

Mineral Industry Surveys

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ALUMINUM IN MARCH 2021

Domestic primary aluminum production in March 2021 was 75,000 metric tons (t). The average daily production in March 2021 was 2,410 t, 3% less than that in February 2021, 21% less than that in March 2020, and 20% less than that in March 2019 (fig. 1, table 1).

Total aluminum recovered from scrap in March 2021 was 272,000 t, 10% more than that in February 2021, slightly less than the amount in March 2020, and 6% less than that in March 2019. Of this, 155,000 t of aluminum was recovered from new scrap, and 117,000 t was recovered from old scrap (fig. 1, table 1).

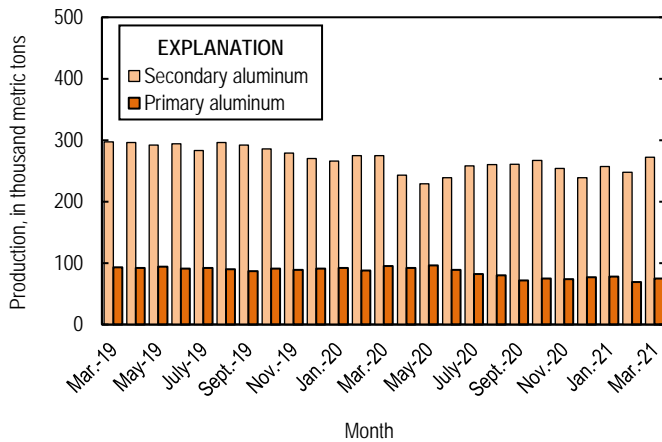


Figure 1. Monthly domestic primary and secondary aluminum production from March 2019 through March 2021.

Prices and Stocks

The March 2021 average U.S. spot market price of primary aluminum ingot was \$1.18 per pound, 8% more than that in February 2021, 36% more than that in March 2020, and 13% more than that in March 2019. The average cash price in March 2021 of primary aluminum ingot on the London Metal Exchange (LME) was \$0.994 per pound, 5% more than that in February 2021, 36% more than that in March 2020, and 17% more than that in March 2019 (fig. 2, table 6).

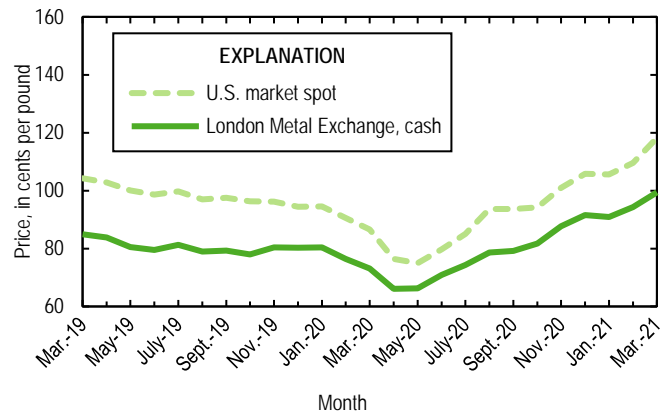


Figure 2. Average monthly prices for primary aluminum from March 2019 through March 2021. Source: S&P Global Platts Metals Week.

Inventories of primary aluminum in LME-approved warehouses, including off-warrant inventories, in the United States decreased to 191,074 t at the end of March 2021 from 195,873 t at the end of February 2021. Inventories of secondary aluminum (North American Secondary Aluminum Alloy Contract) in LME-approved warehouses, including off-warrant inventories, in the United States decreased to 18,678 t at the end of March 2021 from 21,102 t at the end of February 2021 (London Metal Exchange Ltd., 2021a-d).

U.S. Trade

Total imports for consumption of aluminum in the first quarter of 2021 (table 8) increased by 49% compared with those in the same period in 2020. Imports of crude metal and alloys, semifabricated products, and scrap increased by 8%, 288%, and 461%, respectively. Canada continued to be the leading source of imported aluminum materials, supplying 58% of all aluminum imports during the first 3 months of 2021, followed by the United Arab Emirates (6%), Mexico (5%), Bahrain (3%), China (3%), and Russia (3%). Canada accounted for 71% of crude metal, 21% of semifabricated products, and

59% of scrap imports. Other leading sources of crude metal imports were the United Arab Emirates (10%), Russia (5%), and Bahrain (4%). China and Saudi Arabia accounted for 11% and 6% of semifabricated product imports, respectively. Mexico was the source of 28% of scrap imports.

