

# Mineral Industry Surveys

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### **COBALT IN JULY, AUGUST, AND SEPTEMBER 2007**

Preliminary data for 2007 indicate that U.S. cobalt consumption during the first three quarters of 2007 was slightly less than that consumed during the first three quarters of 2006, according to the U.S. Geological Survey. U.S. cobalt consumption during the quarter ending September 30, 2007, was slightly greater than that consumed during the quarter ending June 30, 2007.

The amount of cobalt contained in U.S. imports of cobalt metals and chemicals was 16% lower during January through August 2007 than that during the same period in 2006. The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals during January through August 2007 was 6% greater than that exported during the same period in 2006.

#### Update

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

<u>Month</u>	Price range	Average price
July 2007	26.40-27.75	27.16
August 2007	24.50-27.00	25.99
September 2007	28.40-31.00	29.68

#### TABLE 1 U.S. REPORTED CONSUMPTION OF COBALT MATERIALS $^{\rm 1}$

#### (Metric tons, contained cobalt)

		Oxide and		
	2	other chemical	~	
Period	Metal <sup>2</sup>	compounds <sup>3</sup>	Scrap	Total
2006:				
July	306	227	158	691
August	311	235	175	721
September		229	168	702
October	321	232	158	711
November	308	222	166	696
December	297	229	162	688
January-July <sup>r</sup>	2,200	1,610	1,170	4,980
January-August <sup>r</sup>	2,510	1,840	1,340	5,700
January-September <sup>r</sup>	2,820	2,070	1,510	6,400
January-December <sup>4</sup>	3,740	2,760	2,000	8,500
Year <sup>5</sup>	4,500	2,760	2,010	9,270
2007:				
January	309	226	172	707
February	299	225	162	685
March	327	233	169	729
April		231	164	731
May	325	224	153	702
June	288	240	163	691
July	316	226	158	700
August	323	227	157	707
September	345	226	155	726
January-July	2,200	1,600	1,140	4,940
January-August	2,520	1,830	1,300	5,650
January-September	2,870	2,060	1,450	6,380

<sup>r</sup>Revised.

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

<sup>2</sup>Includes metal powder.

<sup>3</sup>Data may include other cobalt materials.

<sup>4</sup>Data based on monthly reports. <sup>5</sup>Includes annual reports.

## TABLE 2 U.S. REPORTED CONSUMPTION OF COBALT, BY END USE<sup>1</sup>

#### 2006 2007 January-January-January-January-January-January-January- $Julv^4$ End use July Year<sup>3</sup> August<sup>4</sup> September<sup>4</sup> August September December<sup>2</sup> August September July Steel 345 r 394 <sup>r</sup> 443 <sup>r</sup> 700 48 49 49 341 389 438 588 Superalloys 2,140 r 2,740 <sup>r</sup> 323 2,450 r 3,630 4,180 301 304 2,120 2,420 2,740 Magnetic alloys 174 <sup>r</sup> $198\ ^r$ $224\ ^{r}$ 299 386 22 24 25 172 196 221 Other alloys<sup>5</sup> W W W W 224 W W W W W W Cemented carbides<sup>6</sup> 468 <sup>r</sup> 536 <sup>r</sup> 603 r 796 796 67 67 67 461 528 595 Chemical and ceramic uses<sup>7</sup> 1,700<sup>r</sup> 1,950 r 2,190 r 2,920 2,920 239 240 239 1,700 1,940 2,180 Miscellaneous and unspecified 158 <sup>r</sup> 181 <sup>r</sup> 202 <sup>r</sup> 271 63 23 23 23 160 183 206 Total 4,980 r 5,700 r 6,400 r 8,500 9,270 700 707 726 4,940 5,650 6,380

#### (Metric tons, contained cobalt)

Revised. W Withheld to avoid disclosing company proprietary data; included with "Miscellaneous and unspecified."

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

<sup>2</sup>Data based on monthly reports.

<sup>3</sup>Includes annual reports.

<sup>4</sup>Includes revisions to prior months' data.

<sup>5</sup>Includes nonferrous alloys, welding materials, and wear-resistant alloys.

