

Mineral Industry Surveys

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COBALT IN MARCH 2017

U.S. cobalt consumption and stocks in March 2017 will be published in a subsequent issue. The amount of cobalt contained in U.S. imports of cobalt metals and chemicals in January through March 2017 was 15% more than that imported during the same period in 2016 (table 2). The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals in January through March 2017 was 28% more than that exported during the same period in 2016 (table 4).

Prices

In March, the monthly average U.S. spot cobalt price increased for the ninth consecutive month and was 127% higher than that in January 2016. The monthly average LME cash mean price increased for the 11th consecutive month and was 127% higher than that in January 2016. The following listed prices are for cobalt metal in March, in dollars per pound.

Type Price range Average price U.S. spot 23.00–26.00 24.50 LME cash mean 23.02–24.95 23.94

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).

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 $\label{eq:table 1} \textbf{TABLE 1}$ 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}	Government ^{3, 4}	warehouse	warehouse	Total		
2016:	•	-						
March	705	1,070	301	193	458	651		
April	718	1,050	301	197	457	654		
May	734	1,050	301	186	451	637		
June	712	1,030	301	190	455	645		
July	708	1,020	301	190	454	644		
August	693	1,040	301	190	440	630		
September	698	1,030	301	190	435	625		
October	734	1,040	301	195	425	620		
November	711	1,040	301	195	429	624		
December	724	1,020	301	195	496	691		
January-March	2,140 ^r	1,070 ^r	301	193	458	651		
January–December ⁶	8,570	1,020	301	195	496	691		
2017:								
January	NA	NA	301	195	458	653		
February	NA	NA	301	185	533	718		
March	NA	NA	301	193	533	726		
January-March	NA	NA	301	193	533	726		

^pPreliminary. ^rRevised. NA Not available.

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.

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

	Met	Metals ²		Oxides and hydroxides		Salts and compounds ³		Cobalt content,
Period and country	Gross weight	Value ⁴	Gross weight	Value ⁴	Gross weight	Value ⁴	content for the period ⁵	year to date ^{5, 6}
of origin	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(metric tons)
2016: March	720	\$17,300	173	\$3,260	170	\$1,860	903	2,830
	_ 720 701	18,300	173	3,680	170	1,790	903 899	3,730
April		15,500	145	2,790	347	3,390	857	3,730 4,580
May			143	*				
June July	939 767	22,200 19,000	147	2,750 2,310	221 241	2,270 1,990	1,120 918	5,700 6,620
August	1,240	30,200	243	4,690	225	2,230	1,480	8,100
September	_ 724	18,100	223	4,650	85	786	910	9,010
October	_ 787	20,600	156	3,300	177	1,630	958	9,970
November	1,120	28,800 40,000	99	2,210	103 149	756 1,340	1,220	11,200
December Manak		54,400 ^r	209	4,690		4,350 ^r	1,650	12,800
January–March	2,380		444	8,260	380 ^r		2,830	XX
January–December	10,800	267,000	1,960	39,300	2,120	20,500	12,800	XX
2017:		21.700	105	2 200	102	2 120	200	000
January	_ 720	21,700	135	3,300	183	2,130	880	880
February	1,130	37,600	180	4,260	237	2,720	1,350	2,230
March:	_							4.50
Australia								160
Belgium	_ 3	178	54	1,680			42	88
Bolivia	199	3,980					199	199
Brazil					2	28	1	12
Canada	106	4,740					106	418
China	83	2,670	45	1,220	70	671	135	312
Finland	37	1,310	65	1,470	146	1,720	133	383
France	12	448					12	20
Germany	_ 4	251	5	255	(7)	3	7	15
Hong Kong								42
India								5
Italy	_ 2	47					2	2
Japan	97	2,930					97	274
Madagascar	126	4,700					126	315
Morocco	10	480					10	78
Norway								468
Peru					4	91	2	2
Russia								118
South Africa	44	1,620					44	55
Switzerland								36
United Kingdom	1	29	38	936	11	117	32	154
Zambia	70	2,160					70	90
Total	793	25,500	207	5,570	234	2,630	1,020	3,250
January–March	2,650	84,800	523	13,100	653	7,480	3,250	XX

^rRevised. 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.

