

Mineral Industry Surveys

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ALUMINUM IN SEPTEMBER 2021

Domestic primary aluminum production in September 2021 was 72,000 metric tons (t). The average daily production in September 2021 was 2,390 t, slightly more than that in August 2021, slightly less than that in September 2020, and 18% less than that in September 2019 (fig. 1, table 1).

Total aluminum recovered from scrap in September 2021 was 272,000 t, slightly more than that in August 2021, 5% more than that in September 2020, but 4% less than that in September 2019. Of this, 144,000 t of aluminum was recovered from new scrap, and 129,000 t was recovered from old scrap (fig. 1, table 1).

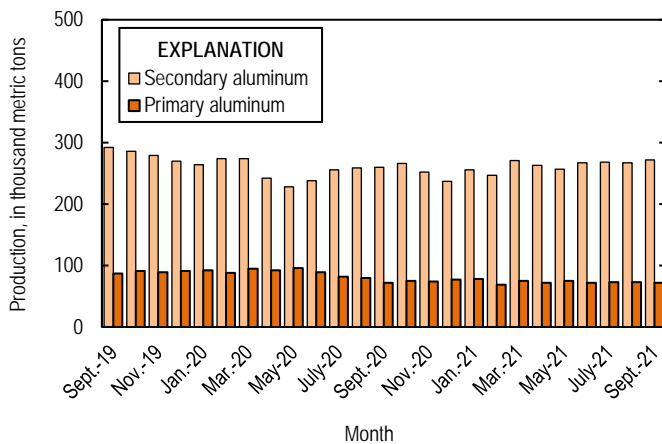


Figure 1. Monthly domestic primary and secondary aluminum production from September 2019 through September 2021.

Prices and Stocks

The September 2021 average U.S. spot market price of primary aluminum ingot was \$1.63 per pound, 7% more than that in August 2021, 75% more than that in September 2020, and 68% more than that in September 2019. The average cash price in September 2021 of primary aluminum ingot on the London Metal Exchange (LME) was \$1.29 per pound, 9% more than that in August 2021, 63% more than that in September 2020, and 62% more than that in September 2019 (fig. 2, table 6).

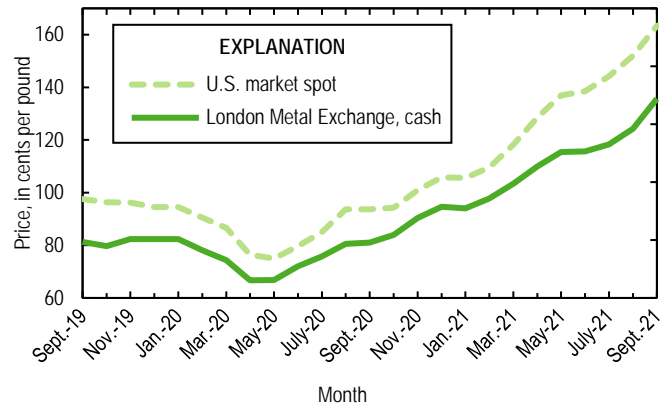


Figure 2. Average monthly prices for primary aluminum from September 2019 through September 2021. Source: S&P Global Platts Metals Week.

Inventories of primary aluminum in LME-approved warehouses, including off-warrant inventories, in the United States decreased to 82,588 t at the end of September 2021 from 91,860 t at the end of August 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 9,257 t at the end of September 2021 from 9,625 t at the end of August 2021 (London Metal Exchange Ltd., 2021a, b, c, d).

U.S. Trade

Total imports for consumption of aluminum in the first 9 months of 2021 (table 8) increased by 9% compared with the amount in the same period in 2020. Imports of crude metal and alloys increased slightly but imports of semifabricated products and scrap increased by 18% and 35%, respectively. Canada continued to be the leading source of imported aluminum materials, supplying 57% of all aluminum imports during the first 9 months of 2021, followed by the United Arab Emirates (6%), Mexico (5%), and Russia (4%). Canada accounted for 71% of crude metal, 19% of semifabricated products, and 59% of scrap imports in the first three quarters of 2021. The United

Arab Emirates and Russia accounted for 10% and 5%, respectively, of crude metal imports. China accounted for 12% of semifabricated product imports. Mexico was the source of 30% of scrap imports.

Total exports of aluminum (table 9) increased by 8% during the first 9 months of 2021 compared with those of the same period in the previous year. Exports of crude metal and scrap increased by 6%, and 13%, respectively, compared with those in the same period of 2020 but exports of semifabricated products decreased by 5%. The leading destinations for total aluminum products during the first 9 months of 2021, in descending order of quantity, were Mexico (19%), Malaysia (18%), Canada (16%), and India (14%).

