000	1,210,000	9,450,000
December	740,000	47,500,000	70,200	3,760,000	208,000	4,200,000	866,000	10,300,000
January-October	7,120,000	373,000,000	872,000	36,800,000	1,580,000	24,000,000	8,240,000	XX
January-December	8,960,000	487,000,000	1,020,000	44,400,000	1,950,000	31,100,000	10,300,000	XX
2008:								
January	939,000	65,800,000	44,100	2,320,000	194,000	4,110,000	1,040,000	1,040,000
February	942,000	69,700,000	105,000	6,710,000	401,000	4,060,000	1,140,000	2,180,000
March	492,000	34,400,000	108,000	7,290,000	293,000	3,150,000	658,000	2,840,000
April	622,000	49,200,000	57,400	4,450,000	601,000	7,570,000	853,000	3,700,000
May	721,000	62,800,000	66,100	5,230,000	523,000	5,810,000	945,000	4,640,000
June	875,000	79,000,000	135,000	8,430,000	523,000	6,670,000	1,140,000	5,780,000
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:								
Argentina	--	--	--	--	--	--	--	33,500
Australia	44,000	2,970,000	--	--	--	--	44,000	558,000
Austria	--	--	--	--	--	--	--	1,770
Belgium	16,200	1,110,000	40,000	2,020,000	5,000	89,200	46,400	594,000
Brazil	10,000	661,000	--	--	6,800	22,300	11,800	165,000
Canada	86,100	5,270,000	--	--	--	--	86,100	1,180,000
China	161,000	9,590,000	10,000	499,000	2,500	37,100	169,000	1,250,000
Croatia	--	--	--	--	--	--	--	3
Finland	43,200	3,130,000	10,500	512,000	132,000	1,530,000	92,000	1,350,000
France	2,550	265,000	--	--	--	--	2,550	23,800
Germany	1,800	145,000	--	--	--	--	1,800	20,300
India	--	--	--	--	89,000	342,000	24,000	215,000
Italy	--	--	--	--	--	--	--	1
Japan	11,300	950,000	--	--	--	--	11,300	119,000
Korea, Republic of	180	11,900	--	--	--	--	180	15,600
Liechtenstein	--	--	--	--	--	--	--	3,250
Morocco	103,000	6,580,000	--	--	--	--	103,000	419,000
Netherlands	--	--	--	--	--	--	--	2,100
Norway	81,800	7,010,000	--	--	--	--	81,800	1,130,000
Peru	--	--	--	--	--	--	--	524
Philippines	--	--	--	--	391	8,790	180	1,590
Russia	159,000	10,200,000	--	--	--	--	159,000	1,300,000
South Africa	10,100	812,000	--	--	--	--	10,100	173,000
Spain	--	--	8,100	413,000	--	--	5,830	5,830
Switzerland	--	--	--	--	--	--	--	768
Uganda	--	--	--	--	--	--	--	20,000
United Arab Emirates	--	--	--	--	--	--	--	5,400
United Kingdom	983	88,900	12,000	578,000	12,800	172,000	13,800	274,000
Zambia	59,600	4,260,000	--	--	--	--	59,600	398,000
Total	791,000	53,000,000	80,600	4,020,000	248,000	2,200,000	922,000	9,260,000
January-October	7,250,000	552,000,000	866,000	55,200,000	4,440,000	46,900,000	9,260,000	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.

Source: U.S. Census Bureau.

