

Mineral Industry Surveys

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ALUMINUM IN OCTOBER 2017

Domestic primary aluminum production in October 2017 was 63,000 metric tons (t). The average daily production in October was 2,020 t, essentially unchanged from that in September 2017 and slightly more than that in October 2016, but 51% less than that in October 2015 (fig. 1, table 1).

Total aluminum recovered from scrap in October 2017 was 303,000 t, essentially unchanged from that in September 2017 and October 2016, but 7% more than in October 2015 (fig. 1, table 1). Of this, 172,000 t of aluminum was recovered from new scrap and 131,000 t was recovered from old scrap.

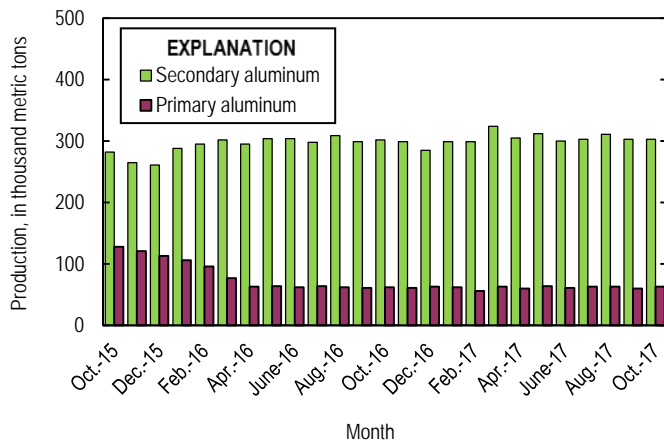


Figure 1. Monthly domestic primary and secondary aluminum production from October 2015 through October 2017. Source: U.S. Geological Survey.

Update

The U.S. Department of Commerce initiated anti-dumping and countervailing duty investigations into imports of common aluminum alloy sheet from China. The alloys that were the subject of the investigation included 1000-series, 3000-series, and 5000-series but did not include can stock alloys. The investigation included flat-rolled products with a thickness greater than 0.2 millimeters and up to 6.3 millimeters. Markets for the subject sheet products were appliances, building and construction, electrical applications, and transportation.

Preliminary determinations are scheduled to be completed in early 2018 (U.S. Department of Commerce, 2017a, b).

The Government of China ordered aluminum smelters and alumina refineries in certain areas to shut down 30% of capacity from November 15, 2017, until March 15, 2018. The order to shut down capacity cited environmental concerns about pollution produced by smelters, refineries, and powerplants during the winter. Smelters and refineries in 31 cities, mainly in the central and eastern Provinces, were affected by the order (Hotter, 2017; Mok, 2017).

Prices and Stocks

The October 2017 average U.S. market price of primary aluminum ingot and average cash price on the London Metal Exchange Ltd. (LME) increased slightly from those in September 2017 to \$1.062 per pound and \$0.966 per pound, respectively (fig. 2, table 6).

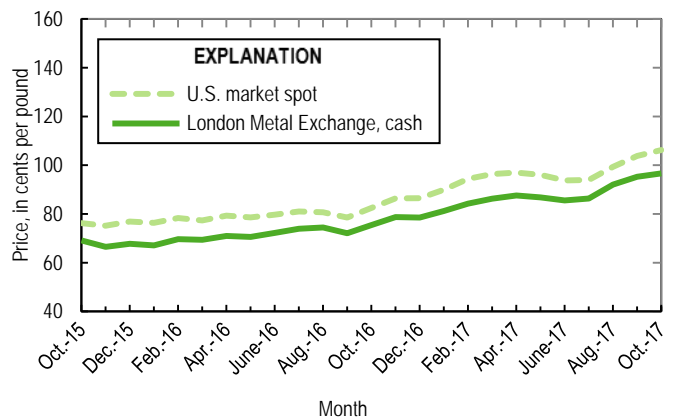


Figure 2. Average monthly prices for primary aluminum from October 2015 through October 2017. Source: Platts Metals Week.

Inventories of primary aluminum in LME-approved warehouses in the United States decreased to 79,900 t at the end of October from 89,750 t at the end of September (London Metal Exchange Ltd., 2017a, b).

References Cited

Hotter, Andrea, 2017, Cut China smelting capacity won't restart—Rusal: American Metal Market, v. 125, no. 45–3, November 8, p. 9.

