

Mineral Industry Surveys

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COBALT IN JULY 2021

The amount of cobalt contained in U.S. imports of cobalt metals and chemicals in July 2021 was 20% less than that imported in July 2020. For the first 7 months of 2021, the amount of cobalt contained in imports was 20% less than that imported during the same period in 2020 (table 2). The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals in July 2021 was 37% more than that exported in July 2020. During the first 7 months of 2021, exports were 35% more than those during the same period in 2020 (table 4).

Prices

In the first 7 months of 2021, the cobalt market experienced higher prices and lower London Metal Exchange (LME) stocks compared with those in 2020 (fig. 1, table 1). In July, the monthly average U.S. spot cobalt price increased by 19% from that in June and was 76% higher than that in July 2020. The monthly average LME cash mean price increased by 17% from

that in June and was 81% higher than that in July 2020. The following listed prices are for cobalt metal in July, in dollars per pound.

Type	Price range	Average price
U.S. spot ¹	23.05-25.10	24.47
LME cash mean ²	22.88-23.81	23.39

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).

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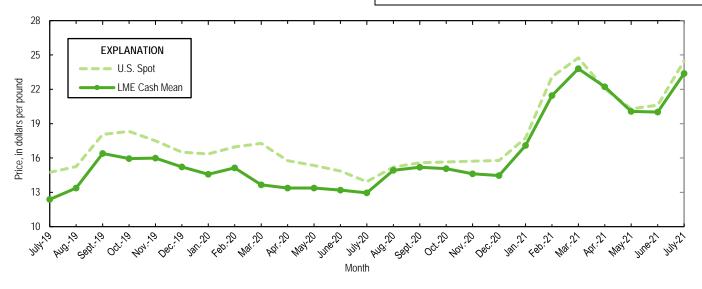


Figure 1. Average U.S. spot prices and LME cash mean prices for July 2019 through July 2021. Sources: S&P Global Platts Metals Week and London Metal Exchange.

TABLE 1 REPORTED STOCKS OF COBALT METAL, END OF PERIOD

(Metric tons, contained cobalt)

		LME ¹				
	U.S.	U.S.	Non-U.S.			
Period	Government ²	warehouse	warehouse	Total		
2020:						
July	302	82	513	595		
August	302	82	373	455		
September	302	82	369	451		
October	302	82	369	451		
November	302	82	369	451		
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		

¹London Metal Exchange. ²Data from Defense Logistics Agency Strategic Materials.

