

# Mineral Industry Surveys

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## COBALT IN DECEMBER 2019

The amount of cobalt contained in U.S. imports of cobalt metals and chemicals in December 2019 was 81% more than that imported in December 2018. In 2019, the amount of cobalt contained in imports was 16% more than that imported during 2018 (table 2). The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals in December 2019 was 20% less than that exported in December 2018. In 2019, the amount exported was 43% less than that exported in 2018 (table 4).

Type	Price range	Average price
U.S. spot <sup>1</sup>	16.00–17.50	16.50
LME cash mean <sup>2</sup>	Not available	15.22

<sup>1</sup>Source: Platts Metals Week, minimum 99.8% cobalt cathode.  
<sup>2</sup>London 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).

**Prices**

In December, the monthly average U.S. spot cobalt price decreased by 6% from that in November and was 46% lower than that in December 2018. The monthly average LME cash mean price decreased by 5% from that in November and was 39% lower than that in December 2018. The following listed prices are for cobalt metal in December, in dollars per pound.

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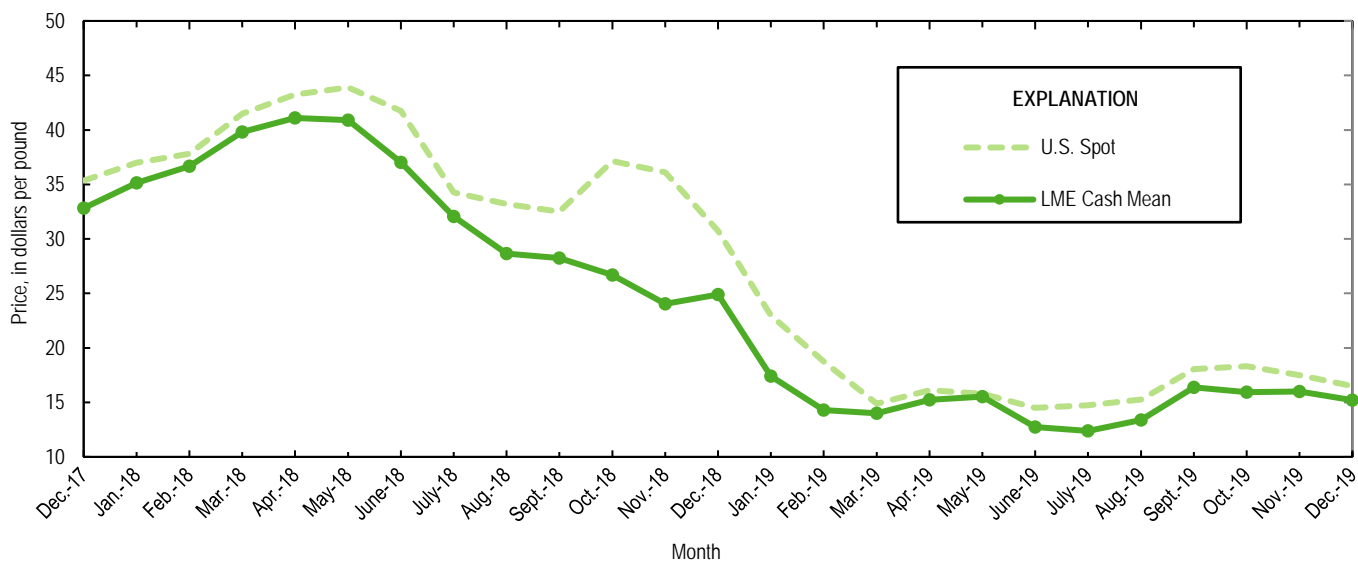


Figure 1. Average U.S. spot prices and LME cash mean prices for December 2017 through December 2019. Sources: Platts Metals Week and London Metal Exchange.\*

\*Corrections posted on June 16, 2020.