Update

On October 30, the United States and the European Union reached an agreement to remove the 10% tariff on aluminum imports from member countries of the European Union that do not exceed specified quotas. Effective January 2022, the tariff will only be applied to imports of unwrought aluminum and wrought products that exceed 18,000 t and 366,000 t each year. The tariff was imposed in 2018 under authority of section 232 of the Trade Expansion Act of 1964. As part of the agreement, tariffs on specific goods produced in the United States exported to member countries of the European Union would not be imposed (Lazzaro, 2021a).

Final implementation of the antidumping and countervailing duties on aluminum foil imports from five countries was announced on November 11. On September 17, the U.S. Commerce Department announced its final determinations in antidumping and countervailing duty investigations of aluminum foil imports from five countries. (See Aluminum in August 2021.) Antidumping and countervailing duty rates were set at 29.11% for Armenia, 13.93-63.05% for Brazil, 5.82% for Oman, 62.18% for Russia, and 4.88% for Turkey. The U.S. International Trade Commission issued its final determinations in the case on October 19, finding that imports of aluminum foil from the five countries harmed producers in the United States (Lazzaro, 2021b).

In November, Alcoa Corp. announced that it was restarting 35,000 metric tons per year (t/yr) of capacity at the 358,000-t/yr Portland Aluminium smelter in Victoria, Australia. The potline has been idle since 2009 and the restart was enabled by a new power supply contract. Work necessary for the restart would begin immediately and the first production of aluminum was expected in the third quarter of 2022. Portland Aluminium was a joint venture between Alcoa (33%) CITIC Nominees Pty. Ltd. (22.5%) Marubeni Aluminium Australia Pty. Ltd. (22.5%) and Alumina Ltd. (22%) (Alcoa Corp., 2021; Coyne, 2021).

Malaysia's Ministry of International Trade and Industry delayed implementing a new regulation on scrap imports that was originally scheduled to take effect on September 1, 2021 but was delayed until January 1, 2022. The new rule requires scrap metal imports to contain a minimum of 94.75% metal and applies to aluminum, copper, and steel scrap. Through the first 9 months of 2021, 382,000 t of aluminum scrap was exported from the United States to Malaysia, which was 25% all aluminum exports (table 9). In recent years, Malaysia has become an important destination for aluminum scrap since China imposed restrictions on scrap exports from the United States (Choo and Chin, 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	1,012	1,630	1,420	3,050	3,270	1,050	4,320	8,380	1,490
2020:									
September	72	140	120	260	214	79	293	625	1,400
October	75	142	123	266	231	80	311	652	1,450
November	74	134	119	252	241	80	321	647	1,430
December	77	124	113	237	229	78	307	621	1,490
January–September	786	1,230 ^r	1,060 ^r	2,300 ^r	2,570	809	3,380	6,460 ^r	1,490
2021:									
January	78	134	123	256	250	84	334	668	1,470
February	69	131	116	247	243	81	324	640	1,480
March	75	154	117	271	308	121	429	775	1,470
April	72	144	118	263	324	109	433	768	1,660
May	75	138	119	257	313	114	427	760	1,680
June	72	141	127	267	294	113	407	746	1,680
July	73	141	127	268	298	105	403	744	1,730
August	73	142	125	267	319	126	445	785	1,710
September	72	144	129	272	285	106	391	735	NA
January–September	658	1,270	1,100	2,370	2,630	958	3,590	6,620	NA

^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	2,010	1,550	1,550 ^r	1,410	91	84	4	4	3,650	3,050
2020:										
September	170	131	132	121	8	8	(2)	(2)	311	260
October	172	133	136	125	8	8	(2)	(2)	317	266
November	169	129	126	115	8	8	(2)	(2)	303	252
December	168	129	111	101	8	8	(2)	(2)	288	237
January–September	1,500 ^r	1,160 ^r	1,170	1,070	66	60	3	3	2,740 ^r	2,290 ^r
2021:										
January	173	132	128	117	8	8	(2)	(2)	310	256
February	166	129	120	110	8	8	(2)	(2)	295	247
March	176	134	141	129	8	8	(2)	(2)	325	272
April	175	135	131	120	8	8	(2)	(2)	315	263
May	172	133	127	116	8	8	(2)	(2)	308	257
June	175	135	137	124	8	8	(2)	(2)	320	267
July	172	133	139	127	8	8	(2)	(2)	321	268
August	176	135	136	124	8	8	(2)	(2)	321	267
September	179	139	138	126	8	8	(2)	(2)	326	272
January–September	1,560	1,200	1,200	1,090	76	70	3	3	2,840	2,370

^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 SEPTEMBER 2021¹

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
Secondary smelters	149,000	179,000	116,000	139,000
Independent mill fabricators	124,000	138,000	113,000	126,000
Foundries	7,040	8,450	6,440	7,730
Other consumers	273	328	273	328
Total	280,000	326,000	235,000	272,000

