

Mineral Industry Surveys

For information, contact:

E. Lee Bray, Aluminum Commodity Specialist
 National Minerals Information Center
 U.S. Geological Survey
 989 National Center
 Reston, VA 20192
 Telephone: (703) 648-4979, Fax: (703) 648-7757
 Email: lbray@usgs.gov

Susan M. Weaver (Data)
 Telephone: (703) 648-7979
 Fax: (703) 648-7995
 Email: sweaver@usgs.gov

Internet: <https://www.usgs.gov/centers/nmic>

ALUMINUM IN OCTOBER 2019

Domestic primary aluminum production in October was 91,000 metric tons (t). The average daily production in October was 2,930 t, slightly more than that in September, 8% more than that in October 2018, and 45% more than that in October 2017 (fig. 1, table 1).

Total aluminum recovered from scrap in October was 279,000 t, slightly less than the amount in September, 12% less than the amount in October 2018, and 8% less than that in October 2017. Of this, 151,000 t of aluminum was recovered from new scrap and 128,000 t was recovered from old scrap (fig. 1, table 1).

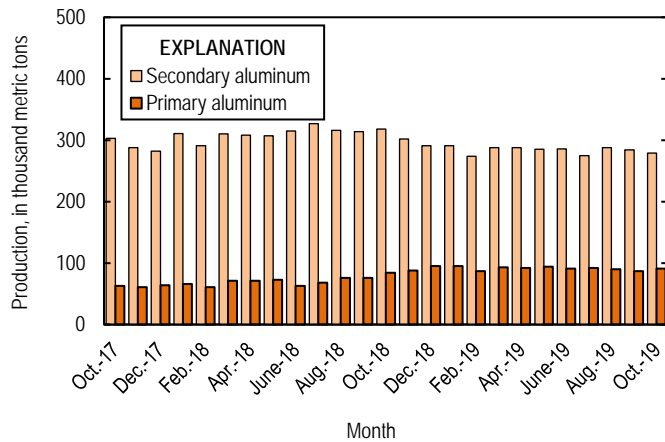


Figure 1. Monthly domestic primary and secondary aluminum production from October 2017 through October 2019.

Prices and Stocks

The October average U.S. market price of primary aluminum ingot was \$0.963 per pound, slightly less than that in September. The average cash price in October of primary aluminum ingot on the London Metal Exchange (LME) decreased slightly to \$0.779 per pound from that in September (fig. 2, table 6).

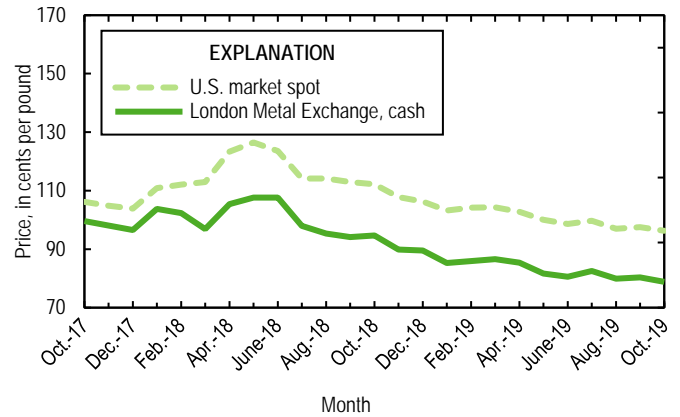


Figure 2. Average monthly prices for primary aluminum from October 2017 through October 2019. Source: Platts Metals Week.

Inventories of primary aluminum in LME-approved warehouses in the United States decreased to 5,225 t at the end of October from 5,800 t at the end of September. Inventories of secondary aluminum (North American Secondary Aluminum Alloy Contract) in LME-approved warehouses in the United States decreased to 58,600 t at the end of October from 64,780 t at the end of September (London Metal Exchange Ltd., 2019a, b).

Update

ELYSIS Corp., a joint venture between Alcoa Corp. and Rio Tinto plc., made its first shipment of aluminum to Apple Inc. in December from its pilot plant. The joint venture developed a primary aluminum smelting process that does not use carbon anodes or generate carbon dioxide and perfluorocarbons. Construction of a commercial scale smelter in Saguenay, Quebec, Canada, started in August 2019 and further expansion to commercial scale would be completed in 2024. The capacity of the smelter was not available (ELYSIS Corp., 2019a, b).

References Cited

ELYSIS Corp., 2019a, Apple purchases from ELYSIS a first carbon-free commercial aluminium batch: Montreal, Quebec, Canada, ELYSIS Corp. media release, December 5. (Accessed December 16, 2019, at <https://www.elysis.com/en/apple-purchases-from-elysis-a-first-carbon-free-commercial-aluminium-batch>.)

