

Mineral Industry Surveys

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ALUMINUM IN APRIL 2022

Domestic primary aluminum production in April 2022 was 82,000 metric tons (t). The average daily production in April 2022 was 2,740 t, unchanged than that in March 2022, 14% more than that in April 2021, and 11% less than that in April 2020 (fig. 1, table 1).

Total aluminum recovered from scrap in April 2022 was 288,000 t, essentially unchanged from the amount in March 2022, 5% more than the amount in April 2021, and 19% more than that in April 2020. Of this, 155,000 t of aluminum was recovered from new scrap, and 132,000 t was recovered from old scrap (fig. 1, table 1).

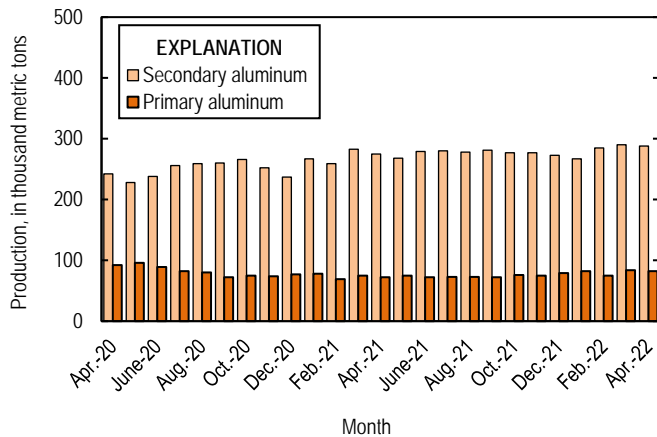


Figure 1. Monthly domestic primary and secondary aluminum production from April 2020 through April 2022.

Prices and Stocks

The April 2022 average U.S. spot market price of primary aluminum ingot was \$1.87 per pound, 6% less than that in March 2022, 46% more than that in April 2021, and 145% more than that in April 2020. The average cash price in April 2022 of primary aluminum ingot on the London Metal Exchange (LME) was \$1.48 per pound, 8% less than that in March 2022, 40% more than that in April 2021, and 123% more than that in April 2020 (fig. 2, table 6).

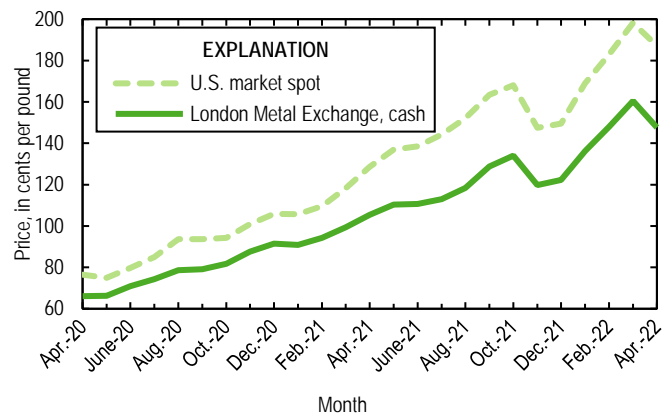


Figure 2. Average monthly prices for primary aluminum from April 2020 through April 2022. Source: S&P Global Platts Metals Week.

Inventories of primary aluminum in LME-approved warehouses, including off-warrant inventories, in the United States decreased to 36,689 t at the end of April 2022 from 43,871 t at the end of March 2022. Inventories of secondary aluminum (North American Secondary Aluminum Alloy Contract) in LME-approved warehouses, including off-warrant inventories, in the United States decreased to 7,537 t at the end of April 2022 from 8,499 t at the end of March 2022 (London Metal Exchange Ltd., 2022a, b, c, d).

Updates

On June 22, Century Aluminum Co. announce that it would idle its Hawesville, KY smelter owing to high energy costs. The company anticipates that the plant will remain idle for 9 to 12 months. The Hawesville smelter has a primary aluminum capacity of 250,000 tons per year (t/yr) (Century Aluminum Co., 2022).

On July 1, Alcoa Corp. announced that it would begin curtailing one of three operating aluminum smelting lines at its Warrick Operations plant in Indiana citing operational challenges. Current producing capacity at the facility is 161,000 t/yr, with each line rated at 54,000 t/yr. With 5 existing

smelting lines, total capacity at the smelter is 269,000 t/yr (Alcoa Corp., 2022).