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

<sup>7</sup>Includes 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 MATERIALS<sup>1</sup>

#### (Metric tons, contained cobalt)

		Industry <sup>2</sup>							
		Oxide and other chemical							
Period	Metal <sup>3</sup>	compounds <sup>4</sup>	Scrap	Total	metal <sup>5</sup>				
2006:									
July	323	165	120	608	1,470				
August	316	164	118	598	1,470				
September	304	160	116	580	1,470				
October	296	170	120	586	1,420				
November	289	171	126	586	1,300				
December	288	176	126	590	1,290				
2007:									
January	293	180	125	598	1,250				
February	331	177	129	637	1,180				
March	340	171	127	637	1,140				
April	325	169	121	615	1,100				
May	321	166	131	618	1,040				
June	341	166	118	625	1,030				
July	336	161	113	610	1,030				
August	341	158	114	613	1,020				
September	349	161	128	638	989				

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

<sup>2</sup>Stocks reported by cobalt processors and consumers.

<sup>3</sup>Includes metal powder.

<sup>4</sup>Data may include other cobalt materials.

<sup>5</sup>Data from Defense National Stockpile Center. Data through June 2007 include material

committed for sale pending shipment; data after June 2007 are uncommitted material only.

#### TABLE 4a

#### U.S. IMPORTS FOR CONSUMPTION OF COBALT THROUGH JUNE 2007, BY COUNTRY<sup>1</sup>

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

Period and country	Meta	ale <sup>2</sup>	Oxides and h	vdrovides	Salts and co	mpounds <sup>3</sup>	Total cobalt content for	Cobalt content, year to
of origin	Quantity	Value <sup>4</sup>	Quantity	Value <sup>4</sup>	Quantity	Value <sup>4</sup>	the period <sup>5</sup>	date <sup>5, 6</sup>
2006:	Quantity	value	Quantity	value	Quantity	value	the period	date
June	969,000	\$29,500,000	42,700	\$1,220,000	278,000	\$2,310,000	1,080,000	6,110,000
July	741,000	21,800,000	85,500	2,230,000	276,000	3,030,000	900,000	7,010,000
August	694,000	21,300,000	91,700	2,260,000	217,000	1,850,000	825,000	7,840,000
September	1,110,000	36,100,000	105,000	2,200,000	83,600	874,000	1,210,000	9,050,000
October	579,000	20,800,000	103,000	2,730,000	170,000	1,800,000	706,000	9,760,000
November	720,000	23,500,000	113,000	3,280,000	105,000	982,000	830,000	10,600,000
December	917,000	32,300,000	115,000	3,040,000	68,400	533,000	1,020,000	11,600,000
Jauuary -June	5,190,000	146,000,000	562,000	13,100,000	1,400,000	15,200,000	6,110,000	11,000,000 XX
January-December	9,950,000	302,000,000	1,180,000	29,400,000	2,330,000	24,200,000	11,600,000	ХХ
2007:	9,930,000	302,000,000	1,180,000	29,400,000	2,330,000	24,200,000	11,000,000	ЛЛ
	788,000	34,800,000	91,400	2,940,000	193,000	1,900,000	906,000	906,000
January	686,000			4,230,000	193,000		900,000 807,000	1,710,000
February	,	32,300,000	111,000	, ,	,	1,980,000	<i>,</i>	
March:	690,000	34,000,000	83,200	3,360,000	87,300	1,040,000	772,000	2,490,000
April	834,000	44,900,000	69,400	3,010,000	145,000	2,210,000	929,000	3,410,000
May	882,000	48,900,000	136,000	6,100,000	249,000	3,960,000	1,060,000	4,470,000
June:								275 000
Australia								275,000
Belgium	96,500	4,220,000	35,600	1,770,000	74,600	533,000	142,000	379,000
Brazil	60,000	3,680,000					60,000	80,800
Canada	88,100	4,810,000					88,100	642,000
China	46,000	2,620,000	980	29,800	1,000	30,700	47,200	597,000
Congo (Kinshasa)								40,000
Finland	22,900	1,140,000	18,300	801,000	105,000	2,430,000	74,800	365,000
France	945	88,200					945	11,200
Germany	1,040	67,100					1,040	9,330
India								19,500
Japan	11,200	769,000			11,100	107,000	13,900	84,300
Korea, Republic of								22,500
Morocco	40,000	2,320,000					40,000	237,000
Norway	223,000	14,000,000					223,000	1,280,000
Philippines								42
Russia								616,000
South Africa	500	34,500					500	82,000
Sweden								1,840
Uganda	10,000	610,000					10,000	104,000
United Kingdom	225	16,500			5,440	87,600	1,530	77,400
Zambia	63,000	3,820,000					63,000	318,000
Total	663,000	38,200,000	54,800	2,600,000	197,000	3,190,000	766,000	5,240,000
January-June	4,540,000	233,000,000	545,000	22,200,000	1,010,000	14,300,000	5,240,000	XX

XX Not applicable. -- Zero.