TABLE 1  
 REPORTED STOCKS OF COBALT METAL, END OF PERIOD

(Metric tons, contained cobalt)

Period	U.S. Government <sup>2</sup>	LME <sup>1</sup>		Total
		U.S. warehouse	Non-U.S. warehouse	
2018:				
December	302	130	733	863
2019:				
January	302	184	781	965
February	302	204	779	983
March	302	204	761	965
April	302	204	700	904
May	302	200	661	861
June	302	200	659	859
July	302	191	649	840
August	302	191	645	836
September	302	191	643	834
October	302	111	600	711
November	302	111	576	687
December	302	102	583	685

<sup>1</sup>London Metal Exchange.

<sup>2</sup>Data from Defense Logistics Agency Strategic Materials.

TABLE 2  
U.S. IMPORTS FOR CONSUMPTION OF COBALT, BY COUNTRY OR LOCALITY<sup>1</sup>

Period and country or locality of origin	Metals <sup>2</sup>		Oxides and hydroxides		Salts and compounds <sup>3</sup>		Total cobalt content for the period <sup>5</sup> (metric tons)	Cobalt content, year to date <sup>5,6</sup> (metric tons)
	Gross weight (metric tons)	Value <sup>4</sup> (thousands)	Gross weight (metric tons)	Value <sup>4</sup> (thousands)	Gross weight (metric tons)	Value <sup>4</sup> (thousands)		
2018:								
December	622	\$39,300	103	\$4,250	86	\$1,780	727	11,800
January–December	9,170	621,000	1,690	92,000	4,660	42,000	11,800	XX
2019:								
January	852	48,000	116	3,880	119	2,040	978	978
February	824	41,400	116	2,630	268	4,670	998	1,980
March	1,240	50,300	102	2,900	159	2,430	1,370	3,340
April	1,260	48,400	161	3,960	239	3,630	1,470	4,810
May	1,220	43,000	190	4,740	286	2,880	1,440	6,250
June	558	17,800	123	3,000	141	1,190	687	6,940
July	1,030	34,000	181	4,350	115	1,580	1,200	8,130
August	602	17,700	119	2,670	88	1,120	718	8,850
September	1,400	47,500	123	3,110	191	1,930	1,550	10,400
October	783	27,700	198	5,150	152	1,640	976	11,400
November	829	29,600	167	4,600	231	3,110	1,030	12,400
December:								
Australia	78	2,690	--	--	--	--	78	725
Belgium	4	166	38	1,020	4	31	32	471
Brazil	--	--	--	--	2	53	1	77
Canada	237	7,940	--	--	--	--	237	2,400
China	1	50	1	17	7	113	4	407
Finland	39	1,550	10	248	83	1,090	75	1,190
France	1	53	--	--	--	--	1	10
Germany	4	187	--	--	--	--	4	58
India	--	--	--	--	--	--	--	12
Japan	213	7,440	--	--	--	--	213	1,410
Korea, Republic of	(7)	5	--	--	--	--	(7)	106
Madagascar	293	11,000	--	--	--	--	293	1,380
Mexico	25	779	--	--	--	--	25	45
Morocco	48	1,590	--	--	--	--	48	267
Norway	218	8,080	--	--	--	--	218	3,190
Russia	21	725	--	--	--	--	21	1,220
South Africa	24	177	--	--	--	--	24	307
Taiwan	--	--	--	--	--	--	--	56
United Kingdom	2	87	53	1,460	7	86	41	386
Other	--	--	--	--	--	--	--	6
Total	1,210	42,600	102	2,740	103	1,370	1,320	13,700
January–December	11,800	448,000	1,700	43,700	2,090	27,600	13,700	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 previously published data.