Total exports of aluminum (table 9) during the first 3 months of 2021 were slightly less than those of the same period in 2020. Exports of crude metal and semifabricated products decreased by 10% and 17%, respectively, compared with those in the same period of 2020. Scrap exports in the first quarter of 2021 increased by 6% compared with those in the first quarter of 2020. The leading destinations for total aluminum exports during the first 3 months of 2021, in descending order of quantity, were Mexico (21%), Canada (17%), Malaysia (16%), China plus Hong Kong (11%), and the Republic of Korea (10%). Scrap accounted for 68% of total aluminum exports in the first quarter of 2021.

Update

In April, the U.S. Department of Commerce issued preliminary determinations of antidumping investigations of aluminum foil imports from Armenia, Brazil, Oman, and Russia and set preliminary duty rates for imports from each country. The preliminary duty rate set for foil imports from Armenia was 188.84%; from Brazil the rate ranged between 13.87% to 63.05%; from Russia the rate was 62.18%; from Oman the rate was 4.03%. The investigation determined that Turkey did not export aluminum foil during the investigation period and therefore an antidumping duty rate was not set for imports from Turkey. The period of the investigation was from July 1, 2019 to June 30, 2020. The antidumping investigations were announced in October 2020. (See Aluminum in September 2020.) Final determinations were expected by the end of October (Coyne, 2021).

On April 16, employees at Century Aluminum Co.'s Hawesville, KY smelter, represented by the United Steelworkers union, ratified a labor contract. The contract will expire April 1, 2026. Production at the 250,000-metric-ton-per-year (t/yr) smelter continued during the contract negotiations. Century also announced that it will add 60 new jobs at the smelter (Century Aluminum Co., 2021).

ELYSIS Corp., a joint venture between Alcoa Corp. and Rio Tinto plc., announced that it selected the Alma smelter in Saguenay, Quebec, Canada, for the first installation and demonstration of its inert anode technology in a commercial-scale smelting pot. A project schedule was not available. The smelter, owned by Rio Tinto, has a capacity of 473,000 t/yr and

is located near the ELYSIS research and development center which was completed in December 2020. (See Aluminum in November 2020.) The inert anode smelting technology was designed to produce primary aluminum without a carbon anode and would eliminate direct carbon emissions from carbon dioxide and fluorocarbons. ELYSIS planned to commercialize the inert anode technology in 2024. Alcoa and Rio Tinto planned to retrofit their existing smelters with the inert anode technology and ELYSIS would license the process to other smelters (ELYSIS Corp., 2021; Hotter, 2021).

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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		
2020 ^p	1,012	1,650	1,420	3,070	3,270	1,050	4,320	8,390	1,490
2020:									
March	95	151	124	275	308	102	410	780	1,590
April	92	126	117	243	338	87	425	760	1,590
May	96	122	107	229	316	80	396	721	1,530
June	89	126	113	239	262	88	350	678	1,430
July	82	139	118	258	253	84	337	677	1,410
August	80	138	122	260	270	85	355	695	1,410
September	72	141	120	261	214	79	293	626	1,400
October	75	143	124	267	231	80	311	653	1,450
November	74	135	119	254	241	80	321	649	1,430
December	77	125	114	239	229	78	307	623	1,490
January–March	275	450 ^r	366 ^r	817 ^r	916 ^r	306 ^r	1,220 ^r	2,310 ^r	1,490
2021:									
January	78	135	123	257	250	84	334	669	1,470 ^r
February	69	132	117	248	243	81	324	641	1,540
March	75	155	117	272	308	121	429	776	NA
January–March	222	422	357	778	801	286	1,090	2,090	NA

^pPreliminary. ^rRevised. NA Not available.