On July 7, the Kaiser Aluminum Corp. declared force majeure at its Warrick Rolling Mill owing to the limited availability of magnesium, an essential component of its aluminum packaging products. Deliveries of magnesium from Warrick's supplier recently stopped, and a new source has not been secured. Kaiser expects production to decrease by 30% to 40% in July, and by approximately 50% through the third quarter. Production at the plant will operate at lower levels until magnesium supplies are restored (Kaiser Aluminum Corp., 2022).

References Cited

Alcoa Corp, 2022, Alcoa announces partial curtailment at Warrick smelter in Indiana: Pittsburgh, PA, Alcoa Corp. press release, July 1. (Accessed July 5, 2022, at <https://investors.alcoa.com/news-releases/news-release-details/2022/Alcoa-Announces-Partial-Curtailment-at-Warrick-Smelter-in-Indiana/default.aspx>.)

Century Aluminum Co., 2022, Century Aluminum to temporarily idle its Hawesville smelter due to soaring energy prices; issues WARN notice to employees: Chicago, IL, Century Aluminum Co. press release, June 22. (Accessed July 25, 2022, at <https://centuryaluminum.com/investors/press-releases/press-release-details/2022/Century-Aluminum-to-Temporarily-Idle-Its-Hawesville-Smelter-Due-to-Soaring-Energy-Prices-Issues-WARN-Notice-to-Employees/default.aspx>.)

Kaiser Aluminum Corp., 2022, Kaiser Aluminum declares force majeure at its Warrick Rolling Mill due to limited availability of magnesium: Franklin, TN, Kaiser Aluminum Corp. press release, July 7. (Accessed July 25, 2022, at <https://investors.kaiseraluminum.com/news-releases/news-release-details/kaiser-aluminum-declares-force-majeure-its-warrick-rolling-mill>.)

London Metal Exchange Ltd., 2022a, Primary aluminium stocks: London, United Kingdom, London Metal Exchange Ltd., March 31, 4 p.

London Metal Exchange Ltd., 2022b, Primary aluminium stocks: London, United Kingdom, London Metal Exchange Ltd., April 29, 4 p.

London Metal Exchange Ltd., 2022c, Off-warrant stock reporting—March 2022: London, United Kingdom, London Metal Exchange Ltd., May 10, 1 p. (Accessed July 19, 2022, via <https://www.lme.com/en/Market-data/Reports-and-data/Warehouse-and-stocks-reports/Off-warrant-stock-reporting>.)

London Metal Exchange Ltd., 2022d, Off-warrant stock reporting—April 2022: London, United Kingdom, London Metal Exchange Ltd., June 10, 1 p. (Accessed July 19, 2022, via <https://www.lme.com/en/Market-data/Reports-and-data/Warehouse-and-stocks-reports/Off-warrant-stock-reporting>.)

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TABLE 1
COMPONENTS OF ALUMINUM SUPPLY¹

(Thousand metric tons)

Period	Primary production	Secondary recovery ²			Imports for consumption			Total new supply ³	Stocks, end of period ⁴
		New	Old	Total	Metals and alloys, crude	Plates, sheets, bars, etc.	Total		
2021 ^p	889	1,780	1,520	3,300	3,630	1,290	4,920	9,110	1,860
2021:									
April	72	152	123	275	324	109	433	780	1,660
May	75	145	123	268	313	114	427	771	1,680
June	72	148	131	279	294	113	407	758	1,680
July	73	148	131	280	298	105	403	756	1,730
August	73	149	129	278	319	126	445	796	1,710
September	72	152	129	281	285	106	391	744	1,710
October	76	149	127	277	339	107	446	799	1,780
November	75	151	126	277	338	119	457	809	1,820
December	79	146	127	273	316	109	425	777	1,860 ^r
January–April	293	592 ^r	492 ^r	1,080 ^r	1,130	395	1,520	2,900 ^r	1,670 ^r
2022:									
January	82	152	115	267	343	112	455	804	1,880
February	75	159	126	285	262	107	369	729	1,900
March	84	159	132	290	341	129	470	844	1,910
April	82	155	132	288	331	125	456	826	1,920
January–April	323	625	505	1,130	1,280	473	1,750	3,200	1,920

^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits, except "Primary production"; may not add to totals shown.

²Metallic recovery from purchased, tolled, or imported scrap, expanded for full coverage of industry.

³Primary production, secondary recovery, and imports for consumption.

⁴Inventory levels reflect total for U.S. and Canadian producers; data from the Aluminum Association Inc.