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

<sup>2</sup>Unwrought cobalt, excluding alloys; includes cobalt cathode and cobalt metal powder; may include intermediate products of cobalt metallurgy.

<sup>3</sup>Includes cobalt acetates, cobalt carbonates, cobalt chlorides, and cobalt sulfates.

<sup>4</sup>Customs value.

<sup>5</sup>Estimated from gross weights.

<sup>6</sup>May include revisions to prior months.

## TABLE 4b U.S. IMPORTS FOR CONSUMPTION OF COBALT THROUGH JULY 2007, BY COUNTRY $^{\rm 1}$

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

							Total cobalt	Cobalt content,
Period and country		Metals <sup>2</sup>		nydroxides	Salts and co		content for	year to
of origin	Quantity	Value <sup>4</sup>	Quantity	Value <sup>4</sup>	Quantity	Value <sup>4</sup>	the period <sup>5</sup>	date <sup>5, 6</sup>
2006:	_							
July	741,000	\$21,800,000	85,500	\$2,230,000	286,000	\$3,030,000	900,000	7,010,000
August	694,000	21,300,000	91,700	2,260,000	217,000	1,850,000	825,000	7,840,000
September	1,110,000	36,100,000	105,000	2,770,000	83,600	874,000	1,210,000	9,050,000
October	579,000	20,800,000	103,000	2,730,000	170,000	1,800,000	706,000	9,760,000
November	720,000	23,500,000	113,000	3,280,000	105,000	982,000	830,000	10,600,000
December	917,000	32,300,000	115,000	3,040,000	68,400	533,000	1,020,000	11,600,000
January-July	5,930,000	168,000,000	648,000	15,400,000	1,680,000	18,200,000	7,010,000	XX
January-December	9,950,000	302,000,000	1,180,000	29,400,000	2,330,000	24,200,000	11,600,000	XX
2007:	—							
January	788,000	34,800,000	91,400	2,940,000	193,000	1,900,000	906,000	906,00
February	686,000	32,300,000	111,000	4,230,000	141,000	1,980,000	807,000	1,710,00
March	690,000	34,000,000	83,200	3,360,000	87,300	1,040,000	772,000	2,490,000
April	834,000	44,900,000	69,400	3,010,000	145,000	2,210,000	929,000	3,410,000
May	882,000	48,900,000	136,000	6,100,000	249,000	3,960,000	1,060,000	4,470,00
June		38,200,000	54,800	2,600,000	197,000	3,190,000	766,000	5,240,00
July:			,	_,,	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0,0000	,	-, ,
Argentina					16,500	564,000	4,110	4,11
Australia	87,000	5,170,000					87,000	362,00
Belgium	14,000	724,000	3,000	124,000			16,200	395,00
Brazil	20,000	1,150,000					20,000	101,00
Canada		6,330,000					112,000	754,00
China	25,000	1,300,000	42,000	1,630,000	63,600	1,150,000	75,800	673,00
Congo (Kinshasa)		1,500,000	42,000	1,050,000		1,150,000		40,00
Finland		717,000	24,800	1,100,000	40,800	865,000	49,900	40,00
France	1,300	120,000	24,800	1,100,000	40,800	803,000	49,900 2,840	413,000
Germany	217	14,100					217	9,55
India					18,000	180,000	4,860	24,40
Italy			12	2,560			9	05.00
Japan	11,500	768,000					11,500	95,80
Korea, Republic of	17,300	410,000					17,300	39,80
Morocco	60,000	3,370,000					60,000	297,00
Norway	149,000	8,980,000					149,000	1,430,00
Philippines								4
Russia	40,000	2,350,000					40,000	656,00
South Africa	500	32,600					500	82,50
Sweden								1,84
Uganda								104,00
United Kingdom			19,000	877,000	44,600	341,000	25,400	103,00
Zambia	60,000	3,490,000					60,000	378,00
Total	615,000	34,900,000	90,900	3,860,000	183,000	3,100,000	737,000	5,980,00
January-July	5,160,000	268,000,000	636,000	26,100,000	1,200,000	17,400,000	5,980,000	XX

XX Not applicable. -- Zero.