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
2020 ^p	2,030	1,570	1,540	1,410	91	84	4	4	3,670	3,070
2020:										
March	175	134	147	135	6	5	(2)	(2)	329	275
April	167	129	119	108	6	5	(2)	(2)	292	243
May	159	124	108	99	6	5	(2)	(2)	273	229
June	160	125	118	108	6	5	(2)	(2)	285	239
July	166	129	132	121	8	8	(2)	(2)	307	258
August	168	130	133	121	8	8	(2)	(2)	310	260
September	171	132	132	121	8	8	(2)	(2)	312	261
October	174	134	136	125	8	8	(2)	(2)	319	267
November	170	131	126	115	8	8	(2)	(2)	305	254
December	170	130	111	100	8	8	(2)	(2)	289	239
January–March	522 ^r	402 ^r	428	393	23	21	1	1	975 ^r	817 ^r
2021:										
January	175	133	128	116	8	8	(2)	(2)	311	257
February	167	131	120	109	8	8	(2)	(2)	296	248
March	177	136	141	129	8	8	(2)	(2)	327	273
January–March	520	399	388	355	25	23	1	1	934	779

^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 MARCH 2021¹

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
Secondary smelters	148,000	177,000	113,000	136,000
Independent mill fabricators	126,000	140,000	116,000	129,000
Foundries	7,040	8,450	6,440	7,730
Other consumers	273	328	273	328
Total	281,000	327,000	236,000	273,000

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 MARCH 2021¹

(Metric tons)

	March			January–March ²		
	Stocks, opening ²	Net receipts ³	Melted or consumed	Stocks, closing	Net receipts ³	Melted or consumed
New scrap:						
Extrusion	19,100	47,300	47,300	19,100	116,000	116,000
Can stock clippings	6,720	30,200	30,200	6,790	83,700	82,600
Other wrought sheet/clippings	7,730	35,600	36,200	7,140	97,700	102,000
Casting	3,820	5,430	5,430	3,820	16,400	16,400
Borings and turnings	4,820	12,900	12,900	4,820	36,500	36,500
Dross and skimmings	13,300	35,400	35,400	13,300	102,000	102,000
Total new scrap	55,500	167,000	167,000	55,000	453,000	456,000
Old scrap:						
Used castings	8,080	27,400	27,400	8,080	80,900	80,900
Used extrusion	8,020	16,900	16,900	8,020	50,700	50,700
Used cans (shredded, loose, baled)	8,250	35,700	35,700	8,260	112,000	112,000
Other wrought products	7,180	25,700	21,100	11,700	65,900	66,500
Fragmentized shredder (auto shredder)	4,190	12,500	12,100	4,630	36,300	36,000
Total old scrap	35,700	118,000	113,000	40,700	345,000	346,000
Total all classes	91,200	285,000	281,000	95,700	798,000	802,000

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.

TABLE 5
ALUMINUM ALLOYS PRODUCED AT SECONDARY SMELTERS IN THE UNITED
STATES IN MARCH 2021^{1,2}

(Metric tons)

	March				January–March	
	Stocks, opening ³	Production	Net shipments	Stocks, closing	Production	Net shipments
Die-cast alloys:						
13% Si, 360, etc. (0.6% Cu, max.)	2,760	2,600	2,600	2,760	7,810	7,810
380 and variations	6,430	18,900	18,900	6,430	56,700	56,700
Sand and permanent mold:						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	2,120	2,850	2,850	2,120	8,550	8,550
No. 319 and variations	2,000	2,430	2,430	2,000	7,280	7,280
F-132 alloy and variations	128	198	198	128	594	594
Al-Zn alloys	37	29	29	37	86	86
Al-Si alloys (0.6% to 2.0% Cu)	143	186	186	143	559	559
Al-Cu alloys (1.5% Si, max.)	423	297	297	423	891	891
Other ⁴	7,630	7,870	7,870	7,630	23,600	23,600
Wrought alloys, extrusion billets	10,100	53,100	53,100	10,100	159,000	159,000
Total all alloys	31,800	88,500	88,500	31,800	265,000	265,000
Less:						
Primary aluminum consumed	XX	15,600	XX	XX	46,800	XX
Primary silicon consumed	XX	1,690	XX	XX	5,070	XX
Other alloying ingredients consumed	XX	733	XX	XX	2,200	XX
Net metallic recovery from aluminum scrap consumed in production of secondary aluminum ingot ⁵						
	XX	70,500	XX	XX	211,000	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
2020:		
March	86.591	73.070
April	76.450	66.095
May	74.961	66.215
June	79.682	70.943
July	85.022	74.360
August	93.613	78.648
September	93.627	79.167
October	94.236	81.774
November	100.921	87.639
December	105.798	91.531
January–December	89.666	77.187
2021:		
January	105.638	90.891
February	109.548	94.329
March	118.185	99.409
January–March	111.124	94.876