TABLE 4c
U.S. IMPORTS FOR CONSUMPTION OF COBALT THROUGH NOVEMBER 2008, 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
	Quantity	Value ⁴	Quantity	Value ⁴	Quantity	Value ⁴		
2007:								
November	1,100,000	\$66,800,000	82,700	\$3,870,000	160,000	\$2,860,000	1,210,000	9,450,000
December	740,000	47,500,000	70,200	3,760,000	208,000	4,200,000	866,000	10,300,000
January-November	8,220,000	440,000,000	955,000	40,600,000	1,740,000	26,900,000	9,450,000	XX
January-December	8,960,000	487,000,000	1,020,000	44,400,000	1,950,000	31,100,000	10,300,000	XX
2008:								
January	939,000	65,800,000	44,100	2,320,000	194,000	4,110,000	1,040,000	1,040,000
February	942,000	69,700,000	105,000	6,710,000	401,000	4,060,000	1,140,000	2,180,000
March	492,000	34,400,000	108,000	7,290,000	293,000	3,150,000	658,000	2,840,000
April	622,000	49,200,000	57,400	4,450,000	601,000	7,570,000	853,000	3,700,000
May	721,000	62,800,000	66,100	5,230,000	523,000	5,810,000	945,000	4,640,000
June	875,000	79,000,000	135,000	8,430,000	523,000	6,670,000	1,140,000	5,780,000
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:								
Argentina	--	--	--	--	--	--	--	33,500
Australia	176,000	11,800,000	--	--	--	--	176,000	734,000
Austria	--	--	--	--	--	--	--	1,770
Belgium	30,400	1,960,000	89,900	1,770,000	3,200	65,700	96,000	690,000
Brazil	--	--	--	--	12,900	41,000	3,490	169,000
Canada	38,500	2,680,000	20,800	1,100,000	--	--	53,500	1,240,000
China	143,000	9,270,000	5,400	273,000	46,100	210,000	159,000	1,410,000
Congo (Kinshasa)	20,000	577,000	--	--	--	--	20,000	20,000
Croatia	--	--	--	--	--	--	--	3
Finland	32,400	2,730,000	21,800	1,070,000	124,000	1,640,000	87,100	1,430,000
France	385	30,200	--	--	--	--	385	24,200
Germany	68	6,870	--	--	--	--	68	20,400
India	--	--	--	--	--	--	--	215,000
Italy	--	--	--	--	--	--	--	1
Japan	14,800	1,020,000	74	3,830	--	--	14,900	134,000
Korea, Republic of	233	10,000	--	--	--	--	233	15,800
Liechtenstein	--	--	--	--	--	--	--	3,250
Morocco	--	--	--	--	--	--	--	419,000
Netherlands	--	--	--	--	--	--	--	2,100
Norway	107,000	7,260,000	--	--	--	--	107,000	1,230,000
Peru	--	--	--	--	--	--	--	524
Philippines	--	--	--	--	--	--	--	1,590
Russia	77,900	3,680,000	--	--	--	--	77,900	1,380,000
South Africa	--	--	--	--	--	--	--	173,000
Spain	--	--	--	--	--	--	--	5,830
Switzerland	--	--	--	--	--	--	--	768
Uganda	--	--	--	--	--	--	--	20,000
United Arab Emirates	--	--	--	--	--	--	--	5,400
United Kingdom	4,510	257,000	10,200	486,000	47,600	649,000	26,600	300,000
Zambia	40,000	2,340,000	--	--	--	--	40,000	438,000
Total	685,000	43,600,000	148,000	4,710,000	234,000	2,610,000	862,000	10,100,000
January-November	7,940,000	595,000,000	1,010,000	59,900,000	4,670,000	49,500,000	10,100,000	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.

Source: U.S. Census Bureau.