 $\label{eq:table 3} \text{U.s. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS, BY COUNTRY}^1$

	Unwrought o	obalt allows	Cobalt wast	a and caren	Wrought cobalt and cobalt articles		
		cobait alloys		e and scrap		irticies	
Period and country of origin	Gross weight (metric tons)	Value ² (thousands)	Gross weight (metric tons)	Value ² (thousands)	Gross weight (metric tons)	Value ² (thousands)	
2016:	(metric tons)	(thousands)	(metric tons)	(tirousurus)	(metric tons)	(thousands)	
March	91	\$2,750	82	\$1,150	11	\$1,440	
April	- 67	2,080	43	619	9	1,570	
May	- 75	2,860	64	896	7	1,310	
June	- 78 78	2,090	77	1,090	14	2,070	
July	- 70 70	2,360	74	1,230	6	1,360	
August	- 60	1,770	115	1,600	15	1,700	
September	24	1,040	114	1,410	21	2,220	
October	51	2,010	155	1,550	27	2,760	
November	- 67	2,450	94	1,230	25	2,390	
December	43	1,540	108	1,540	8	1,950	
January–March	283	8,810	182	2,640	33	4,580	
January–December	820	27,000	1,030	13,800	167	21,900	
2017:	_ 020	27,000	1,030	13,000	107	21,500	
January	- 68	3,080	100	1,620	11	1,920	
February	33	1,550	111	1,470	12	2,050	
March:	-	-,,,,,		-,		_,,,,,	
Australia	-				3	70	
Austria	- 				2	118	
Belgium	_ 2	54					
Canada	- 		7	77	5	860	
China	(3)	11	3	57	1	262	
Colombia			1	8			
France	- 		13	213	6	1,140	
Germany	-		(3)	6	1	189	
India	- 				(3)	15	
Ireland			26	395			
Japan			9	96	(3)	35	
Korea, Republic of	- 		2	19			
Mexico	- 		3	35	(3)	5	
Netherlands	- 		(3)	10			
Norway	_ 2	84					
Switzerland	- 		6	100	(3)	61	
Taiwan	- 				(3)	3	
United Kingdom	40	1,460	47	761	11	484	
Total	44	1,600	119	1,780	29	3,240	
January-March	145	6,240	330	4,860	51	7,210	

⁻⁻ Zero.

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

²Customs value.

³Less than ½ 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 c	ompounds 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)
2016:								
March	289	\$6,850	72	\$236	19	\$132	345	1,000
April	399	7,530	2	51	29	130	408	1,410
May	317	7,170	4	39	75	371	337	1,750
June	303	6,100	10	214	68	356	327	2,080
July	311	5,570					311	2,390
August	458	8,030	21	256	39	202	483	2,870
September	275	5,480	6	130	8	66	281	3,150
October	273	5,240	4	143	(7)	6	275	3,430
November	360	6,160	1	52	24	102	367	3,790
December	361	7,430	2	100	9	86	365	4,160
January-March	929	19,400	83	399	62	283	1,000	XX
January-December	3,990	78,100	134	1,380	314	1,600	4,160	XX
2017:								
January	356	6,380			31	213	364	364
February	376	6,590			18	212	381	745
March	471	10,900	97	434			541	1,290
January-March	1,200	23,800	97	434	49	425	1,290	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.

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

	Wrought c	ore and			
	cobalt a	rticles	concentrates		
	Gross		Gross		
	weight	Value ²	weight	Value ²	
Period	(metric tons)	(thousands)	(metric tons)	(thousands)	
2016:					
March	163	\$9,130			
April	140	8,190			
May	109	8,380			
June	137	9,970			
July	106	7,820	(3)	\$4	
August	80	6,510	2	59	
September	93	7,790	(3)	3	
October	120	8,000			
November	90	7,910			
December	103	8,490			
January-March	409 ^r	23,400 ^r			
January-December	1,390	96,500	2	65	
2017:					
January	153	8,520			
February	84	6,430	2	26	
March	104	8,090	4	20	
January-March	341	23,000	5	45	

^rRevised. -- 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.