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

Metals ²		Oxides and hydroxides		C-14 d d- ³		Total cobalt	Cobalt content,
	18		lydroxides		iipouiius		year to
	M-14		W-14		37-14		date ^{5, 6}
							(metric tons)
(metric tons)	(mousanus)	(metric tons)	(mousanus)	(metric tons)	(tilousanus)	(metric tons)	(metric tons)
725	\$22,800	102	\$2.520	112	\$1.410	929	7,120
							7,650
							8,190
							8,540
							9,100
							9,740
,					,		XX
8,140	282,000	1,260	30,600	2,070	23,500	9,740	XX
	4 4 0 0 0		2	201	2.250		
							674
	*		,				1,080
							2,290
							3,280
	21,800						4,000
740	31,200	236	7,410	392	4,130	1,020	5,020
25	2,230						125
		44	1,680	2	26	32	282
				23	97	6	90
68	2,840			(7)	5	69	435
		2	82			1	82
19	1,080	45	1,330	145	1,790	93	876
7	371					7	68
		1	20			(7)	ϵ
186	8,070			12	63	189	863
(7)	12	7	207			5	10
							15
							68
							142
							1,790
126	5,680					126	345
2	108					2	32
		19	609	112	662		124
							336
			,				7
							5,690
							XX
	Gross weight (metric tons) 725 450 325 263 446 546 6,110 8,140 507 223 1,000 784 508 740 25 68 19 7 186 (7) 126 2	weight (metric tons) Value ⁴ (thousands) 725 \$22,800 450 13,100 325 10,100 263 9,130 446 14,100 546 22,100 6,110 214,000 8,140 282,000 507 16,900 223 7,880 1,000 39,900 784 32,300 508 21,800 740 31,200 25 2,230 68 2,840 19 1,080 7 371 186 8,070 (7) 12 126 5,680 2 108 5 336 5 336 </td <td>Gross weight (metric tons) Value⁴ (thousands) Gross weight (metric tons) 725 \$22,800 103 450 13,100 30 325 10,100 175 263 9,130 61 446 14,100 91 546 22,100 100 6,110 214,000 807 8,140 282,000 1,260 507 16,900 137 223 7,880 175 1,000 39,900 176 784 32,300 159 508 21,800 172 740 31,200 236 25 2,230 - 44 - 2 19 1,080 45 7 371 - 1 186 8,070 - - - -</td> <td>Gross weight (metric tons) Value⁴ (thousands) Gross weight (metric tons) Value⁴ (thousands) 725 \$22,800 103 \$2,530 450 13,100 30 737 325 10,100 175 3,570 263 9,130 61 1,320 446 14,100 91 2,270 546 22,100 100 2,370 6,110 214,000 807 20,300 8,140 282,000 1,260 30,600 507 16,900 137 3,600 223 7,880 175 4,170 1,000 39,900 176 5,300 784 32,300 159 5,540 508 21,800 172 6,370 740 31,200 236 7,410 25 2,230 - 44 1,680 - 2 82 19 1</td> <td>Gross weight (metric tons) Value⁴ (thousands) Gross weight (metric tons) Value⁴ (thousands) Gross weight (metric tons) 725 \$22,800 103 \$2,530 112 450 13,100 30 737 168 325 10,100 175 3,570 235 263 9,130 61 1,320 167 446 14,100 91 2,270 129 546 22,100 100 2,370 84 6,110 214,000 807 20,300 1,290 ° 8,140 282,000 1,260 30,600 2,070 507 16,900 137 3,600 204 223 7,880 175 4,170 179 1,000 39,900 176 5,300 269 784 32,300 159 5,540 298 508 21,800 172 6,370 335 740 31,200 236 7,410 392</td> <td>Gross weight (metric tons) Value⁴ (thousands) Gross weight (thousands) Value⁴ (metric tons) Value⁴ (thousands) Value⁴ (thousands) 725 \$22,800 103 \$2,530 112 \$1,410 450 13,100 30 737 168 2,220 325 10,100 175 3,570 235 2,910 263 9,130 61 1,320 167 1,660 446 14,100 91 2,270 129 1,370 546 22,100 100 2,370 84 875 6,110 214,000 807 20,300 1,290 r 14,500 8,140 282,000 1,260 30,600 2,070 23,500 507 16,900 137 3,600 204 2,370 223 7,880 175 4,170 179 2,170 1,000 39,900 176 5,300 269 2,740 784 32,300 159 5,540</td> <td>Gross weight (metric tons) Value⁴ (thousands) Gross weight (thousands) Value⁴ (thousands) Value⁴ (thousands) content for the period (thousands) 725 \$22,800 103 \$2,530 112 \$1,410 838 450 13,100 30 737 168 2,220 536 325 10,100 175 3,570 235 2,910 535 263 9,130 61 1,320 167 1,660 359 446 14,100 91 2,270 129 1,370 552 546 22,100 100 2,370 84 875 642 6,110 21,400 807 20,300 1,290 1,450 7,120 8,140 282,000 1,260 30,600 2,070 23,500 9,740 507 16,900 137 3,600 204 2,370 674 223 7,880 175 4,170 179 2,170 409 1,000</td>	Gross weight (metric tons) Value ⁴ (thousands) Gross weight (metric tons) 725 \$22,800 103 450 13,100 30 325 10,100 175 263 9,130 61 446 14,100 91 546 22,100 100 6,110 214,000 807 8,140 282,000 1,260 507 16,900 137 223 7,880 175 1,000 39,900 176 784 32,300 159 508 21,800 172 740 31,200 236 25 2,230 - 44 - 2 19 1,080 45 7 371 - 1 186 8,070 - - - -	Gross weight (metric tons) Value ⁴ (thousands) Gross weight (metric tons) Value ⁴ (thousands) 725 \$22,800 103 \$2,530 450 13,100 30 737 325 10,100 175 3,570 263 9,130 61 1,320 446 14,100 91 2,270 546 22,100 100 2,370 6,110 214,000 807 20,300 8,140 282,000 1,260 30,600 507 16,900 137 3,600 223 7,880 175 4,170 1,000 39,900 176 5,300 784 32,300 159 5,540 508 21,800 172 6,370 740 31,200 236 7,410 25 2,230 - 44 1,680 - 2 82 19 1	Gross weight (metric tons) Value ⁴ (thousands) Gross weight (metric tons) Value ⁴ (thousands) Gross weight (metric tons) 725 \$22,800 103 \$2,530 112 450 13,100 30 737 168 325 10,100 175 3,570 235 263 9,130 61 1,320 167 446 14,100 91 2,270 129 546 22,100 100 2,370 84 6,110 214,000 807 20,300 1,290 ° 8,140 282,000 1,260 30,600 2,070 507 16,900 137 3,600 204 223 7,880 175 4,170 179 1,000 39,900 176 5,300 269 784 32,300 159 5,540 298 508 21,800 172 6,370 335 740 31,200 236 7,410 392	Gross weight (metric tons) Value ⁴ (thousands) Gross weight (thousands) Value ⁴ (metric tons) Value ⁴ (thousands) Value ⁴ (thousands) 725 \$22,800 103 \$2,530 112 \$1,410 450 13,100 30 737 168 2,220 325 10,100 175 3,570 235 2,910 263 9,130 61 1,320 167 1,660 446 14,100 91 2,270 129 1,370 546 22,100 100 2,370 84 875 6,110 214,000 807 20,300 1,290 r 14,500 8,140 282,000 1,260 30,600 2,070 23,500 507 16,900 137 3,600 204 2,370 223 7,880 175 4,170 179 2,170 1,000 39,900 176 5,300 269 2,740 784 32,300 159 5,540	Gross weight (metric tons) Value ⁴ (thousands) Gross weight (thousands) Value ⁴ (thousands) Value ⁴ (thousands) content for the period (thousands) 725 \$22,800 103 \$2,530 112 \$1,410 838 450 13,100 30 737 168 2,220 536 325 10,100 175 3,570 235 2,910 535 263 9,130 61 1,320 167 1,660 359 446 14,100 91 2,270 129 1,370 552 546 22,100 100 2,370 84 875 642 6,110 21,400 807 20,300 1,290 1,450 7,120 8,140 282,000 1,260 30,600 2,070 23,500 9,740 507 16,900 137 3,600 204 2,370 674 223 7,880 175 4,170 179 2,170 409 1,000