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

<sup>2</sup>Unwrought cobalt, excluding alloys; includes cobalt cathode and cobalt metal powder; may include intermediate products of cobalt metallurgy.

<sup>3</sup>Includes cobalt acetates, cobalt carbonates, cobalt chlorides, and cobalt sulfates.

<sup>4</sup>Customs value.

<sup>5</sup>Estimated from gross weights.

<sup>6</sup>May include revisions to prior months.

## TABLE 4c U.S. IMPORTS FOR CONSUMPTION OF COBALT THROUGH AUGUST 2007, BY COUNTRY $^{\rm 1}$

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

Deviation 1		2		h		. 3	Total cobalt	Cobalt content,
Period and country		etals <sup>2</sup>	Oxides and		Salts and c		content for	year to
of origin	Quantity	Value <sup>4</sup>	Quantity	Value <sup>4</sup>	Quantity	Value <sup>4</sup>	the period <sup>5</sup>	date <sup>5, 6</sup>
2006:								
August	694,000	21,300,000	91,700	2,260,000	217,000	1,850,000	825,000	7,840,000
September	1,110,000	36,100,000	105,000	2,770,000	83,600	874,000	1,210,000	9,050,000
October	579,000	20,800,000	103,000	2,730,000	170,000	1,800,000	706,000	9,760,000
November	720,000	23,500,000	113,000	3,280,000	105,000	982,000	830,000	10,600,000
December	917,000	32,300,000	115,000	3,040,000	68,400	533,000	1,020,000	11,600,000
January-August	6,630,000	189,000,000	739,000	17,600,000	1,900,000	20,100,000	7,840,000	XX
January-December	9,950,000	302,000,000	1,180,000	29,400,000	2,330,000	24,200,000	11,600,000	XX
2007:								
January	788,000	34,800,000	91,400	2,940,000	193,000	1,900,000	906,000	906,000
February	686,000	32,300,000	111,000	4,230,000	141,000	1,980,000	807,000	1,710,000
March:	690,000	34,000,000	83,200	3,360,000	87,300	1,040,000	772,000	2,490,000
April	834,000	44,900,000	69,400	3,010,000	145,000	2,210,000	929,000	3,410,000
May	882,000	48,900,000	136,000	6,100,000	249,000	3,960,000	1,060,000	4,470,000
June	663,000	38,200,000	54,800	2,600,000	197,000	3,190,000	766,000	5,240,000
July	615,000	34,900,000	90,900	3,860,000	183,000	3,100,000	737,000	5,980,000
August:								
Argentina								4,110
Australia	10,000	559,000					10,000	372,000
Belgium	23,300	1,490,000	70,000	3,650,000	21,500	258,000	79,600	475,000
Brazil								101,000
Canada	115,000	6,160,000					115,000	869,000
China	76,000	4,560,000	12,200	494,000	36,300	917,000	101,000	775,000
Congo (Kinshasa)			,					40,000
Finland	11,700	745,000	26,800	1,110,000	36,100	717,000	43,800	458,000
France	825	80,000	20,000				825	14,800
Germany	1,500	102,000					1,500	11,100
India	10,000	595,000					10,000	34,400
Italy								9
Japan	15,200	936,000					15,200	111,000
Korea, Republic of			140	7,840			101	39,900
Morocco	20,000	1,060,000	140	7,840			20,000	39,900
Norway	52,000	3,070,000					52,000	1,480,000
	52,000	5,070,000					52,000	1,480,000
Philippines								
Russia	28,500	1,670,000					28,500	684,000
South Africa	500	31,000					500	83,000
Sweden		512.000						1,840
Uganda	8,600	512,000					8,600	112,000
United Kingdom	2,750	139,000	11,400	463,000	35,800	598,000	22,200	125,000
Zambia	60,000	3,330,000					60,000	438,000
Total	436,000	25,000,000	121,000	5,720,000	130,000	2,490,000	569,000	6,550,000
January-August	5,590,000	293,000,000	757,000	31,800,000	1,330,000	19,900,000	6,550,000	XX

XX Not applicable. -- Zero.