<sup>7</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 3  
U.S. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS, BY COUNTRY OR LOCALITY<sup>1</sup>

Period and country or locality of origin	Unwrought cobalt alloys		Cobalt waste and scrap		Wrought cobalt and cobalt articles	
	Gross weight (metric tons)	Value <sup>2</sup> (thousands)	Gross weight (metric tons)	Value <sup>2</sup> (thousands)	Gross weight (metric tons)	Value <sup>2</sup> (thousands)
2018:						
December	85	\$4,330	212	\$3,360	23	\$4,020
January–December	565	31,900	2,430	41,100	341	44,600
2019:						
January	29	1,920	173	1,990	42	5,410
February	59	3,490	179	2,520	24	3,350
March	85	4,040	144	2,410	43	4,890
April	38	2,870	253	3,430	34	4,490
May	18	1,140	156	3,360	41	4,510
June	21	1,550	145	1,460	47	4,480
July	34	2,430	223	2,420	55	4,630
August	39	2,470	171	2,440	23	3,190
September	22	1,510	155	1,880	67	4,860
October	16	875	158	2,120	47	4,980
November	21	1,240	192	2,950	43	4,480
December:						
Belgium	15	575	3	173	(3)	4
Canada	--	--	6	51	3	851
China	--	--	4	42	1	406
France	--	--	1	14	17	1,360
Germany	(3)	11	(3)	3	3	525
Ireland	--	--	38	134	--	--
Japan	(3)	12	9	49	(3)	7
Romania	--	--	21	353	--	--
Switzerland	--	--	3	5	(3)	14
Tunisia	--	--	15	136	--	--
United Kingdom	25	1,680	50	1,210	26	2,130
Other	(3)	3	2	9	1	28
Total	40	2,280	152	2,170	52	5,320
January–December	422	25,800	2,100	29,200	517	54,600

-- 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.

<sup>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 4  
U.S. EXPORTS OF COBALT MATERIALS<sup>1</sup>

Period	Unwrought cobalt, powders, matte, waste and scrap <sup>2</sup>		Oxides and hydroxides		Salts and compounds <sup>3</sup>		Total cobalt content for the period <sup>5</sup> (metric tons)	Cobalt content, year to date <sup>5,6</sup> (metric tons)
	Gross weight (metric tons)	Value <sup>4</sup> (thousands)	Gross weight (metric tons)	Value <sup>4</sup> (thousands)	Gross weight (metric tons)	Value <sup>4</sup> (thousands)		
2018:								
December	447	\$13,000	2	\$73	22	\$422	453	6,960
January–December	6,850	172,000	69	2,810	279	4,490	6,960	XX
2019:								
January	266	9,190	3	126	22	416	273	273
February	518	15,900	4	84	20	258	525	798
March	413	14,300	1	49	6	69	415	1,210
April	424	10,800	4	207	16	157	431	1,650
May	285	9,430	3	74	46	287	299	1,940
June	252	9,180	7	90	10	208	259	2,200
July	214	8,870	44	658	19	170	250	2,450
August	398	10,700	4	115	--	--	401	2,850
September	237	8,370	2	55	26	316	244	3,100
October	262	9,760	5	215	38	487	274	3,370
November	267	8,380	(7)	13	--	--	267	3,640
December	361	11,000	1	25	(7)	4	361	4,000
January–December	3,900	126,000	79	1,710	203	2,370	4,000	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>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 previously published data.

<sup>7</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 5  
U.S. EXPORTS OF WROUGHT COBALT, COBALT ORE,  
AND CONCENTRATES<sup>1</sup>

Period	Wrought cobalt and cobalt articles		Cobalt ore and concentrates	
	Gross weight (metric tons)	Value <sup>2</sup> (thousands)	Gross weight (metric tons)	Value <sup>2</sup> (thousands)
2018:				
December	124	\$13,400	--	--
January–December	1,160	127,000	55	\$562
2019:				
January	111	12,200	16	103
February	102	11,300	--	--
March	105	13,300	8	264
April	151	13,300	--	--
May	117	12,600	(3)	6
June	109	11,400	(3)	5
July	102	11,300	--	--
August	127	13,700	--	--
September	139	12,400	(3)	10
October	229	17,200	(3)	4
November	242	18,700	--	--
December	208	16,600	77	211
January–December	1,740	164,000	102	603

-- Zero.

<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.

<sup>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.