

Mineral Industry Surveys

For information, contact:

Kim B. Shedd, Cobalt Commodity Specialist National Minerals Information Center U.S. Geological Survey 989 National Center Reston, VA 20192

Telephone: (703) 648-4974, Fax: (703) 648-7757

Email: kshedd@usgs.gov

Annie Hwang (Data) Telephone: (703) 648-7952 Fax: (703) 648-7975 Email: ahwang@usgs.gov

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

COBALT IN MARCH 2018

On the basis of preliminary data, U.S. cobalt consumption in January through March was slightly less than consumption during the same period in 2017. The amount of cobalt contained in U.S. imports of cobalt metals and chemicals in January through March 2018 was 15% more than that imported during the same period in 2017 (table 2). The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals in January through March 2018 was more than double that exported during the same period in 2017 (table 4).

Prices

Cobalt prices continued the upward trend that began in early 2016 as a result of strong demand from consumers, limited availability of cobalt on the spot market, and an increase in metal purchases by investors. In March, the monthly average U.S. spot cobalt price was 10% higher than that in February 2018 and 69% higher than that in March 2017. The monthly average LME cash mean price was 9% higher than that in

February 2018 and 66% higher than that in March 2017. The following listed prices are for cobalt metal in March, in dollars per pound.

Type	Price range	Average price
U.S. spot ¹	39.00-45.00	41.48
LME cash mean ²	35.95-43.20	39.80

¹Source: Platts Metals Week, minimum 99.8% cobalt cathode.
²London Metal Exchange, mean of the cash buyer and cash seller price, minimum 99.3% cobalt briquettes, cathode, ingot, or rounds (converted from dollars per metric ton and rounded to the nearest cent).

List services and web feed subscribers are the first to receive notification of USGS minerals information publications and data releases. For information on how to subscribe, go to http://minerals.usgs.gov/minerals/.

$\label{eq:table 1} \textbf{TABLE 1}$ REPORTED CONSUMPTION AND STOCKS OF COBALT MATERIALS 1

(Metric tons, contained cobalt)

		Stocks, end of period							
		LME ^{3, 5}							
	Consumption,	U.S.	U.S.	U.S.	Non-U.S.				
Period	U.S. industry ^{p, 2}	industry ^{p, 2}	Government3,4	warehouse	warehouse	Total			
2017:	•	•							
March	747	932	301	193	533	726			
April	740	935	301	188	601	789			
May	734	937	301	188	557	745			
June	731	929	301	193	548	741			
July	728	939	301	191	503	694			
August	732	966	302	191	553	744			
September	731	978	302	183	622	805			
October	724	985	302	167	583	750			
November	701	977	302	163	562	725			
December	705	996	302	160	420	580			
January-March	2,190	932	301	193	533	726			
January-December ⁶	8,710	996	302	160	420	580			
2018:									
January	717	1,000	302	159	385	544			
February	697	1,010	302	159	360	519			
March	746	962	302	141	397	538			
January-March	2,160	962	302	141	397	538			

^pPreliminary.

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

²Data for cobalt metal, metal powder, oxide and other chemical compounds, and scrap reported by U.S. cobalt processors and consumers. Includes estimates.

³Cobalt metal

⁴Data from Defense Logistics Agency Strategic Materials.

⁵London Metal Exchange.

⁶U.S. industry data based on monthly reports.

 $\label{eq:table 2} \textbf{U.S. IMPORTS FOR CONSUMPTION OF COBALT, BY COUNTRY OR LOCALITY}^1$

	Metals ² Gross		Oxides and hydroxides		Salts and compounds ³		Total cobalt	Cobalt content,
			Gross	ilydioxides	Gross	ompounds	content for	
Period and country or locality of origin	weight (metric tons)	Value ⁴ (thousands)	weight (metric tons)	Value ⁴ (thousands)	weight (metric tons)	Value ⁴ (thousands)	the period ⁵ (metric tons)	year to date ^{5, 6} (metric tons)
2017:	(metric tons)	(tilousalius)	(metric tons)	(tilousalius)	(metric tons)	(tilousalius)	(metric tons)	(metric tons)
March	793	\$25,500	207	\$5,570	234	\$2,630	1,020	3,250
April	980	45,500	222	7,050	211	2,040	1,020	3,230 4,440
	535	25,600	227	7,030	215	2,370	764	5,210
May June	977	49,800	106	3,930	316	3,750		
July	756	38,900	141	5,540	175	2,770	1,160 917	6,360
	569	31,300	202	8,180	297	3,660	800	7,280 8,080
August								
September	789	45,300	139	5,970	234	2,500	963	9,040
October	875	51,900	104	4,670	187	2,730	1,000	10,000
November	1,090	63,800	250	10,900	182	3,340	1,340	11,400
December	507	28,300	201	9,330	223	3,530	725	12,100
January–March	2,650	84,800	523	13,100	653	7,480	3,250	XX
January-December	9,730	465,000	2,120	76,600	2,690	34,200	12,100	XX
2018:								
January	1,150	70,900	135	6,220	345	4,790	1,350	1,350
February	902	62,500	176	9,700	271	2,970	1,110	2,470
March:								
Australia	182	12,600					182	482
Belgium	(7)	12	176	9,960	29	143	135	207
Brazil					194	949	54	83
Canada	77	4,680					77	534
China	61	4,720	21	1,330	259	2,470	157	389
Finland	7	596	48	2,380	430	3,270	174	453
France	8	634					8	8
Germany	3	193					3	12
Hong Kong								25
India								1
Japan	175	11,500					175	532
Korea, Republic of								(7)
Madagascar	21	1,740					21	126
Morocco	30	2,350					30	95
Norway	182	7,480					182	458
Russia								84
South Africa	17	131					17	110
United Kingdom	18	784	59	3,360	21	152	66	146
Total	782	47,500	304	17,000	933	6,980	1,280	3,750
January–March	2,830	181,000	615	33,000	1,550	14,700	3,750	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.