ELYSIS Corp., 2019b, ELYSIS R&D center in Saguenay—Construction work officially launched: Saguenay, Quebec, Canada, ELYSIS Corp. media release, August 16. (Accessed December 16, 2019, at <https://www.elysis.com/en/elysis-rd-center-in-saguenay-construction-work-officially-launched>.)

London Metal Exchange Ltd., 2019a, Aluminium stocks: London, United Kingdom, London Metal Exchange Ltd., September 30, 3 p.

London Metal Exchange Ltd., 2019b, Aluminium stocks: London, United Kingdom, London Metal Exchange Ltd., October 31, 3 p.

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/nmic/minerals-information-publication-list-services>.

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		
2018 ^p	891	2,140	1,570	3,710	4,130	1,410	5,540	10,100	1,570
2018:									
October	84	182	136	318	306	119	425	827	1,570
November	88	169	133	302	294	122	416	806	1,580
December	95	169	122	291	306	122	428	813	1,570
January–October	709	1,800	1,320	3,120	3,530	1,170	4,700	8,520	1,570
2019:									
January	95	172	119	291	298	136	434	820	1,640
February	87	153	121	274	284	118	402	763	1,600
March	93	159	129	288	312	145	457	838	1,590
April	92	161	128	288	314	143	457	838	1,650
May	94	158	127	285	287	135	423	802	1,630
June	91	159	127	286	315	131	446	823	1,630
July	92	145	129	275	91	117	208	575	1,640
August	90	158	130	288	74	115	189	567	1,650 ^r
September	87	159	125	284	54	105	159	531	1,640
October	91	151	128	279	65	100	165	534	NA
January–October	912	1,580	1,260	2,840	2,090	1,250	3,340	7,090	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
	2018 ^p	2,210	1,700	2,090	1,910	101	93	4	4	4,410
2018:										
October	195	146	179	164	8	8	(2)	(2)	383	318
November	189	141	167	153	8	8	(2)	(2)	365	302
December	186	141	155	142	8	8	(2)	(2)	350	291
January–October	1,840	1,420	1,770	1,620	84	77	3	3	3,690	3,120
2019:										
January	178	135	161	148	8	8	(2)	(2)	348	291
February	182	138	140	128	8	8	(2)	(2)	330	274
March	188	141	152	140	8	8	(2)	(2)	349	288
April	184	139	154	141	8	8	(2)	(2)	346	288
May	185	139	150	137	8	8	(2)	(2)	344	285
June	184	139	152	139	8	8	(2)	(2)	345	286
July	182	137	142	130	8	8	(2)	(2)	333	275
August	182	135	158	145	8	8	(2)	(2)	348	288
September	182	138	151	139	8	8	(2)	(2)	342	284
October	185	140	143	130	8	8	(2)	(2)	336	279
January–October	1,830	1,380	1,500	1,380	84	77	3	3	3,420	2,840

^pPreliminary.

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 OCTOBER 2019¹

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
Secondary smelters	154,000	185,000	117,000	140,000
Independent mill fabricators	128,000	143,000	118,000	130,000
Foundries	7,040	8,450	6,440	7,730
Other consumers	273	328	273	328
Total	290,000	336,000	241,000	279,000

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 OCTOBER 2019¹

(Metric tons)

	October			January–October ²		
	Stocks, opening ²	Net receipts ³	Melted or consumed	Stocks, closing	Net receipts ³	Melted or consumed
New scrap:						
Extrusion	18,500	48,000	48,000	18,600	531,000	531,000
Can stock clippings	6,020	22,900	22,900	6,080	241,000	241,000
Other wrought sheet/clippings	47,700	42,500	38,500	51,700	397,000	372,000
Casting	4,150	5,590	5,590	4,150	64,400	64,400
Borings and turnings	5,580	11,900	11,900	5,590	126,000	126,000
Dross and skimmings	16,400	39,200	39,200	16,400	398,000	398,000
Total new scrap	98,400	170,000	166,000	102,000	1,760,000	1,730,000
Old scrap:						
Used castings	9,410	26,500	26,500	9,410	267,000	267,000
Used extrusion	9,190	15,900	15,900	9,190	154,000	154,000
Used cans (shredded, loose, baled)	11,300	40,400	40,500	11,200	406,000	406,000
Other wrought products	15,600	32,600	31,500	16,700	302,000	302,000
Fragmentized shredder (auto shredder)	3,870	9,270	9,300	3,850	95,100	95,200
Total old scrap	49,300	125,000	124,000	50,400	1,220,000	1,220,000
Total all classes	148,000	295,000	290,000	153,000	2,980,000	2,960,000

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 OCTOBER 2019^{1,2}

(Metric tons)