TABLE 2
ESTIMATED FULL COVERAGE CONSUMPTION OF AND METALLIC RECOVERY FROM
PURCHASED NEW AND OLD ALUMINUM SCRAP¹

(Thousand metric tons)

Period	Secondary smelters		Independent mill fabricators		Foundries		Other consumers		Total	
	Con-sump-tion	Metal recovery	Con-sump-tion	Metal recovery	Con-sump-tion	Metal recovery	Con-sump-tion	Metal recovery	Con-sump-tion	Metal recovery
2021 ^P	2,320	1,750	1,590	1,450	101	93	4	4	4,020	3,300
2021:										
April	195	146	131	120	8	8	(2)	(2)	335	275
May	192	145	126	115	8	8	(2)	(2)	327	268
June	194	147	137	124	8	8	(2)	(2)	340	279
July	192	145	139	127	8	8	(2)	(2)	340	280
August	196	147	136	124	8	8	(2)	(2)	341	278
September	194	146	139	127	8	8	(2)	(2)	341	281
October	195	146	134	122	8	8	(2)	(2)	338	277
November	196	147	133	122	8	8	(2)	(2)	338	277
December	194	146	130	119	8	8	(2)	(2)	333	273
January–April	770 ^r	578 ^r	519	475	34	31	1	1	1,320 ^r	1,080 ^r
2022:										
January	195	146	123	113	8	8	(2)	(2)	327	267
February	193	145	144	132	8	8	(2)	(2)	346	285
March	200	149	145	133	8	8	(2)	(2)	354	290
April	199	149	143	130	8	8	(2)	(2)	351	288
January–April	788	589	555	508	34	31	1	1	1,380	1,130

^PPreliminary. ^rRevised.

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

²Less than ½ unit.

TABLE 3
 CONSUMPTION OF AND RECOVERY FROM PURCHASED
 NEW AND OLD ALUMINUM SCRAP IN APRIL 2022¹

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
Secondary smelters	166,000	199,000	124,000	149,000
Independent mill fabricators	129,000	143,000	117,000	130,000
Foundries	7,040	8,450	6,440	7,730
Other consumers	273	328	273	328
Total	302,000	351,000	249,000	288,000

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

TABLE 4
PURCHASED AND TOLL-TREATED ALUMINUM-BASE SCRAP IN APRIL 2022¹

(Metric tons)

	April			January–April ²		
	Stocks, opening ²	Net receipts ³	Melted or consumed	Stocks, closing	Net receipts ³	Melted or consumed
New scrap:						
Extrusion	18,800	41,500	41,500	18,800	164,000	165,000
Can stock clippings	10,500	27,600	27,600	10,500	119,000	119,000
Other wrought sheet/clippings	8,480	36,800	36,900	8,370	145,000	145,000
Casting	5,920	8,120	8,120	5,920	33,100	33,100
Borings and turnings	5,270	14,300	14,300	5,270	54,000	54,000
Dross and skimmings ⁴	18,500	44,200	44,200	18,500	177,000	177,000
Total new scrap	67,400	172,000	173,000	67,300	692,000	693,000
Old scrap:						
Used castings	8,160	28,000	28,000	8,160	110,000	110,000
Used extrusion	7,840	16,700	16,700	7,840	66,700	66,700
Used cans (shredded, loose, baled)	7,850	44,500	44,500	7,850	163,000	163,000
Other wrought products	19,100	28,100	28,100	19,100	103,000	103,000
Fragmentized shredder (auto shredder)	5,970	12,100	12,100	5,970	48,500	48,500
Total old scrap	48,900	129,000	129,000	48,900	492,000	492,000
Total all classes	116,000	302,000	302,000	116,000	1,180,000	1,180,000

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

²May include revisions to previously published data.

³Includes data on imported aluminum-base scrap.

⁴Gross volume of dross and skimmings. Recoverable aluminum content ranges from 15% to 50% of gross weight.

TABLE 5
ALUMINUM ALLOYS PRODUCED AT SECONDARY SMELTERS IN THE UNITED
STATES IN APRIL 2022^{1,2}

(Metric tons)

	April				January–April	
	Stocks, opening ³	Production	Net shipments	Stocks, closing	Production	Net shipments
Die-cast alloys:						
13% Si, 360, etc. (0.6% Cu, max.)	2,570	2,870	2,870	2,570	11,500	11,500
380 and variations	7,970	18,900	18,900	7,970	75,800	75,800
Sand and permanent mold:						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	1,950	2,830	2,830	1,950	11,300	11,300
No. 319 and variations	2,230	2,000	2,000	2,230	8,000	8,000
F-132 alloy and variations	143	221	221	143	883	883
Al-Zn alloys	172	85	85	172	340	340
Al-Si alloys (0.6% to 2.0% Cu)	101	166	166	101	662	662
Al-Cu alloys (1.5% Si, max.)	405	564	564	405	2,260	2,260
Other ⁴	7,250	8,250	8,250	7,250	33,000	33,000
Wrought alloys, extrusion billets	10,700	54,800	54,800	10,700	219,000	219,000
Total all alloys	33,400	90,700	90,700	33,400	363,000	363,000
Less:						
Primary aluminum consumed	XX	16,600	XX	XX	66,400	XX
Primary silicon consumed	XX	1,680	XX	XX	6,720	XX
Other alloying ingredients consumed	XX	791	XX	XX	3,160	XX
Net metallic recovery from aluminum scrap consumed in production of secondary aluminum ingot ⁵	XX	71,600	XX	XX	287,000	XX