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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		
2016 ^p	841	2,010	1,570	3,580	4,230	1,180	5,410	9,840	1,400
2016:									
October	62	167	135	302	316	99	415	779	1,320
November	61	169	130	299	392	100	492	852	1,270
December	63	166	119	285	381	95	476	824	1,400
January–October	716	1,670	1,330	3,000	3,460	983	4,440	8,160	1,400
2017:									
January	62	164	135	299	458	100	558	919	1,310
February	56	170	130	299	394	90	484	840	1,290
March	63	180	145	324	476	111	587	974	1,310
April	60	171	134	305	434	113	547	912	1,320
May	64	176	136	312	411	133	544	920	1,340
June	61	170	130	300	409	119	528	889	1,330
July	63	170	133	303	411	130	541	907	1,360
August	63	174	137	311	379	121	500	874	1,390
September	60	170	133	303	338	102	440	803	1,420
October	63	172	131	303	358	122	480	846	NA
January–October	616	1,720	1,340	3,060	4,070	1,140	5,210	8,880	NA

^pPreliminary. 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 both 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
2016 ^p	2,140	1,690	1,980	1,800	101	93	5	5	4,220	3,580
2016:										
October	179	141	168	153	8	8	(2)	(2)	357	302
November	177	139	166	151	8	8	(2)	(2)	351	299
December	168	135	155	142	8	8	(2)	(2)	332	285
January–October	1,790	1,410	1,650	1,510	84	77	4	4	3,530	3,000
2017:										
January	176	139	167	152	8	8	(2)	(2)	352	299
February	170	136	171	156	8	8	(2)	(2)	350	299
March	179	140	193	176	8	8	(2)	(2)	381	324
April	175	137	175	160	8	8	(2)	(2)	358	305
May	179	141	179	163	8	8	(2)	(2)	366	312
June	168	131	176	161	8	8	(2)	(2)	352	300
July	175	138	172	157	8	8	(2)	(2)	355	303
August	177	140	178	163	8	8	(2)	(2)	364	311
September	172	137	173	158	8	8	(2)	(2)	354	303
October	179	141	168	154	8	8	(2)	(2)	356	303
January–October	1,750	1,380	1,750	1,600	84	77	4	4	3,590	3,060

^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 2017¹

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
Secondary smelters	149,000	179,000	118,000	141,000
Independent mill fabricators	155,000	168,000	142,000	154,000
Foundries	7,040	8,450	6,440	7,730
Other consumers	296	355	295	354
Total	312,000	356,000	266,000	303,000

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 AND SWEATED
PIG IN OCTOBER 2017¹

(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	16,200	72,300	72,800	15,700	693,000	692,000
Can stock clippings	7,100	16,400	16,500	6,920	194,000	194,000
Other wrought sheet/clippings	9,380	44,900	45,200	9,150	460,000	459,000
Casting	2,860	5,430	5,380	2,900	55,900	55,800
Borings and turnings	3,660	11,100	9,970	4,790	97,500	96,100
Dross and skimmings	7,410	32,200	32,200	7,410	309,000	309,000
Total new scrap	46,600	182,000	182,000	46,900	1,810,000	1,810,000
Old scrap:						
Used castings	7,650	25,500	25,500	7,610	243,000	243,000
Used extrusion	7,510	13,400	12,900	8,060	141,000	141,000
Used cans (shredded, loose, baled)	4,610	55,100	55,100	4,560	577,000	577,000
Other wrought products	14,600	28,900	28,300	15,100	280,000	289,000
Fragmentized shredder (auto shredder)	3,220	7,160	7,690	2,690	84,400	84,000
Total old scrap	37,500	130,000	130,000	38,000	1,330,000	1,330,000
Sweated pig	183	151	151	183	1,510	1,510
Total all classes	84,400	312,000	312,000	85,100	3,140,000	3,140,000

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 2017^{1,2}

(Metric tons)

	October				January–October ³	
	Stocks, opening ³	Production	Net shipments	Stocks, closing	Production	Net shipments
Die-cast alloys:						
13% Si, 360, etc. (0.6% Cu, max.)	2,290	2,640	2,670	2,250	26,700	27,400
380 and variations	5,570	12,300	12,300	5,570	123,000	123,000
Sand and permanent mold:						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	1,610	4,160	4,160	1,610	41,600	41,600
No. 319 and variations	3,030	2,910	2,920	3,030	29,200	29,200
F-132 alloy and variations	670	341	341	670	3,410	3,410
Al-Zn alloys	418	130	130	418	1,300	1,300
Al-Si alloys (0.6% to 2.0% Cu)	214	125	125	214	1,250	1,250
Al-Cu alloys (1.5% Si, max.)	174	83	83	174	832	832
Other ⁴	4,600	15,200	15,100	4,690	151,000	156,000
Wrought alloys, extrusion billets	40,100	65,800	66,500	39,400	655,000	656,000
Total all alloys	58,700	104,000	104,000	58,000	1,030,000	1,040,000
Less:						
Primary aluminum consumed	XX	18,600	XX	XX	187,000	XX
Primary silicon consumed	XX	2,010	XX	XX	21,100	XX
Other alloying ingredients consumed	XX	1,290	XX	XX	13,300	XX
Net metallic recovery from aluminum scrap and sweated pig consumed in production of secondary aluminum ingot ⁵	XX	81,800	XX	XX	812,000	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-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
2016:		
October	82.476	75.458
November	86.375	78.692
December	86.475	78.483
January–December	80.428	72.746
2017:		
January	89.964	81.210
February	94.375	84.207
March	96.370	86.233
April	96.972	87.571
May	96.071	86.803
June	93.761	85.559
July	93.964	86.329
August	99.330	92.062
September	103.810	95.261
October	106.198	96.616
January–October	97.082	88.185