^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.

 $^{^5\}mbox{Estimated}$ from gross weights.

⁶May include revisions to previously published data.

⁷Less than ½ unit.

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

					Wrought co	
	Unwrought c	obalt alloys	Cobalt waste	and scrap	cobalt a	rticles
	Gross	2	Gross	2	Gross	2
Period and country or	weight	Value ²	weight	Value ²	weight	Value ²
locality of origin	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)
2020:						
July	10	\$460	87	\$1,270	21	\$3,430
August	12	472	128	1,800	14	2,150
September	22	937	39	509	31	3,640
October	1	46	52	544	22	3,210
November	10	421	116	1,620	23	3,380
December	46	2,100	132	1,100	18	3,670
January–July	180	8,850	961 ^r	9,650 ^r	211	28,400
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:						
Austria					4	366
Belgium	4	177				
Canada	(3)	52	35	360	3	893
China			1	7	3	749
France			32	759	4	1,110
Germany	1	18			5	332
Ireland			27	54	(3)	8
Japan			3	33	(3)	2
Singapore			21	277		
Taiwan			6	232	(3)	6
Tunisia			5	56		
United Kingdom	8	402	5	83	5	634
Other			1	13	1	123
Total	13	649	136	1,870	25	4,220
January–July	130	5,800	845	10,300	146	22,900
Revised Zero	200	-,		,	2.10	,,,,,,

^rRevised. -- 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 coba	alt, powders,						Cobalt
	matte, waste and scrap ²		Oxides and hydroxides		Salts and compounds 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)
2020:								
July	248	\$7,250	8	\$230	59	\$266	268	2,260
August	271	6,610	11	262	9	23	281	2,540
September	231	6,300	3	131	31	232	240	2,790
October	269	8,650	2	86	20	52	275	3,060
November	157	6,680	(7)	11	38	254	166	3,230
December	213	6,090	1	31			213	3,440
January–July	2,160 ^r	63,400 ^r	57	2,110	278	3,270	2,260 ^r	XX
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
January–July	3,020	81,600	33	671	3	65	3,050	XX

^rRevised. 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.

TABLE 5 $\mbox{U.S. EXPORTS OF WROUGHT COBALT, COBALT ORE, } \\ \mbox{AND CONCENTRATES}^1$

	Wrought co		Cobalt ore and concentrates		
	-	rucies			
	Gross		Gross		
	weight	Value ²	weight	Value ²	
Period	(metric tons)	(thousands)	(metric tons)	(thousands)	
2020:					
July	96	\$11,200			
August	100	9,650			
September	108	10,400			
October	167	14,300			
November	112	10,700			
December	135	12,600			
January–July	757 ^r	84,400 ^r	150	\$521	
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			
January–July	899	90,700	2	14	

^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.