 ${\it TABLE~3}$ U.S. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS, BY COUNTRY OR LOCALITY 1

	Unwrought	cobalt alloys	Cobalt wast	e and scrap	Wrought cobalt and cobalt articles		
	Gross		Gross		Gross		
Period and country or	weight	Value ²	weight	Value ²	weight	Value ²	
locality of origin	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	
2017:	()	(()	()	()	()	
March	44	\$1,600	119	\$1,780	29	\$3,240	
April	45	1,960	134	1,830	26	3,080	
May	26	1,150	158	2,420	19	2,210	
June	31	1,300	139	1,980	13	2,570	
July	12	530	153	2,820	6	1,570	
August	12	484	102	1,580	24	2,510	
September	24	1,140	119	1,750	20	2,680	
October	45	2,110	181	2,790	13	2,780	
November	27	1,260	103	1,100	20	3,040	
December	50	2,270	124	2,060	15	2,750	
January–March	145	6,240	330	4,860	51	7,210	
January–December	418	18,400	1,540	23,200	206	30,400	
2018:	- 410	10,400	1,540	23,200	200	50,400	
January	42	2,040	198	3,090	19	3,330	
February	63	3,230	161	2,780	22	2,870	
March:		3,230	101	2,700		2,070	
Austria	(3)	4			(3)	3	
Belgium	1	87			(3)	24	
Brazil			(3)	4		24	
Canada	(3)	3	23	242	6	1,360	
China	- (3)			242	1	355	
Finland	(3)	2					
France	- (3)		21	465	14	1,650	
Germany	(3)	11	1	7	14	242	
·	- (3)		(3)	3	(3)	32	
India						27	
Ireland			81	237	(3)		
Israel	- -		2	16 97		10	
Japan Kanaa Banahiia af			6		(3)	10	
Korea, Republic of			(3)	10			
Malaysia	(3)	9					
Mexico				124	(3)	10	
Netherlands			5	134			
Norway	2	84					
Poland			4	39			
Singapore			1	14			
Sweden					(3)	7	
Switzerland					(3)	14	
Tunisia			8	77	(3)	3	
Turkey			21	169			
United Kingdom	35	1,870	85	2,130	19	1,020	
Vietnam					(3)	8	
Total	38	2,070	258	3,650	41	4,760	
January–March Zero.	143	7,340	617	9,510	83	11,000	

⁻⁻ Zero.

 $^{^{1}\}mbox{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

²Customs value.

 $^{^3}Less$ than $^{1}\!\!/_{\!2}$ unit.

 $\label{eq:table 4} \textbf{U.S. EXPORTS OF COBALT MATERIALS}^1$

	Unwrought co	balt, powders,						Cobalt
	matte, waste and scrap ²		Oxides and hydroxides		Salts and compounds ³		Total cobalt	content,
	Gross		Gross		Gross		content for	year to
	weight	Value ⁴	weight	Value ⁴	weight	Value ⁴	the period ⁵	date ^{5, 6}
Period	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(metric tons)
2017:								
March	471	\$10,900	97	\$434			541	1,290
April	312	9,180	10	269	(7)	\$7	319	1,600
May	589	12,000	40	305	36	532	626	2,230
June	398	7,520	5	139	19	281	405	2,640
July	486	9,650	9	313	4	66	494	3,130
August	347	8,490	4	138	19	277	354	3,480
September	368	10,100	13	576	19	20	382	3,870
October	485	13,600	7	235	19	281	494	4,360
November	841	11,200	4	169	20	295	849	5,210
December	507	11,600	11	507	19	330	520	5,730
January-March	1,200	23,800	97	434	49	425	1,290	XX
January-December	5,540	117,000	200	3,090	205	2,510	5,730	XX
2018:	= -							
January	308	8,990	1	58	19	280	314	314
February	973	11,800	19	353	16	276	991	1,300
March	1,310	17,700	4	190			1,310	2,610
January-March	2,590	38,500	25	601	35	556	2,610	XX

XX Not applicable. -- Zero.

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.

 $\label{eq:table 5} \text{U.S. EXPORTS OF WROUGHT COBALT, COBALT ORE,} \\ \text{AND CONCENTRATES}^1$

	Wrought		Cobalt ore and			
	cobalt articles		concentrates			
	Gross	Gross				
	weight	Value ²	weight	Value ²		
Period	(metric tons)	(thousands)	(metric tons)	(thousands)		
2017:						
March	104	\$8,090	4	\$20		
April	93	8,180	105	415		
May	70	7,590	132	533		
June	104	8,610				
July	79	7,860	1	5		
August	115	9,010	6	30		
September	98	8,990	1	5		
October	107	8,350				
November	85	10,200				
December	94	10,400	3	7		
January-March	341	23,000	5	45		
January-December	1,190	102,000	253	1,040		
2018:						
January	98	9,690				
February	99	10,100	(3)	4		
March	88	10,700				
January-March	285	30,500	(3)	4		

⁻⁻ 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.