TABLE 5a

U.S. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS THROUGH SEPTEMBER 2008, 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
2007:						
September	452	\$66,000	53,000	\$560,000	14,400	\$1,440,000
October	9,110	487,000	88,000	1,400,000	20,000	1,890,000
November	1,230	73,700	63,600	1,220,000	19,600	2,380,000
December	2,940	189,000	85,800	1,630,000	13,900	1,460,000
January-September	27,700	1,850,000	968,000	13,200,000	152,000	14,200,000
January-December	41,000	2,600,000	1,210,000	17,500,000	206,000	20,000,000
2008:						
January	26,500	1,410,000	34,600	599,000	17,300	1,940,000
February	339	27,200	65,300	1,440,000	22,500	1,940,000
March	766	87,700	114,000	2,900,000	34,700	2,700,000
April	15,500	871,000	214,000	4,870,000	22,800	2,180,000
May	1,140	93,800	127,000	2,600,000	15,600	1,750,000
June	14,300	776,000	117,000	2,130,000	28,900	3,070,000
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:						
Canada	23	3,320	--	--	1,810	525,000
China	--	--	--	--	560	86,300
France	--	--	4,410	45,900	1,730	225,000
Germany	56	5,420	--	--	3,570	349,000
Ireland	--	--	13,500	195,000	--	--
Japan	--	--	--	--	1,410	117,000
Malaysia	--	--	6,450	41,300	--	--
Mexico	--	--	2,590	61,600	--	--
Singapore	--	--	83	2,490	--	--
Taiwan	--	--	--	--	5	2,580
United Kingdom	135	31,900	7,800	266,000	18,500	1,600,000
Total	214	40,700	34,800	613,000	27,600	2,900,000
January-September	73,000	4,160,000	908,000	19,700,000	236,000	22,600,000

-- 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 5b

U.S. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS THROUGH OCTOBER 2008, 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
2007:						
October	9,110	\$487,000	88,000	\$1,400,000	20,000	\$1,890,000
November	1,230	73,700	63,600	1,220,000	19,600	2,380,000
December	2,940	189,000	85,800	1,630,000	13,900	1,460,000
January-October	36,800	2,340,000	1,060,000	14,600,000	172,000	16,100,000
January-December	41,000	2,600,000	1,210,000	17,500,000	206,000	20,000,000
2008:						
January	26,500	1,410,000	34,600	599,000	17,300	1,940,000
February	339	27,200	65,300	1,440,000	22,500	1,940,000
March	766	87,700	114,000	2,900,000	34,700	2,700,000
April	15,500	871,000	214,000	4,870,000	22,800	2,180,000
May	1,140	93,800	127,000	2,600,000	15,600	1,750,000
June	14,300	776,000	117,000	2,130,000	28,900	3,070,000
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:						
Belgium	--	--	--	--	25	2,730
Canada	--	--	--	--	2,000	435,000
China	--	--	--	--	250	37,400
Finland	300	74,400	--	--	--	--
France	--	--	2,500	26,100	869	111,000
Germany	--	--	18,500	320,000	7,410	699,000
India	--	--	16,200	103,000	12,700	87,400
Ireland	--	--	18,600	271,000	--	--
Japan	--	--	--	--	399	55,800
Mexico	--	--	2,870	62,600	--	--
Singapore	--	--	205	3,550	--	--
Switzerland	--	--	153	2,650	1	2,460
Tunisia	--	--	2,540	83,800	--	--
United Kingdom	20,300	1,080,000	23,500	459,000	10,200	959,000
Total	20,600	1,150,000	85,000	1,330,000	33,900	2,390,000
January-October	93,600	5,310,000	993,000	21,000,000	270,000	25,000,000