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

<sup>2</sup>Unwrought cobalt, excluding alloys; includes cobalt cathode and cobalt metal powder; may include intermediate products of cobalt metallurgy.

<sup>3</sup>Includes cobalt acetates, cobalt carbonates, cobalt chlorides, and cobalt sulfates.

<sup>4</sup>Customs value.

<sup>5</sup>Estimated from gross weights.

<sup>6</sup>May include revisions to prior months.

#### TABLE 5a

#### U.S. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS THROUGH JUNE 2007, BY COUNTRY<sup>1</sup>

	Unwrot	ught			Wrought co	balt and
Period and country	cobalt a	lloys	Cobalt waste	and scrap	cobalt a	ticles
of origin	Quantity	Value <sup>2</sup>	Quantity	Value <sup>2</sup>	Quantity	Value <sup>2</sup>
2006:						
June	233	\$19,300	149,000	\$1,780,000	23,300	\$1,680,
July	1,950	26,400	47,900	519,000	23,700	1,920,
August	21,200	676,000	51,300	708,000	18,300	1,470,
September	447	39,700	54,400	677,000	14,200	1,360,
October	3,860	196,000	62,200	926,000	16,700	1,210,
November	350	42,000	62,200	632,000	18,900	1,780,
December	342	39,400	59,400	1,010,000	19,900	1,550,
January-June	5,490	301,000	388,000	4,910,000	126,000	9,350,
January-December	33.600	1.320.000	726.000	9,390,000	238.000	18.600.

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

Value<sup>2</sup>

\$1,680,000

1,920,000 1,470,000

1,360,000

1,210,000

1,780,000

1,550,000

9,350,000

January-E 18,600,000 33,600 1,320,000 726,000 9,390,000 238,000 2007: January 4,210 136,000 61,200 683,000 14,100 1,350,000 February 515 63,400 67,500 904,000 16,200 1,450,000 March 794 89,700 172,000 1,660,000 15,900 1,560,000 April 1,530 164,000 186,000 2,720,000 25,500 1,620,000 May 15,800 1,020,000 120,000 1,740,000 18,800 1,610,000 June: Canada 14,500 111,000 2,850 561,000 -----425 46,200 China ------------57,000 Finland 350 -----------3,690 396,000 France ------------13,100 365,000 336 27,800 Germany -----10,700 Ireland -----153,000 ----Japan 1,100 89,900 17,000 205,000 2,100 118,000 2,550 74,900 Singapore --------United Kingdom 16,200 256,000 4,450 421,000 1,450 147,000 Total 74,100 1,160,000 13,800 1,570,000 January-June 24,300 1,620,000 681,000 8,870,000 104,000 9,160,000

-- Zero.

2006: June

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

<sup>2</sup>Customs value.

Source: U.S. Census Bureau.

#### TABLE 5b

#### U.S. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS THROUGH JULY 2007, BY COUNTRY<sup>1</sup>

	Unwrot	ught			Wrought co	obalt and	
Period and country	cobalt a	cobalt alloys		Cobalt waste and scrap		cobalt articles	
of origin	Quantity	Value <sup>2</sup>	Quantity	Value <sup>2</sup>	Quantity	Value <sup>2</sup>	
2006:							
July	1,950	\$26,400	47,900	\$519,000	23,700	\$1,920,000	
August	21,200	676,000	51,300	708,000	18,300	1,470,000	
September	447	39,700	54,400	677,000	14,200	1,360,000	
October	3,860	196,000	62,200	926,000	16,700	1,210,000	
November	350	42,000	62,200	632,000	18,900	1,780,000	
December	342	39,400	59,400	1,010,000	19,900	1,550,000	
January-July	7,440	328,000	436,000	5,430,000	150,000	11,300,000	
January-December	33,600	1,320,000	726,000	9,390,000	238,000	18,600,000	
2007:							
January	4,210	136,000	61,200	683,000	14,100	1,350,000	
February	515	63,400	67,500	904,000	16,200	1,450,000	
March	794	89,700	172,000	1,660,000	15,900	1,560,000	
April	1,530	164,000	186,000	2,720,000	25,500	1,620,000	
May	15,800	1,020,000	120,000	1,740,000	18,800	1,610,000	
June	1,450	147,000	74,100	1,160,000	13,800	1,570,000	
July:							
Australia			8,900	120,000			
Austria			18,400	127,000			
Canada			1,190	26,300	3,660	743,000	
Finland	191	47,700					
France			21,200	635,000	173	75,400	
Germany			49,100	758,000	2,360	145,000	
Ireland			16,900	276,000	151	3,940	
Japan	400	26,800	1,180	35,900	696	52,600	
Sweden	20	4,600					
Taiwan					3	2,380	
Thailand			693	9,030		-	
Tunisia			4,440	47,600		-	
United Kingdom	23	3,250	9,910	152,000	6,970	626,000	
Total	634	82,400	132,000	2,190,000	14,000	1,650,000	
January-July	24,900	1,700,000	813,000	11,100,000	118,000	10,800,000	