XX Not applicable.

¹Excludes integrated aluminum companies.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³May include revisions to previously published data.

⁴Includes alloys No. 12, Al-Mg, Al-Zn, Al-Cu, Al-Si-Cu-Ni, aluminum-base hardeners, variations of these alloys, plus other aluminum alloys.

⁵No allowance made for melt-loss of primary aluminum and alloying ingredients.

TABLE 6
 AVERAGE PRICE OF ALUMINUM IN THE UNITED STATES
 AND ON THE LONDON METAL EXCHANGE

(Cents per pound)

Period	Midwest U.S. market price	LME cash price Grade A
2021:		
April	128.563	105.404
May	136.947	110.397
June	138.489	110.635
July	144.205	113.033
August	152.055	118.417
September	163.420	128.794
October	168.110	134.028
November	147.557	119.796
December	149.417	122.237
January–December	138.511	112.281
2022:		
January	169.020	136.197
February	182.873	147.883
March	198.185	160.448
April	187.079	147.693
January–April	184.289	148.055

Source: S&P Global Platts Metals Week.

TABLE 7
AVERAGE BUYING PRICES FOR ALUMINUM SCRAP

(Cents per pound)

Month	Used beverage cans	Mixed low copper clips	Old sheet	Old cast	Turnings (clean and dry)
2021:					
April	75.50	72.10	68.90	70.50	69.20
May	74.13	74.50	70.50	71.00	69.50
June	70.88	73.75	68.75	68.75	68.00
July	71.40	73.90	67.20	67.40	67.60
August	77.10	73.50	66.10	66.70	66.40
September	NA	NA	NA	NA	NA
October	NA	NA	NA	NA	NA
November	NA	NA	NA	NA	NA
December	NA	NA	NA	NA	NA
January–December ¹	71.81	70.80	66.74	67.67	66.56
2022:					
January	NA	NA	NA	NA	NA
February	NA	NA	NA	NA	NA
March	NA	NA	NA	NA	NA
April	NA	NA	NA	NA	NA

NA Not available.

¹September–December 2021 data are not available. January–August YTD average.

Source: Fastmarket-AMM.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN APRIL 2022¹

(Metric tons)

Country or locality	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	April	January–April	April	January–April	April	January–April	April	January–April
Argentina	3,670	49,200	51	51	--	--	3,720	49,300
Australia	5,920	61,900	(2)	55	--	--	5,920	62,000
Austria	--	25	2,630	9,670	--	(2)	2,630	9,700
Bahrain	12,100	97,600	8,550	19,800	--	--	20,600	117,000
Belgium	2	130	602	3,110	--	--	604	3,240
Brazil	518	6,310	158	282	662	662	1,340	7,250
Canada	233,000	778,000	17,400	67,000	31,700	117,000	282,000	962,000
Chile	--	--	--	(2)	84	684	84	684
China ³	61	493	15,100	65,900	17	57	15,100	66,400
Colombia	--	--	273	1,130	657	2,050	930	3,190
Costa Rica	--	--	20	20	278	867	298	887
France	133	799	443	1,330	16	90	592	2,220
Germany	91	1,050	1,450	7,930	171	537	1,710	9,520
Greece	--	--	1,670	8,640	21	64	1,690	8,710
Guatemala	--	--	--	--	747	2,890	747	2,890
Honduras	--	--	161	958	102	463	263	1,420
India	14,300	32,100	1,090	5,760	--	--	15,400	37,900
Indonesia	--	--	1,630	5,330	--	--	1,630	5,330
Italy	--	--	1,460	4,470	--	--	1,460	4,470
Japan	--	1	4,740	15,800	26	30	4,760	15,800
Korea, Republic of	2,210	6,930	10,900	40,300	38	66	13,200	47,300
Malaysia	20	104	1,110	4,180	--	--	1,130	4,290
Mexico	1,550	5,730	8,130	27,700	18,300	71,500	28,000	105,000
Netherlands	121	357	152	712	50	400	323	1,470
Norway	91	588	1,170	3,770	--	--	1,260	4,360
Oman	--	624	12,700	37,100	--	--	12,700	37,700
Qatar	8,450	23,700	(2)	(2)	--	--	8,450	23,700
Romania	--	--	4	606	--	--	4	606
Russia	18,400	80,100	515	3,400	--	--	19,000	83,500
Saudi Arabia	--	--	2,830	9,720	--	--	2,830	9,720
South Africa	232	2,180	2,690	17,100	--	--	2,920	19,300
Spain	28	465	794	3,250	--	1	822	3,720
Sweden	--	--	511	2,250	--	--	511	2,250
Switzerland	--	3	272	912	--	--	272	915
Taiwan	--	54	240	1,380	(2)	3	240	1,440
Thailand	203	805	10,600	38,900	--	--	10,800	39,700
Turkey	1,250	5,200	5,320	18,300	--	(2)	6,580	23,500
United Arab Emirates	28,400	122,000	1,030	3,010	--	97	29,500	125,000
United Kingdom	--	19	1,050	7,370	--	47	1,050	7,430
Vietnam	5	5	3,460	13,400	--	19	3,460	13,500
Other	36	36	4,590	22,700	2,060	8,150	6,690	30,900
Total	331,000	1,280,000	125,000	473,000	55,000	206,000	511,000	1,960,000

