

# Mineral Industry Surveys

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## COBALT IN OCTOBER 2019

The amount of cobalt contained in U.S. imports of cobalt metals and chemicals in October 2019 was 15% less than that imported in October 2018. For the first ten months of 2019, the amount of cobalt contained in imports was 9% more than that imported during the same period in 2018 (table 2). The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals in October 2019 was 15% less than that exported in October 2018 and during the first ten months of 2019, the amount exported was 46% less than that exported during the same period in 2018 (table 4).

40% lower than that in October 2018. The following listed prices are for cobalt metal in October, in dollars per pound.

Type	Price range	Average price
U.S. spot <sup>1</sup>	18.00–18.75	18.33
LME cash mean <sup>2</sup>	15.31–16.22	15.95

<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 October, the monthly average U.S. spot cobalt price increased slightly from that in September and was 51% lower than that in October 2018. The monthly average LME cash mean price decreased slightly from that in September and was

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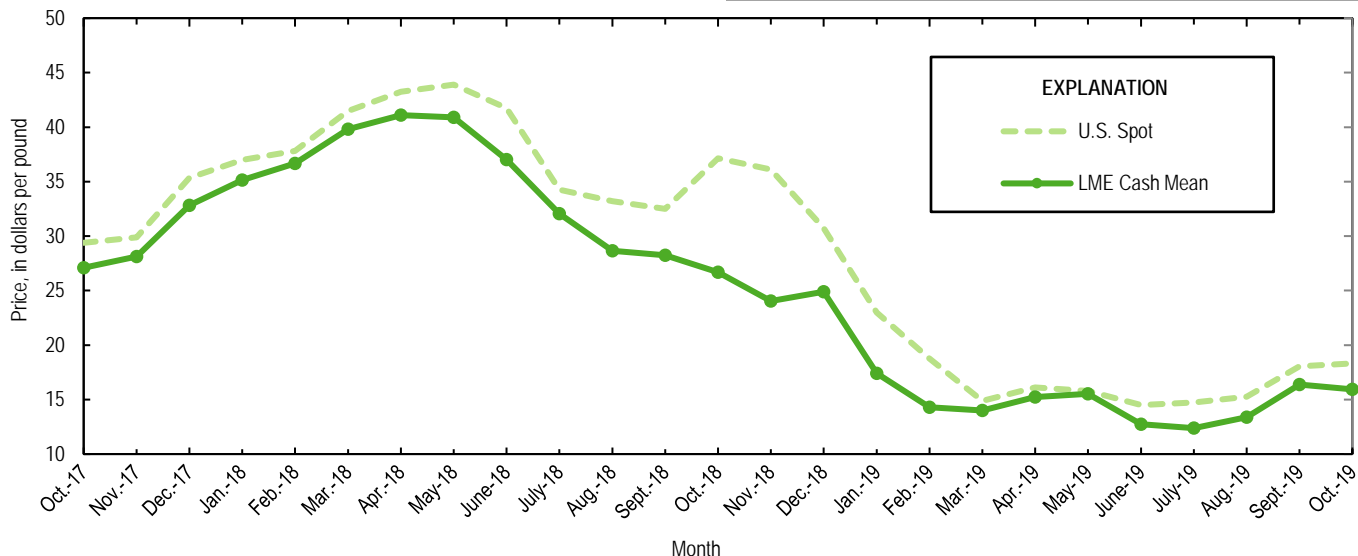


Figure 1. Average U.S. spot prices and LME cash mean prices for October 2017 through October 2019. Sources: Platts Metals Week and London Metal Exchange.\*

\*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	
<b>2018:</b>				
October	302	130	611	741
November	302	130	585	715
December	302	130	733	863
<b>2019:</b>				
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

<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:								
October	968	\$63,900	112	\$5,170	353	\$4,000	1,150	10,400
November	462	29,100	102	5,930	385	3,030	640	11,100
December	622	39,300	103	4,250	86	1,780	727	11,800
January–October	8,090 <sup>r</sup>	553,000 <sup>r</sup>	1,480	81,800	4,190	37,200	10,400	XX
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:								
Australia	--	--	--	--	--	--	--	647
Belgium	1	38	80	2,360	--	--	59	373
Brazil	--	--	--	--	31	132	8	50
Canada	170	5,940	--	--	3	57	171	2,010
China	1	50	4	119	29	296	12	397
Finland	98	3,130	60	1,460	83	1,060	172	1,020
France	(7)	22	--	--	--	--	(7)	8
Germany	11	434	--	--	--	--	11	51
India	--	--	--	--	--	--	--	12
Japan	143	4,430	--	--	--	--	143	1,060
Korea, Republic of	--	--	15	282	--	--	10	94
Madagascar	105	3,580	--	--	--	--	105	961
Mexico	--	--	--	--	--	--	--	20
Morocco	--	--	--	--	--	--	--	179
Norway	159	6,470	--	--	--	--	159	2,730
Russia	92	3,490	--	--	(7)	2	92	1,150
South Africa	--	--	--	--	--	--	--	233
Taiwan	--	--	26	584	--	--	19	43
United Kingdom	3	140	14	335	6	96	16	328
Other	--	--	--	--	--	--	--	4
Total	783	27,700	198	5,150	152	1,640	976	11,400
January–October	9,760	376,000	1,430	36,400	1,760	23,100	11,400	XX

<sup>r</sup>Revised. 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:						
October	41	\$2,380	264	\$4,170	35	\$3,880
November	53	3,550	165	3,360	39	4,990
December	85	4,330	212	3,360	23	4,020
January–October	427	24,000	2,050	34,300	279 <sup>r</sup>	35,600 <sup>r</sup>
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:						
Belgium	6	237	--	--	(3)	8
Canada	--	--	21	181	3	1,140
Costa Rica	--	--	9	79	--	--
Czechia	--	--	2	29	--	--
France	--	--	11	227	9	1,190
India	(3)	4	--	--	8	78
Ireland	--	--	48	478	--	--
Japan	--	--	15	195	(3)	30
Netherlands	--	--	6	136	--	--
Singapore	--	--	20	367	--	--
Tunisia	--	--	10	94	--	--
United Kingdom	10	631	12	313	23	1,850
Other	(3)	3	3	25	4	669
Total	16	875	158	2,120	47	4,980
January–October	361	22,300	1,760	24,000	422	44,800

<sup>r</sup>Revised. -- 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:								
October	312	\$11,400	2	\$74	39	\$496	322	6,220
November	284	11,700	3	64	11	61	289	6,510
December	447	13,000	2	73	22	422	453	6,960
January–October	6,120 <sup>r</sup>	148,000 <sup>r</sup>	64	2,670	246	4,010	6,220 <sup>r</sup>	XX
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
January–October	3,270	106,000	78	1,670	203	2,370	3,370	XX

<sup>r</sup>Revised. 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.

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:				
October	92	\$11,900	--	--
November	147	14,000	(3)	\$11
December	124	13,400	--	--
January–October	893	99,500	55	551
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
January–October	1,290	129,000	25	392

-- 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.