

## Mineral Industry Surveys

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## **COBALT IN NOVEMBER 2019**

The amount of cobalt contained in U.S. imports of cobalt metals and chemicals in November 2019 was 61% more than that imported in November 2018. For the first 11 months of 2019, the amount of cobalt contained in imports was 12% 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 November 2019 was 7% less than that exported in November 2018 and during the first 11 months of 2019, the amount exported was 44% less than that exported during the same period in 2018 (table 4).

## **Prices**

In November, the monthly average U.S. spot cobalt price decreased by 5% from that in October and was 52% lower than that in November 2018. The monthly average LME cash mean price essentially unchanged from that in October and was 39%

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

Type	Price range	Average price
U.S. spot <sup>1</sup>	17.00-18.00	17.50
LME cash mean <sup>2</sup>	15.99-15.99	15.99

<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).

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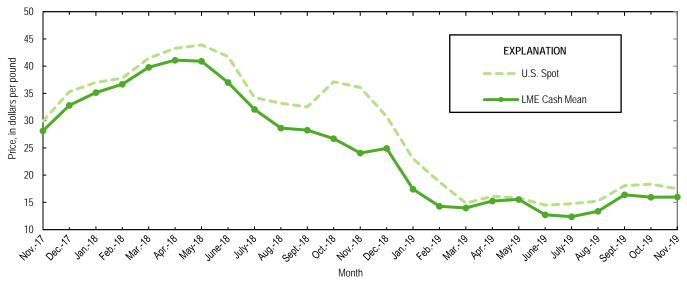


Figure 1. Average U.S. spot prices and LME cash mean prices for November 2017 through November 2019. Sources: Platts Metals Week and London Metal Exchange.\*

<sup>\*</sup>Corrections posted on June 16, 2020.

 $\label{table 1} \text{REPORTED STOCKS OF COBALT METAL, END OF PERIOD}$ 

(Metric tons, contained cobalt)

		LME <sup>1</sup>				
	U.S.	U.S.	Non-U.S.			
Period	Government <sup>2</sup>	warehouse	warehouse	Total		
2018:						
November	302	130	585	715		
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		

London Metal Exchange.

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

TABLE 2 U.S. IMPORTS FOR CONSUMPTION OF COBALT, BY COUNTRY OR LOCALITY  $^1$ 

	Metals <sup>2</sup>		Oxides and hydroxides		Salts and compounds <sup>3</sup>		Total cobalt	Cobalt content,
	Gross	18	Gross	iyuroxiucs	Gross	inpounds	content for	,
Period and country or	weight	Value <sup>4</sup>	weight	Value <sup>4</sup>	weight	Value <sup>4</sup>	the period <sup>5</sup>	year to date <sup>5, 6</sup>
locality of origin	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(metric tons)
2018:	(metric tons)	(tilousalius)	(metric tons)	(tilousalius)	(metric tons)	(tilousalius)	(metric tons)	(metric tons)
	162	¢20,100	102	¢£ 020	205	62.020	640	11 100
November	462 622	\$29,100	102	\$5,930	385	\$3,030		11,100
December		39,300		4,250	86	1,780	727	11,800
January-November	8,550 <sup>r</sup>	582,000 <sup>r</sup>	1,580	87,700	4,570	40,200	11,100	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	783	27,700	198	5,150	152	1,640	976	11,400
November:		•				·		·
Australia								647
Belgium	7	372	83	2,480			66	440
Brazil	20	710			20	273	26	76
Canada	152	5,860					152	2,160
China	6	198			3	15	6	403
Finland	3	128	29	820	199	2,620	94	1,110
France	1	34				2,020	1	1,110
Germany	3	141					3	54
India								12
Japan	138	4,910					138	1,190
Korea, Republic of			17	197			136	1,190
		4.570		197				
Madagascar	126	4,570					126	1,090
Mexico								20
Morocco	40	1,500					40	219
Norway	239	9,110					239	2,970
Russia	45	1,630					45	1,200
South Africa	50	377					50	283
Taiwan			18	513			13	56
United Kingdom	1	40	19	590	5	102	17	345
Other	1	34			4	95	2	(
Total	829	29,600	167	4,600	231	3,110	1,030	12,400
January-November	10,600	405,000	1,600	41,000	1,990	26,200	12,400	XX

Revised. XX Not applicable. -- Zero.