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 SEPTEMBER 2021¹

(Metric tons)

	September			January–September ²		
	Stocks, opening ²	Net receipts ³	Melted or consumed	Stocks, closing	Net receipts ³	Melted or consumed
New scrap:						
Extrusion	19,600	42,800	42,600	19,700	356,000	356,000
Can stock clippings	6,900	27,900	27,900	6,900	252,000	251,000
Other wrought sheet/clippings	10,100	30,000	30,100	9,990	286,000	290,000
Casting	4,490	8,020	8,020	4,490	64,000	64,000
Borings and turnings	4,390	13,200	13,200	4,390	104,000	106,000
Dross and skimmings	13,300	33,400	33,400	13,300	306,000	306,000
Total new scrap	58,700	155,000	155,000	58,800	1,370,000	1,370,000
Old scrap:						
Used castings	8,150	26,800	26,800	8,150	244,000	244,000
Used extrusion	7,680	16,700	16,700	7,680	149,000	150,000
Used cans (shredded, loose, baled)	8,700	46,800	46,800	8,700	368,000	368,000
Other wrought products	16,300	23,400	23,400	16,300	207,000	203,000
Fragmentized shredder (auto shredder)	5,310	11,200	11,200	5,310	104,000	103,000
Total old scrap	46,100	125,000	125,000	46,100	1,070,000	1,070,000
Total all classes	105,000	280,000	280,000	105,000	2,440,000	2,440,000

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 SEPTEMBER 2021^{1,2}

(Metric tons)

	September				January–September	
	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	23,400	23,400
380 and variations	6,350	18,300	18,300	6,350	165,000	165,000
Sand and permanent mold:						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	2,120	2,850	2,850	2,120	25,700	25,700
No. 319 and variations	2,110	2,210	2,210	2,110	19,900	19,900
F-132 alloy and variations	128	198	198	128	1,780	1,780
Al-Zn alloys	37	29	29	37	258	258
Al-Si alloys (0.6% to 2.0% Cu)	143	186	186	143	1,680	1,680
Al-Cu alloys (1.5% Si, max.)	423	297	297	423	2,670	2,670
Other ⁴	7,630	7,870	7,870	7,630	70,800	70,800
Wrought alloys, extrusion billets	10,100	53,100	53,100	10,100	478,000	478,000
Total all alloys	31,900	87,700	87,700	31,900	789,000	789,000
Less:						
Primary aluminum consumed	XX	15,600	XX	XX	140,000	XX
Primary silicon consumed	XX	1,630	XX	XX	14,700	XX
Other alloying ingredients consumed	XX	733	XX	XX	6,590	XX
Net metallic recovery from aluminum scrap consumed in production of secondary aluminum ingot ⁵						
	XX	69,700	XX	XX	628,000	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:		
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
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
January–September	133.006	107.923

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:					
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
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
January–September ¹	71.81	70.80	66.74	67.67	66.56

NA Not available.

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

Source: Fastmarket-AMM.

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

(Metric tons)

