

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: ksheddd@usgs.gov

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

Internet: <https://www.usgs.gov/centers/national-minerals-information-center>

COBALT IN DECEMBER 2021

The amount of cobalt contained in U.S. imports of cobalt metals and chemicals in December 2021 was 6% more than that imported in December 2020. In 2021, the amount of cobalt contained in imports was essentially the same as that imported during 2020 (table 2). The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals in December 2021 was 56% more than that exported in December 2020. In 2021, exports were 43% more than those in 2020 (table 4).

Prices

In 2021, the cobalt market experienced higher prices and lower London Metal Exchange (LME) stocks compared with those in 2020 (fig. 1, table 1). In December, the monthly average U.S. spot cobalt price increased by 13% from that in November and was more than two times that in December 2020. The monthly average LME cash mean price was 15% higher than that in November and more than two times that in December 2020. The following listed prices are for cobalt metal in December, in dollars per pound.

Type	Price range	Average price
U.S. spot ¹	31.00–33.90	32.78
LME cash mean ²	Not available	31.26

¹Source: S&P Global 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).

The 2021 annual average U.S. spot cobalt price was \$24.21 per pound, 54% higher than the 2020 annual average price of \$15.70 per pound. The 2021 annual average LME cash mean price was \$23.17 per pound, 63% higher than the 2020 annual average price of \$14.21 per pound.

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 <https://www.usgs.gov/centers/national-minerals-information-center/minerals-information-publication-list-services>.

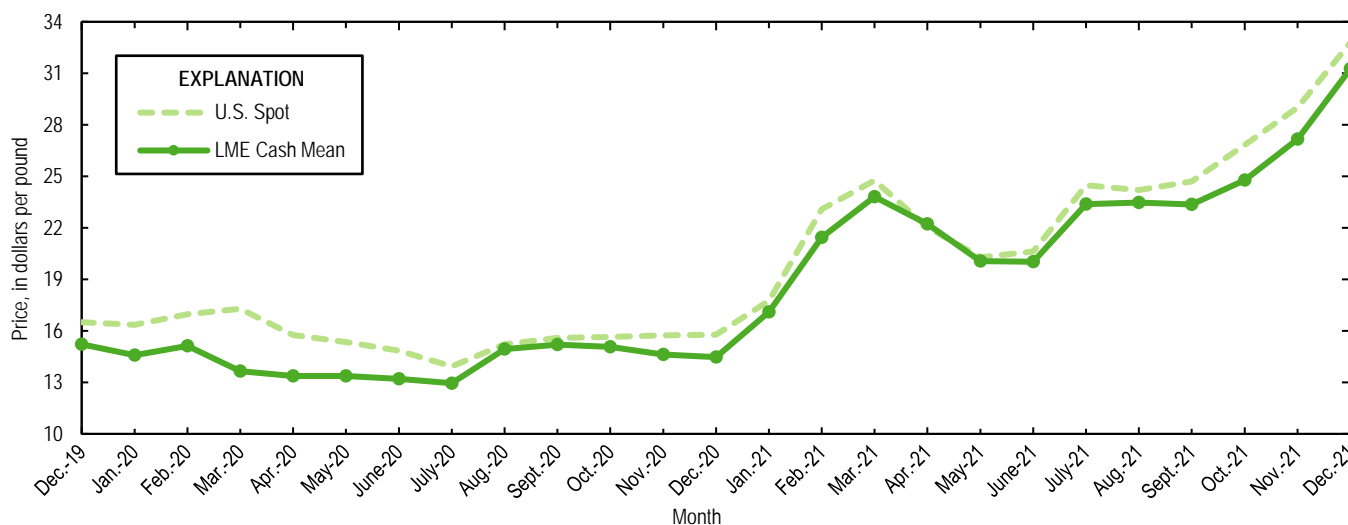


Figure 1. Average U.S. spot prices and LME cash mean prices for December 2019 through December 2021. Sources: S&P Global Platts Metals Week and London Metal Exchange.

TABLE 1
REPORTED STOCKS OF COBALT METAL, END OF PERIOD

(Metric tons, contained cobalt)

Period	U.S. Government ²	LME ¹		Total
		U.S. warehouse	Non-U.S. warehouse	
2020, December	302	82	369	451
2021:				
January	302	73	353	426
February	302	73	254	327
March	302	50	244	294
April	302	50	244	294
May	302	50	247	297
June	302	50	241	291
July	302	50	236	286
August	302	50	236	286
September	302	50	230	280
October	302	50	221	271
November	302	50	221	271
December	302	50	206	256

¹London Metal Exchange.

²Data from Defense Logistics Agency Strategic Materials.