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

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

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

<sup>&</sup>lt;sup>4</sup>Customs value.

<sup>&</sup>lt;sup>5</sup>Estimated from gross weights.

<sup>&</sup>lt;sup>6</sup>May include revisions to previously published data.

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

	Unwrought cobalt alloys		Cobalt waste	Cobalt waste and scrap		Wrought cobalt and cobalt articles	
	Gross		Gross		Gross		
Period and country or	weight	Value <sup>2</sup>	weight	Value <sup>2</sup>	weight	Value <sup>2</sup>	
locality of origin	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	
2018:							
November	53	\$3,550	165	\$3,360	39	\$4,990	
December	85	4,330	212	3,360	23	4,020	
January-November	479 <sup>r</sup>	27,500	2,220	37,700	318 <sup>r</sup>	40,600 r	
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:							
Belgium	4	139	5	246	(3)	2	
Canada	(3)	35	1	20	3	1,060	
China			9	4	3	288	
France			18	541	14	1,190	
Germany			(3)	3	2	170	
Ireland			64	284			
Japan			6	54	1	116	
Taiwan			6	232	(3)	31	
Tunisia			10	95			
United Arab Emirates			4	72			
United Kingdom	17	1,070	68	1,400	18	1,520	
Other					3	94	
Total	21	1,240	192	2,950	43	4,480	
January-November	381	23,500	1,950	27,000	465	49,300	

<sup>&</sup>lt;sup>r</sup>Revised. -- Zero.

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

<sup>&</sup>lt;sup>2</sup>Customs value.

<sup>&</sup>lt;sup>3</sup>Less than ½ unit.

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

	Unwrought cob	alt, powders,						Cobalt
	matte, waste	and scrap <sup>2</sup>	Oxides and l	nydroxides	Salts and co	ompounds <sup>3</sup>	Total cobalt	content,
	Gross		Gross		Gross		content for	year to
	weight	Value <sup>4</sup>	weight	Value <sup>4</sup>	weight	Value <sup>4</sup>	the period <sup>5</sup>	date <sup>5, 6</sup>
Period	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(metric tons)
2018:								
November	284	\$11,700	3	\$64	11	\$61	289	6,510
December	447	13,000	2	73	22	422	453	6,960
January-November	6,400 <sup>r</sup>	159,000 <sup>r</sup>	67	2,740	257	4,070	6,510	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
November	267	8,380	(7)	13			267	3,640
January-November	3,530	115,000	78	1,690	203	2,370	3,640	XX

<sup>&</sup>lt;sup>r</sup>Revised. XX Not applicable. -- Zero.

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

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

<sup>&</sup>lt;sup>3</sup>Cobalt acetates and cobalt chlorides.

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

<sup>&</sup>lt;sup>5</sup>Estimated from gross weights.

<sup>&</sup>lt;sup>6</sup>May include revisions to previously published data.

<sup>&</sup>lt;sup>7</sup>Less than ½ unit.

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

	Wrought cobalt a		Cobalt ore and concentrates		
Period	Gross weight (metric tons)	Value <sup>2</sup> (thousands)	Gross weight (metric tons)	Value <sup>2</sup> (thousands)	
2018:					
November	147	\$14,000	(3)	\$11	
December	124	13,400			
January-November	1,040	114,000 <sup>r</sup>	55	562	
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			
January-November	1,530	147,000	25	392	

<sup>&</sup>lt;sup>r</sup>Revised. -- Zero.

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

<sup>&</sup>lt;sup>2</sup>Free alongside ship (f.a.s.) value.

<sup>&</sup>lt;sup>3</sup>Less than ½ unit.