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

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.  $^{2}$ Customs value.

Source: U.S. Census Bureau.

#### TABLE 5c

#### U.S. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS THROUGH AUGUST 2007, BY COUNTRY<sup>1</sup>

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

	Unwro	•			Wrought c		
Period and country	cobalt a			Cobalt waste and scrap		cobalt articles	
of origin	Quantity	Value <sup>2</sup>	Quantity	Value <sup>2</sup>	Quantity	Value <sup>2</sup>	
2006:							
August	21,200	\$676,000	51,300	\$708,000	18,300	\$1,470,000	
September	447	39,700	54,400	677,000	14,200	1,360,000	
October	3,860	196,000	62,200	926,000	16,700	1,210,000	
November	350	42,000	62,200	632,000	18,900	1,780,000	
December	342	39,400	59,400	1,010,000	19,900	1,550,000	
January-August	28,600	1,000,000	487,000	6,140,000	168,000	12,700,000	
January-December	33,600	1,320,000	726,000	9,390,000	238,000	18,600,000	
2007:							
January	4,210	136,000	61,200	683,000	14,100	1,350,000	
February	515	63,400	67,500	904,000	16,200	1,450,000	
March	794	89,700	172,000	1,660,000	15,900	1,560,000	
April	1,530	164,000	186,000	2,720,000	25,500	1,620,000	
May	15,800	1,020,000	120,000	1,740,000	18,800	1,610,000	
June	1,450	147,000	74,100	1,160,000	13,800	1,570,000	
July	634	82,400	132,000	2,190,000	14,000	1,650,000	
August:							
Belgium					135	14,000	
Canada					2,290	457,000	
China					4,000	250,000	
France			9,670	249,000	2,090	243,000	
Germany	56	5,070	15,600	481,000	175	21,400	
India			625	15,000		-	
Ireland			16,400	240,000		-	
Japan	400	28,100	32,100	374,000	1,370	85,800	
Mexico			6,780	33,400		-	
Singapore			1,250	22,100	48	15,500	
Taiwan					4	2,380	
Thailand			3,020	47,100			
Tunisia			4,470	64,200		-	
United Kingdom	1,830	51,600	12,100	101,000	9,230	902,000	
Total	2,290	84,800	102,000	1,630,000	19,300	1,990,000	
January-August	27,200	1,780,000	915,000	12,700,000	138,000	12,800,000	

-- Zero.

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

<sup>2</sup>Customs value.

Source: U.S. Census Bureau.