TABLE 2
U.S. IMPORTS FOR CONSUMPTION OF COBALT, BY COUNTRY OR LOCALITY¹

Period and country or locality of origin	Metals ²		Oxides and hydroxides		Salts and compounds ³		Total cobalt content for the period ⁵ (metric tons)	Cobalt content, year to date ^{5,6} (metric tons)
	Gross weight (metric tons)	Value ⁴ (thousands)	Gross weight (metric tons)	Value ⁴ (thousands)	Gross weight (metric tons)	Value ⁴ (thousands)		
2020:								
December	546	\$22,100	100	\$2,370	84	\$875	642	9,740
January–December	8,140	282,000	1,260	30,600	2,070	23,500	9,740	XX
2021:								
January	507	16,900	137	3,600	204	2,370	674	674
February	223	7,880	175	4,170	179	2,170	409	1,080
March	1,000	39,900	176	5,300	269	2,740	1,210	2,290
April	784	32,300	159	5,540	298	3,860	985	3,280
May	508	21,800	172	6,370	335	4,430	722	4,000
June	740	31,200	236	7,410	392	4,130	1,020	5,020
July	437	20,700	202	6,600	330	3,320	675	5,690
August	801	37,800	187	6,620	216	2,300	1,000	6,690
September	577	28,500	174	6,590	199	3,070	766	7,460
October	722	35,200	168	6,040	309	4,160	937	8,400
November	475	25,500	267	10,100	190	2,820	725	9,120
December:								
Australia	--	--	--	--	--	--	--	203
Belgium	3	199	--	--	--	--	3	431
Brazil	--	--	--	--	74	380	21	188
Canada	123	7,230	--	--	1	13	123	905
China	--	--	3	132	9	90	4	104
Finland	69	4,040	75	2,480	143	2,410	168	1,540
Germany	2	195	--	--	10	127	5	113
Italy	--	--	1	16	--	--	(7)	9
Japan	77	3,880	--	--	--	--	77	1,130
Korea, Republic of	(7)	4	4	117	--	--	3	31
Madagascar	21	1,130	--	--	--	--	21	120
Mexico	--	--	--	--	--	--	--	68
Morocco	--	--	--	--	--	--	--	142
Norway	81	5,580	--	--	--	--	81	3,150
Russia	57	2,710	--	--	--	--	57	748
South Africa	4	277	--	--	--	--	4	47
Taiwan	--	--	18	822	115	914	43	267
United Kingdom	3	285	68	2,850	59	1,150	69	595
Other	--	--	--	--	--	--	--	13
Total	440	25,500	169	6,410	410	5,080	679	9,800
January–December	7,210	323,000	2,220	74,700	3,330	40,500	9,800	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.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS, BY COUNTRY OR LOCALITY¹

Period and country or locality of origin	Unwrought cobalt alloys		Cobalt waste and scrap		Wrought cobalt and cobalt articles	
	Gross weight (metric tons)	Value ² (thousands)	Gross weight (metric tons)	Value ² (thousands)	Gross weight (metric tons)	Value ² (thousands)
2020:						
December	46	\$2,100	132	\$1,100	18	\$3,670
January–December	272	12,800	1,430	15,200	319	44,400
2021:						
January	53	2,230	84	1,330	20	2,530
February	30	1,230	96	1,170	17	2,990
March	15	749	127	1,210	16	3,370
April	4	232	108	1,400	37	3,040
May	3	166	145	1,840	9	3,270
June	11	546	149	1,480	22	3,530
July	13	649	136	1,870	25	4,220
August	3	123	128	1,680	51	4,570
September	11	476	99	1,590	34	5,000
October	20	1,110	160	2,300	27	4,480
November	17	838	188	2,710	24	4,150
December:						
Austria	--	--	--	--	4	387
Belgium	4	236	20	165	--	--
Canada	--	--	22	40	1	608
China	2	132	1	8	3	779
France	--	--	1	9	8	1,190
Germany	--	--	8	4	1	381
Ireland	--	--	49	229	--	--
Japan	(3)	9	2	31	--	--
Mexico	--	--	2	18	(3)	18
Norway	--	--	--	--	3	108
Russia	--	--	--	--	5	265
Tunisia	--	--	3	24	--	--
United Kingdom	23	1,080	28	669	6	849
Other	(3)	4	--	--	1	120
Total	30	1,460	135	1,200	32	4,710
January–December	210	9,800	1,560	19,800	315	45,800

-- Zero.

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

²Customs value.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 4
U.S. EXPORTS OF COBALT MATERIALS¹

Period	Unwrought cobalt, powders, matte, waste and scrap ²		Oxides and hydroxides		Salts and compounds ³		Total cobalt content for the period ⁵ (metric tons)	Cobalt content, year to date ^{5,6} (metric tons)
	Gross weight (metric tons)	Value ⁴ (thousands)	Gross weight (metric tons)	Value ⁴ (thousands)	Gross weight (metric tons)	Value ⁴ (thousands)		
2020:								
December	213	\$6,090	1	\$31	--	--	213	3,440
January–December	3,300	97,700	74	2,630	376	\$3,830	3,440	XX
2021:								
January	403	11,200	1	29	--	--	403	403
February	470	11,300	21	222	(7)	4	485	889
March	481	9,650	5	192	(7)	6	484	1,370
April	569	14,000	1	28	(7)	4	570	1,940
May	439	14,300	3	68	--	--	441	2,380
June	295	8,020	3	106	1	18	298	2,680
July	367	13,100	1	25	1	32	368	3,050
August	285	9,810	2	79	6	58	288	3,340
September	344	11,600	1	32	--	--	345	3,680
October	488	15,500	2	85	(7)	10	489	4,170
November	426	10,500	2	101	--	--	428	4,600
December	331	9,920	2	96	--	--	333	4,930
January–December	4,900	139,000	43	1,060	9	133	4,930	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.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF WROUGHT COBALT, COBALT ORE,
AND CONCENTRATES¹

Period	Wrought cobalt and cobalt articles		Cobalt ore and concentrates	
	Gross weight (metric tons)	Value ² (thousands)	Gross weight (metric tons)	Value ² (thousands)
2020:				
December	135	\$12,600	--	--
January–December	1,380	142,000	150	\$521
2021:				
January	87	10,100	--	--
February	113	14,400	--	--
March	151	13,500	--	--
April	116	12,100	2	14
May	105	11,000	--	--
June	114	12,000	--	--
July	213	17,700	--	--
August	192	16,200	--	--
September	116	10,700	(3)	8
October	274	22,500	--	--
November	140	13,500	--	--
December	217	18,600	(3)	4
January–December	1,840	172,000	2	26

-- 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.

Source: U.S. Census Bureau.