-- 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 5c

U.S. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS THROUGH NOVEMBER 2008, 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
2007:						
November	1,230	\$73,700	63,600	\$1,220,000	19,600	\$2,380,000
December	2,940	189,000	85,800	1,630,000	13,800	1,460,000
January-November	38,000	2,410,000	1,120,000	15,900,000	192,000	18,500,000
January-December	41,000	2,600,000	1,210,000	17,500,000	206,000	20,000,000
2008:						
January	26,500	1,410,000	34,600	599,000	17,300	1,940,000
February	339	27,200	65,300	1,440,000	22,500	1,940,000
March	766	87,700	114,000	2,900,000	34,700	2,700,000
April	15,500	871,000	214,000	4,870,000	22,800	2,180,000
May	1,140	93,800	127,000	2,600,000	15,600	1,750,000
June	14,300	776,000	117,000	2,130,000	28,900	3,070,000
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:						
Belgium	--	--	--	--	400	43,600
Canada	23	3,320	--	--	1,900	431,000
China	--	--	--	--	704	108,000
France	--	--	3,900	44,300	4,970	599,000
Germany	--	--	13,500	140,000	2,330	275,000
Ireland	--	--	4,230	60,500	--	--
Israel	--	--	--	--	5	16,000
Italy	--	--	--	--	204	40,400
Japan	--	--	16,800	148,000	2,030	131,000
Mexico	--	--	1,810	36,300	--	--
Tunisia	--	--	2,700	89,700	--	--
United Kingdom	21	2,900	16,700	357,000	13,700	1,290,000
Total	44	6,220	59,700	875,000	26,200	2,930,000
January-November	93,600	5,320,000	1,050,000	21,900,000	296,000	27,900,000

-- 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
	Quantity	Value ⁴	Quantity	Value ⁴	Quantity	Value ⁴		
2007:								
September	257,000	\$7,890,000	11,200	\$466,000	15,700	\$338,000	269,000	2,320,000
October	183,000	4,820,000	27,900	1,280,000	41,300	547,000	213,000	2,540,000
November	265,000	5,600,000	24,900	1,120,000	227	5,530	283,000	2,820,000
December	226,000	7,420,000	65,200	1,640,000	19,700	125,000	278,000	3,100,000
January-September	1,750,000	51,400,000	745,000	24,400,000	174,000	1,980,000	2,320,000	XX
January-October	1,930,000	56,300,000	773,000	25,700,000	215,000	2,530,000	2,540,000	XX
January-November	2,190,000	61,900,000	798,000	26,800,000	215,000	2,530,000	2,820,000	XX
January-December	2,420,000	69,300,000	863,000	28,500,000	235,000	2,660,000	3,100,000	XX
2008:								
January	155,000	5,820,000	21,000	882,000	7,430	235,000	171,000	171,000
February	190,000	8,330,000	76,200	1,800,000	56,700	2,350,000	259,000	430,000
March	243,000	9,720,000	50,400	1,320,000	22,800	495,000	285,000	715,000
April	181,000	8,030,000	48,000	3,980,000	1,770	26,600	216,000	931,000
May	261,000	11,100,000	81,200	1,780,000	67,200	789,000	336,000	1,270,000
June	180,000	9,470,000	21,100	785,000	3,520	43,400	196,000	1,460,000
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
January-September	1,830,000	86,800,000	440,000	17,100,000	210,000	4,810,000	2,190,000	XX
January-October	2,050,000	93,600,000	476,000	18,200,000	246,000	5,310,000	2,460,000	XX
January-November	2,210,000	101,000,000	499,000	18,500,000	303,000	5,660,000	2,640,000	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.

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
2007:				
September	105,000	\$6,560,000	40,200	\$1,720,000
October	120,000	7,330,000	33,200	1,490,000
November	135,000	9,060,000	82,900	2,270,000
December	97,100	6,300,000	123,000	3,020,000
January-September	1,090,000	66,600,000	364,000	7,290,000
January-October	1,210,000	74,000,000	398,000	8,780,000
January-November	1,340,000	83,000,000	481,000	11,100,000
January-December	1,440,000	89,300,000	603,000	17,100,000
2008:				
January	117,000	8,520,000	31,900	2,560,000
February	143,000	11,500,000	33,400	714,000
March	92,200	6,420,000	28,600	2,630,000
April	127,000	9,300,000	89,000	4,520,000
May	98,400	6,990,000	19,300	1,830,000
June	117,000	9,900,000	103,000	9,940,000
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
January-September	996,000	77,500,000	463,000	27,200,000
January-October	1,130,000	87,100,000	621,000	28,000,000
January-November	1,270,000	97,600,000	638,000	28,400,000

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.