## TABLE 6 U.S. EXPORTS OF COBALT MATERIALS<sup>1</sup>

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

	Unwrought col	· 1	0.11			. 3	Total cobalt	Cobalt content,
<b>D</b> 1 1	matte, waste	and scrap <sup>2</sup>	Oxides and	2	Salts and co		content for	year to
Period	Quantity	Value <sup>4</sup>	Quantity	Value <sup>4</sup>	Quantity	Value <sup>4</sup>	the period <sup>5</sup>	date <sup>5, 6</sup>
2006:	-							
June	157,000	\$3,980,000	66,000	\$1,680,000	50,300	\$111,000	217,000	1,530,000
July	150,000	4,890,000	63,300	1,370,000	33,200	224,000	203,000	1,730,000
August	130,000	3,650,000	91,000	2,180,000	64,900	390,000	211,000	1,940,000
September	165,000	4,500,000	109,000	3,010,000	20,900	163,000	249,000	2,190,000
October	235,000	3,650,000	62,300	1,800,000	15,500	168,000	284,000	2,470,000
November	109,000	2,200,000	91,200	2,180,000	31,500	171,000	183,000	2,660,000
December	103,000	2,750,000	114,000	3,020,000	48,100	293,000	196,000	2,850,000
January-June	1,040,000	38,800,000	566,000	13,300,000	321,000	1,890,000	1,530,000	XX
January-July	1,190,000	43,700,000	629,000	14,600,000	354,000	2,120,000	1,730,000	XX
January-August	1,320,000	47,400,000	720,000	16,800,000	419,000	2,510,000	1,940,000	XX
January-December	1,930,000	60,500,000	1,100,000	26,800,000	535,000	3,300,000	2,850,000	XX
2007	_							
January	92,800	3,720,000	90,800	3,480,000	41,800	208,000	168,000	168,000
February	439,000	7,060,000	105,000	3,630,000	38,400	417,000	524,000	692,000
March	- 113,000	4,520,000	93,600	3,420,000	6,050	106,000	182,000	874,000
April	- 164,000	4,880,000	134,000	5,580,000	4,680	153,000	262,000	1,140,000
May	223,000	6,840,000	94,000	3,170,000	20,800	218,000	296,000	1,430,000
June	70,200	3,090,000	65,700	2,620,000	1,690	27,400	118,000	1,550,000
July	200,000	5,910,000	33,200	1,270,000	41,500	490,000	234,000	1,780,000
August	187,000	7,510,000	118,000	786,000	3,450	22,000	273,000	2,060,000
January-June	1,100,000	30,100,000	583,000	21,900,000	113,000	1,130,000	1,550,000	XX
January-July	1,300,000	36,000,000	616,000	23,200,000	155,000	1,620,000	1,780,000	XX
January-August	1,490,000	43,500,000	734,000	24,000,000	158,000	1,640,000	2,060,000	XX

XX Not applicable.

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

<sup>2</sup>May include other intermediate products of cobalt metallurgy and unwrought cobalt alloys.

<sup>3</sup>Cobalt acetates and cobalt chlorides.

<sup>4</sup>Free alongside ship (f.a.s.) value.

<sup>5</sup>Estimated from gross weights.

<sup>6</sup>May include revisions to prior months.

#### TABLE 7

#### U.S. EXPORTS OF WROUGHT COBALT, COBALT ORE, AND CONCENTRATES<sup>1</sup>

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

	Wrought co	obalt and	Cobalt or	e and	
	cobalt a	rticles	concentrates		
Period	Quantity	Value <sup>2</sup>	Quantity	Value <sup>2</sup>	
2006:					
June	112,000	\$6,110,000	31,800	\$423,000	
July	130,000	7,020,000	81,200	1,320,000	
August	140,000	6,350,000	6,690	162,000	
September	165,000	8,040,000	107,000	585,000	
October	178,000	8,400,000	59,700	1,410,000	
November	209,000	9,960,000	20,800	716,000	
December	185,000	7,980,000	59,200	1,700,000	
January-June	974,000	42,600,000	160,000	3,250,000	
January-July	1,100,000	49,700,000	241,000	4,570,000	
January-August	1,240,000	56,000,000	248,000	4,730,000	
January-December	1,980,000	90,400,000	495,000	9,130,000	
2007:					
January	155,000	8,360,000	10,400	436,000	
February	93,000	5,870,000	13,600	713,000	
March	126,000	7,950,000	21,800	1,050,000	
April	128,000	8,040,000	134,000	1,950,000	
May	123,000	7,450,000	19,800	883,000	
June	132,000	8,670,000	6,050	79,900	
July	128,000	7,550,000	110,000	279,000	
August	95,300	6,180,000	7,850	180,000	
January-June	757,000	46,300,000	206,000	5,120,000	
January-July	886,000	53,900,000	316,000	5,390,000	
January-August	981,000	60,100,000	324,000	5,570,000	

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown. <sup>2</sup>Free alongside ship (f.a.s.) value.