-- Zero.

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

²Less than ½ unit.

³Includes Hong Kong.

Source: U.S. Census Bureau.

TABLE 9
U.S. EXPORTS OF ALUMINUM IN APRIL 2022¹

(Metric tons)

Country or locality	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	April	January--	April	January--	April	January--	April	January--
		April		April		April		April
Australia	40	532	7	44	--	--	47	576
Belgium	--	(2)	75	165	2,100	6,930	2,180	7,090
Brazil	(2)	22	82	411	84	468	166	901
Canada	6,620	23,100	23,400	85,600	9,000	40,500	39,000	149,000
China ³	200	844	309	1,160	16,300	70,600	16,900	72,600
Colombia	28	31	12	156	84	245	124	432
Dominican Republic	--	2	27	101	84	1,070	111	1,180
France	8	80	302	905	60	295	370	1,280
Germany	35	58	68	410	1,250	1,860	1,350	2,330
Guatemala	--	--	7	15	--	--	7	15
India	23	154	38	118	33,400	148,000	33,400	148,000
Indonesia	--	--	1	21	3,880	15,400	3,880	15,400
Ireland	13	13	21	56	--	--	34	69
Israel	(2)	(2)	20	307	--	(2)	20	307
Italy	2	3	74	176	1,550	4,040	1,630	4,220
Jamaica	--	20	(2)	5	--	--	(2)	25
Japan	157	250	132	497	1,860	10,300	2,150	11,000
Korea, Republic of	159	351	120	591	25,600	105,000	25,800	106,000
Malaysia	1,730	3,330	52	118	24,100	108,000	25,900	112,000
Mexico	9,900	43,700	12,500	47,500	19,500	69,700	42,000	161,000
Netherlands	7	18	39	119	627	2,010	673	2,140
New Zealand	--	--	18	91	--	--	18	91
Norway	--	7	15	16	--	--	15	23
Pakistan	--	--	(2)	22	1,560	6,530	1,560	6,550
Panama	--	--	3	8	--	--	3	8
Philippines	--	3	13	46	910	3,090	923	3,140
Poland	--	13	27	121	11	11	38	145
Romania	(2)	(2)	3	9	--	--	3	9
Russia	--	--	(2)	6	--	2,720	(2)	2,720
Saudi Arabia	(2)	(2)	2	10	--	--	2	10
Singapore	17	55	46	165	45	635	108	855
Spain	--	--	18	31	247	1,280	265	1,310
Taiwan	75	340	86	309	3,380	9,810	3,540	10,500
Thailand	(2)	(2)	33	91	10,300	34,700	10,400	34,800
Turkey	--	(2)	34	134	2,470	8,480	2,500	8,610
United Arab Emirates	--	40	795	2,070	343	1,480	1,140	3,590
United Kingdom	(2)	38	120	483	157	1,170	277	1,690
Vietnam	3	3	1	23	963	4,970	967	4,990
Other	49	397	187	719	1,540	6,220	1,770	7,340
Total	19,100	73,400	38,700	143,000	161,000	666,000	219,000	882,000

-- Zero.

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

²Less than ½ unit.

³Includes Hong Kong.

Source: U.S. Census Bureau.