	October				January–October	
	Stocks, opening ³	Production	Net shipments	Stocks, closing	Production	Net shipments
Die-cast alloys:						
13% Si, 360, etc. (0.6% Cu, max.)	2,630	1,790	1,790	2,630	17,900	17,900
380 and variations	6,930	15,400	15,400	6,930	154,000	154,000
Sand and permanent mold:						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	1,310	2,550	2,550	1,310	25,500	25,500
No. 319 and variations	3,480	3,370	3,370	3,480	33,600	33,600
F-132 alloy and variations	418	386	386	418	3,860	3,860
Al-Zn alloys	W	W	W	W	W	W
Al-Si alloys (0.6% to 2.0% Cu)	214	142	142	214	1,420	1,420
Al-Cu alloys (1.5% Si, max.)	W	W	W	W	W	W
Other ⁴	6,930	10,100	10,100	6,930	101,000	101,000
Wrought alloys, extrusion billets	10,800	55,000	55,000	10,800	550,000	550,000
Total all alloys	32,700	88,800	88,800	32,700	888,000	888,000
Less:						
Primary aluminum consumed	XX	16,200	XX	XX	160,000	XX
Primary silicon consumed	XX	1,860	XX	XX	19,400	XX
Other alloying ingredients consumed	XX	846	XX	XX	9,290	XX
Net metallic recovery from aluminum						
scrap consumed in production of						
secondary aluminum ingot ⁵	XX	69,900	XX	XX	699,000	XX

W Withheld to avoid disclosing company proprietary data; included in "Other." 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
2018:		
October	112.207	92.254
November	107.763	87.871
December	106.294	87.588
January–December	114.737	95.703
2019:		
January	103.268	83.711
February	104.202	84.333
March	104.286	84.907
April	102.825	83.849
May	100.083	80.510
June	98.625	79.547
July	99.707	81.307 ^r
August	96.929	78.953 ^r
September	97.507	79.344 ^r
October	96.283	77.949
January–October	100.372	81.441

^rRevised.

Source: 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)
2018:					
October	63.50	55.87	45.78	44.30	42.30
November	59.35	54.62	45.45	44.50	41.00
December	58.12	53.25	45.50	45.00	40.62
January–December	73.00	61.90	55.12	55.42	52.03
2019:					
January	54.98	50.55	44.38	43.45	39.38
February	57.58	50.21	45.32	44.32	39.50
March	59.60	51.00	46.00	45.00	39.38
April	59.48	51.38	46.40	45.48	39.05
May	57.00	49.05	44.77	43.07	37.91
June	54.12	47.15	42.40	40.90	34.70
July	54.00	46.34	41.00	39.00	32.18
August	53.18	45.64	39.18	38.43	31.39
September	51.50	42.10	36.98	35.90	29.35
October	NA	NA	NA	NA	NA
January–October	NA	NA	NA	NA	NA

NA Not available.

Source: American Metal Market.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN OCTOBER 2019¹

(Metric tons)

Country or locality	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	October	January– October	October	January– October	October	January– October	October	January– October
Argentina	3,250	102,000	--	21	--	--	3,250	102,000
Australia	162	164,000	45	913	--	389	207	166,000
Austria	--	--	773	21,400	--	--	773	21,400
Bahrain	10,500	108,000	5,090	62,200	--	--	15,600	170,000
Belgium	--	129	802	11,300	--	--	802	11,400
Brazil	--	1,640	2,180	30,300	--	174	2,180	32,100
Canada	12,500	916,000	19,200	165,000	34,800	322,000	66,500	1,400,000
Chile	--	--	--	5	429	2,850	429	2,860
China	244	10,700	6,190	108,000	55	180	6,490	119,000
Colombia	--	--	401	3,890	5	1,270	406	5,160
Costa Rica	--	--	--	--	223	2,790	223	2,790
El Salvador	--	--	32	571	107	1,520	139	2,090
France	--	3,040	1,190	17,300	251	618	1,440	20,900
Germany	--	142	8,280	90,800	29	1,760	8,310	92,700
Greece	--	--	1,640	31,700	5	33	1,640	31,700
Guatemala	--	--	11	19	464	9,240	475	9,260
Honduras	--	--	282	1,700	21	779	303	2,470
Hong Kong	--	--	37	5,260	--	--	37	5,260
India	10,200	131,000	3,760	47,500	--	26	14,000	179,000
Indonesia	--	--	2,080	66,400	1	1	2,090	66,400
Italy	--	1,570	1,650	28,500	--	36	1,650	30,100
Japan	4	57	4,530	41,000	905	9,310	5,440	50,400
Korea, Republic of	--	7,850	3,220	37,400	1,120	9,810	4,340	55,100
Malaysia	504	4,270	512	5,810	--	39	1,020	10,100
Mexico	--	325	2,270	31,300	12,500	128,000	14,800	159,000
Netherlands	--	445	493	4,710	158	434	651	5,590
New Zealand	--	5,190	--	2	--	--	--	5,190
Norway	--	11,600	185	4,510	--	--	185	16,100
Oman	--	5,110	7,400	76,000	--	--	7,400	81,100
Qatar	7,960	131,000	--	62	--	--	7,960	131,000
Romania	--	--	634	11,200	35	35	669	11,200
Russia	3,920	129,000	1,310	12,300	--	--	5,230	141,000
Saudi Arabia	--	12,100	6,430	49,500	--	--	6,430	61,600
South Africa	--	6,760	3,020	43,900	--	--	3,020	50,600
Spain	--	2,080	839	18,500	--	729	839	21,300
Sweden	--	--	531	7,920	--	--	531	7,920
Switzerland	--	--	329	5,830	43	43	372	5,870
Taiwan	--	117	3,840	53,100	2	850	3,840	54,100
Thailand	104	673	451	13,900	19	367	574	14,900
Turkey	--	--	3,950	49,200	--	--	3,950	49,200
United Arab Emirates	15,700	337,000	95	2,680	--	134	15,800	339,000
United Kingdom	9	748	341	7,740	295	3,480	645	12,000
Venezuela	--	36	--	284	78	1,140	78	1,460
Vietnam	--	--	1,730	17,800	5	1,120	1,740	19,000
Other	--	2,030	4,080	57,400	912	12,000	4,990	71,500
Total	65,100	2,090,000	99,800	1,250,000	52,400	511,000	217,000	3,850,000