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)
2020:					
March	50.02	41.80	38.95	39.95	35.18
April	40.79	37.12	32.45	34.17	30.21
May	39.80	36.80	32.35	33.80	29.25
June	44.77	37.50	35.39	35.77	29.91
July	47.45	40.09	37.86	37.20	31.23
August	48.40	42.69	40.52	39.60	34.64
September	50.93	46.10	43.90	43.60	37.88
October	52.18	48.18	46.73	47.00	40.55
November	56.55	51.45	51.42	51.76	46.06
December	62.82	58.86	58.02	57.50	50.41
January–December	49.90	43.57	41.19	41.39	35.73
2021:					
January	65.00	64.50	61.50	63.00	59.00
February	67.50	65.63	64.50	65.50	64.00
March	73.00	68.50	66.50	68.50	68.75
January–March	68.50	66.21	64.17	65.67	63.92

Source: Fastmarket-AMM.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN MARCH 2021¹

(Metric tons)

Country or locality	Metals and alloys, crude		Plates, sheets, bars, etc		Scrap		Total	
	March	January– March	March	January– March	March	January– March	March	January– March
Argentina	8,110	17,400	--	3	--	--	8,110	17,400
Australia	7,290	24,400	8	120	--	--	7,300	24,500
Austria	(2)	(2)	2,510	6,210	--	1	2,510	6,210
Bahrain	9,770	30,700	4,680	6,470	--	--	14,400	37,200
Belgium	23	78	970	3,250	--	--	993	3,330
Brazil	(2)	(2)	36	41	3,270	4,380	3,310	4,420
Canada	216,000	567,000	22,200	61,300	34,800	98,300	273,000	726,000
Chile	--	--	--	--	289	686	289	686
China	57	946	15,200	32,200	11	53	15,300	33,200
Colombia	--	--	631	1,610	570	1,690	1,200	3,300
Costa Rica	--	--	--	17	281	774	281	791
France	290	450	696	1,490	15	74	1,000	2,010
Germany	481	719	4,400	10,200	89	729	4,970	11,600
Greece	--	--	1,850	4,480	--	--	1,850	4,480
Guatemala	--	--	--	14	943	3,030	943	3,040
Honduras	--	--	415	1,400	24	45	439	1,440
Hong Kong	--	(2)	180	799	--	--	180	799
India	6,500	16,900	1,090	2,520	--	--	7,590	19,400
Indonesia	--	--	1,410	4,630	--	--	1,410	4,630
Italy	--	--	1,260	4,020	--	--	1,260	4,020
Japan	--	--	3,070	8,320	863	2,200	3,940	10,500
Korea, Republic of	1,360	3,500	3,890	6,890	39	77	5,290	10,500
Malaysia	4	4	1,370	3,260	--	--	1,380	3,260
Mexico	2,050	3,110	4,680	12,800	19,300	47,300	26,000	63,200
Netherlands	31	33	300	701	48	235	379	969
New Zealand	38	358	--	3	--	--	38	361
Norway	39	97	540	2,050	--	--	579	2,150
Oman	1,280	1,280	10,400	20,400	--	--	11,700	21,600
Qatar	5,570	17,300	--	--	--	--	5,570	17,300
Romania	--	--	298	1,440	--	--	298	1,440
Russia	17,500	38,700	1,100	3,840	--	--	18,600	42,600
Saudi Arabia	--	--	6,640	16,000	--	--	6,640	16,000
South Africa	--	--	2,030	4,820	--	--	2,030	4,820
Spain	89	197	2,060	6,140	386	1,110	2,540	7,450
Sweden	--	--	731	2,080	--	--	731	2,080
Switzerland	--	1	615	1,710	2	2	617	1,720
Taiwan	--	(2)	809	2,380	2	5	811	2,390
Thailand	103	172	9,310	14,400	42	112	9,460	14,700
Turkey	--	--	5,290	10,500	--	--	5,290	10,500
United Arab Emirates	31,200	77,800	47	430	--	--	31,200	78,200
United Kingdom	20	20	270	725	609	1,480	899	2,220
Vietnam	--	--	2,090	6,660	--	--	2,090	6,660
Other	114	138	7,890	19,600	1,570	4,380	9,570	24,200
Total	308,000	801,000	121,000	286,000	63,200	167,000	492,000	1,250,000