Country or locality	Metals and alloys, crude		Plates, sheets, bars, etc		Scrap		Total	
	September	January– September	September	January– September	September	January– September	September	January– September
Argentina	24,400	84,900	64	175	--	--	24,400	85,000
Australia	6,440	82,900	43	354	--	--	6,480	83,200
Austria	1,500	1,500	3,350	21,800	9	51	4,860	23,400
Bahrain	13,000	83,900	2,130	15,700	--	--	15,100	99,600
Belgium	6	243	874	9,230	--	--	880	9,470
Brazil	--	(2)	37	190	--	10,600	37	10,700
Canada	201,000	1,860,000	19,900	180,000	35,800	309,000	257,000	2,350,000
Chile	--	--	--	--	100	2,030	100	2,030
China	57	1,330	14,900	110,000	11	204	14,900	112,000
Colombia	--	--	742	5,550	560	4,510	1,300	10,100
Costa Rica	--	--	20	145	328	1,770	348	1,910
France	415	1,880	1,380	6,790	11	210	1,810	8,880
Germany	359	2,050	2,950	29,900	437	2,400	3,750	34,400
Greece	--	--	1,720	15,500	--	50	1,720	15,600
Guatemala	--	--	--	14	792	8,490	792	8,500
Honduras	--	--	463	4,200	20	181	483	4,380
Hong Kong	--	73	492	2,900	--	--	492	2,970
India	2,630	42,600	1,130	10,400	(2)	(2)	3,750	53,100
Indonesia	--	--	1,680	15,900	4	4	1,690	15,900
Italy	--	302	661	12,200	--	(2)	661	12,500
Japan	--	9	4,410	35,600	--	2,240	4,410	37,800
Korea, Republic of	1,770	10,400	3,040	27,100	--	118	4,810	37,600
Malaysia	79	124	574	9,820	--	--	653	9,950
Mexico	970	11,500	6,030	44,300	17,600	157,000	24,600	213,000
Netherlands	18	421	111	1,940	192	1,820	321	4,180
New Zealand	99	817	1	9	--	--	100	826
Norway	--	143	306	7,820	--	--	306	7,960
Oman	--	3,460	6,380	66,600	--	--	6,380	70,100
Qatar	6,120	50,200	--	--	--	--	6,120	50,200
Romania	--	--	454	4,150	--	--	454	4,150
Russia	9,570	138,000	1,420	11,300	--	--	11,000	149,000
Saudi Arabia	--	--	4,440	47,900	--	726	4,440	48,600
South Africa	507	1,540	3,510	26,200	--	--	4,020	27,700
Spain	35	835	1,650	18,900	--	3,300	1,680	23,000
Sweden	--	--	790	7,210	--	--	790	7,210
Switzerland	63	77	621	7,170	--	2	684	7,250
Taiwan	--	91	294	4,680	1	18	295	4,790
Thailand	95	853	2,310	48,900	--	297	2,400	50,100
Turkey	19	42	5,480	46,200	--	--	5,500	46,300
United Arab Emirates	15,600	253,000	429	2,690	70	70	16,100	255,000
United Kingdom	1	114	698	4,100	--	3,480	699	7,700
Vietnam	--	1	3,480	28,900	--	1	3,480	28,900
Other	8	275	7,000	65,800	2,510	17,300	9,520	83,400
Total	285,000	2,630,000	106,000	958,000	58,400	526,000	449,000	4,120,000

-- 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 SEPTEMBER 2021¹

(Metric tons)

Country or locality	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	September	January– September	September	January– September	September	January– September	September	January– September
Australia	40	708	38	844	--	235	78	1,790
Belgium	--	1	30	208	824	2,350	854	2,560
Brazil	1	32	75	969	129	3,930	205	4,930
Canada	5,290	50,700	23,900	227,000	7,570	67,400	36,800	345,000
China	62	1,280	379	6,520	1,680	13,400	2,120	21,200
Colombia	14	130	60	484	91	264	165	878
Dominican Republic	--	10	27	254	87	1,310	114	1,580
France	11	121	121	3,200	80	623	212	3,950
Germany	8	63	97	2,560	317	3,230	422	5,850
Guatemala	--	1	2	68	--	--	2	69
Hong Kong	--	245	72	665	6,940	175,000	7,020	176,000
India	22	541	105	781	46,100	295,000	46,200	296,000
Indonesia	--	(2)	3	13	7,370	55,000	7,370	55,000
Ireland	--	14	41	369	--	116	41	499
Israel	26	38	501	8,390	--	--	527	8,430
Italy	--	15	35	505	516	1,940	551	2,460
Jamaica	--	5	(2)	43	--	1	(2)	49
Japan	48	331	177	2,160	2,920	18,200	3,140	20,700
Korea, Republic of	33	475	270	7,630	25,000	193,000	25,300	201,000
Malaysia	83	266	24	2,320	41,200	380,000	41,300	382,000
Mexico	7,130	85,500	22,100	204,000	13,300	127,000	42,400	417,000
Netherlands	10	83	28	442	199	1,950	237	2,470
New Zealand	13	15	31	363	--	--	44	378
Norway	--	--	8	41	--	--	8	41
Pakistan	--	2	(2)	19	877	11,200	877	11,300
Panama	(2)	5	5	69	--	--	5	74
Philippines	6	16	13	76	510	3,870	529	3,960
Poland	19	53	35	291	--	--	54	344
Romania	6	91	70	424	--	--	76	515
Russia	--	--	8	50	3,340	42,600	3,340	42,600
Saudi Arabia	--	1	4	189	--	208	4	398
Singapore	8	87	69	1,990	--	738	77	2,810
Spain	4	33	17	172	401	1,760	422	1,970
Taiwan	81	1,250	277	3,320	2,480	22,000	2,840	26,600
Thailand	--	3	54	665	5,920	51,500	5,980	52,200
Turkey	--	1	74	1,040	698	5,830	772	6,870
United Arab Emirates	--	119	245	2,030	1,400	8,360	1,640	10,500
United Kingdom	1	88	315	3,560	186	2,300	502	5,950
Vietnam	--	1	24	562	594	9,440	618	10,000
Other	90	2,270	334	2,610	647	11,500	1,070	16,300
Total	13,000	145,000	49,700	487,000	171,000	1,510,000	234,000	2,140,000

-- 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.