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 9
U.S. EXPORTS OF ALUMINUM IN OCTOBER 2019¹

(Metric tons)

Country or locality	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	October	January– October	October	January– October	October	January– October	October	January– October
Australia	215	608	177	1,940	--	3	392	2,550
Belgium	1	7	188	1,710	1,260	6,580	1,450	8,300
Brazil	124	1,100	328	5,370	1,870	19,400	2,320	25,900
Canada	8,920	83,100	28,000	285,000	8,420	78,900	45,300	447,000
China	179	763	2,400	23,900	6,760	307,000	9,340	332,000
Colombia	--	4	59	518	--	--	59	522
Dominican Republic	40	678	12	639	--	58	52	1,380
France	352	6,010	443	6,870	355	2,010	1,150	14,900
Germany	61	1,860	744	5,430	587	6,500	1,390	13,800
Guatemala	--	--	420	4,190	--	--	420	4,190
Hong Kong	2	31	190	1,230	3,390	86,100	3,580	87,400
India	46	216	303	1,710	20,300	217,000	20,600	219,000
Indonesia	--	209	6	65	9,340	83,900	9,350	84,200
Ireland	--	15	19	472	--	--	19	487
Israel	--	4	975	10,200	--	21	975	10,200
Italy	13	75	202	1,490	4,020	9,230	4,230	10,800
Jamaica	--	9	14	145	--	--	14	154
Japan	60	1,520	1,270	15,200	1,290	12,400	2,610	29,100
Korea, Republic of	3	287	2,130	23,600	24,000	227,000	26,100	251,000
Malaysia	1	67	323	2,890	40,100	216,000	40,500	219,000
Mexico	7,360	94,500	29,900	317,000	16,000	156,000	53,300	567,000
Netherlands	8	48	31	390	--	926	39	1,360
New Zealand	--	2	69	368	--	--	69	370
Norway	--	--	--	82	--	--	--	82
Pakistan	--	--	4	49	733	11,500	737	11,600
Panama	--	20	62	208	--	--	62	228
Philippines	--	2	43	301	1,330	9,880	1,370	10,200
Poland	5	65	237	973	38	239	280	1,280
Romania	5	87	138	1,060	--	--	143	1,150
Russia	--	6	58	142	1,580	5,870	1,630	6,020
Saudi Arabia	--	7	54	649	18	2,910	72	3,570
Singapore	3	448	282	1,610	94	4,990	379	7,050
Spain	698	1,110	180	1,170	460	4,110	1,340	6,390
Taiwan	384	2,160	302	4,780	5,210	53,100	5,900	60,000
Thailand	1	348	133	1,400	3,810	25,100	3,940	26,900
Turkey	--	115	467	4,310	59	437	526	4,870
United Arab Emirates	--	166	11	275	1,090	5,510	1,100	5,950
United Kingdom	45	780	829	7,890	114	2,200	988	10,900
Vietnam	--	3	19	131	2,080	5,770	2,100	5,910
Other	120	651	398	4,040	2,590	12,900	3,110	17,600
Total	18,600	197,000	71,400	739,000	157,000	1,570,000	247,000	2,510,000

-- Zero.

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

Source: U.S. Census Bureau.