-- Zero.

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

²Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 9
U.S. EXPORTS OF ALUMINUM IN MARCH 2021¹

(Metric tons)

Country or locality	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	March	January– March	March	January– March	March	January– March	March	January– March
Australia	172	349	120	258	114	235	406	842
Belgium	--	1	33	85	156	379	189	465
Brazil	20	26	50	218	909	1,990	979	2,230
Canada	6,600	17,300	29,700	78,400	8,720	21,700	45,100	118,000
China	98	483	989	2,590	1,930	6,590	3,010	9,660
Colombia	--	--	10	183	20	78	30	261
Dominican Republic	--	--	44	142	126	479	170	621
France	21	46	341	1,120	9	87	371	1,250
Germany	5	7	509	986	299	979	813	1,970
Guatemala	--	--	27	34	--	--	27	34
Hong Kong	--	243	113	273	24,200	64,800	24,300	65,400
India	23	69	67	203	29,700	81,000	29,800	81,300
Indonesia	--	--	1	4	4,770	19,000	4,770	19,000
Ireland	--	13	57	154	--	--	57	167
Israel	11	11	1,260	3,110	--	--	1,270	3,120
Italy	--	(2)	50	157	237	665	287	822
Jamaica	--	--	12	17	--	--	12	17
Japan	34	58	305	776	1,160	5,150	1,500	5,980
Korea, Republic of	39	258	1,090	3,440	19,700	65,000	20,800	68,700
Malaysia	(2)	(2)	435	1,100	41,100	110,000	41,600	111,000
Mexico	12,100	30,000	26,500	72,200	17,600	45,100	56,300	147,000
Netherlands	5	31	36	88	200	501	241	620
New Zealand	--	2	68	146	--	--	68	148
Norway	--	--	2	3	--	--	2	3
Pakistan	--	--	--	15	1,230	3,920	1,230	3,930
Panama	(2)	1	1	16	--	--	1	17
Philippines	--	--	9	19	274	1,320	283	1,340
Poland	--	--	15	69	--	--	15	69
Romania	15	34	7	99	--	--	22	133
Russia	--	--	19	25	3,830	11,000	3,850	11,000
Saudi Arabia	--	--	14	128	--	187	14	315
Singapore	20	51	444	813	117	203	581	1,070
Spain	3	9	10	70	167	822	180	901
Taiwan	3	610	438	1,720	2,410	7,370	2,850	9,700
Thailand	(2)	(2)	31	127	6,410	20,000	6,440	20,100
Turkey	--	(2)	99	637	533	2,030	632	2,670
United Arab Emirates	--	--	292	472	911	1,540	1,200	2,020
United Kingdom	12	16	392	1,060	349	1,030	753	2,110
Vietnam	--	1	40	81	1,540	5,040	1,580	5,130
Other	299	824	318	794	1,430	4,850	2,050	6,470
Total	19,500	50,500	64,000	172,000	170,000	483,000	254,000	706,000

-- Zero.

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

²Less than ½ unit.

Source: U.S. Census Bureau.