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)
2016:					
October	63.00	57.00	53.24	55.95	55.76
November	67.15	57.88	54.20	56.20	55.00
December	67.81	58.50	55.00	57.67	55.00
January–December	61.99	56.99	53.68	56.54	54.36
2017:					
January	70.30	59.92	56.00	58.35	56.65
February	72.37	62.47	58.00	59.68	58.89
March	73.35	65.91	60.96	61.96	60.52
April	71.55	66.00	61.75	62.75	61.15
May	68.27	64.50	60.05	61.05	60.36
June	67.23	63.14	58.77	59.77	59.68
July	67.05	62.00	57.85	59.00	59.00
August	70.98	62.91	57.30	58.35	59.00
September	73.12	65.00	58.40	58.95	58.90
October	74.09	65.00	58.00	58.77	58.00
January–October	70.83	63.69	58.71	59.86	59.22

Source: American Metal Market.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN OCTOBER 2017¹

(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	13,200	171,000	--	--	--	--	13,200	171,000
Australia	2,990	84,500	22	347	--	1,040	3,010	85,900
Austria	--	7	2,230	26,700	214	1,890	2,450	28,600
Bahrain	8,710	97,600	6,990	48,300	--	--	15,700	146,000
Belgium	185	778	1,350	6,720	--	--	1,540	7,500
Brazil	60	8,390	2,060	16,000	72	4,560	2,190	28,900
Canada	194,000	2,090,000	22,900	210,000	31,700	320,000	249,000	2,620,000
Chile	--	--	--	--	431	5,400	431	5,400
China	109	3,890	33,500	388,000	195	627	33,800	393,000
Colombia	--	--	841	6,540	124	2,740	965	9,270
Costa Rica	--	--	--	(2)	308	2,990	308	2,990
El Salvador	--	--	16	222	307	2,770	323	2,990
France	920	7,940	3,480	21,500	316	1,930	4,710	31,400
Germany	304	1,810	2,850	34,400	684	2,790	3,840	39,000
Greece	--	(2)	2,170	16,600	15	305	2,180	16,900
Guatemala	--	--	--	--	972	10,800	972	10,800
Honduras	--	--	--	--	300	3,070	300	3,070
Hong Kong	--	30,600	496	5,300	141	1,720	637	37,600
India	19,000	91,100	3,960	40,500	--	37	22,900	132,000
Indonesia	--	200	7,400	64,000	--	--	7,400	64,200
Italy	--	4,540	843	7,940	81	237	924	12,700
Japan	77	82	3,040	21,700	26	597	3,140	22,400
Korea, Republic of	--	1,790	1,430	12,200	1,100	11,700	2,520	25,600
Malaysia	--	1,350	711	5,670	--	(2)	711	7,020
Mexico	1,250	14,600	4,320	40,300	15,900	146,000	21,400	201,000
Netherlands	181	1,320	461	3,870	4	24	646	5,210
New Zealand	529	2,680	--	1	--	85	529	2,770
Norway	64	673	339	447	--	--	403	1,120
Oman	--	13,600	2,840	18,800	--	--	2,840	32,400
Qatar	9,180	104,000	--	3	--	--	9,180	104,000
Romania	--	--	401	3,050	--	121	401	3,170
Russia	54,400	580,000	1,740	15,300	397	630	56,500	596,000
Saudi Arabia	12,200	30,200	4,570	10,400	117	10,200	16,900	50,800
South Africa	5,290	91,100	3,480	42,400	--	36	8,770	134,000
Spain	54	572	277	2,710	536	8,630	867	11,900
Sweden	16	16	427	5,520	--	--	443	5,530
Switzerland	--	--	330	2,150	--	--	330	2,150
Taiwan	59	292	244	3,370	308	2,310	611	5,970
Thailand	70	611	625	6,490	556	2,670	1,250	9,770
Turkey	--	--	764	9,000	736	4,710	1,500	13,700
United Arab Emirates	29,700	561,000	105	278	162	3,070	30,000	564,000
United Kingdom	185	774	323	5,630	101	2,360	609	8,770
Venezuela	4,880	71,300	123	2,820	2,190	15,400	7,180	89,600
Vietnam	--	369	2,440	20,300	--	39	2,440	20,700
Other	184	1,560	1,870	14,500	1,210	24,000	3,260	40,100
Total	358,000	4,070,000	122,000	1,140,000	59,100	595,000	539,000	5,800,000

-- 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 OCTOBER 2017¹

(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	86	619	283	1,570	1	25	370	2,220
Belgium	7	68	120	2,380	80	1,660	207	4,100
Bolivia	--	--	278	2,040	--	--	278	2,040
Brazil	40	3,530	339	2,920	30	231	409	6,680
Canada	8,900	82,300	35,800	348,000	9,270	89,600	54,000	520,000
China	159	600	2,300	23,400	80,700	669,000	83,100	693,000
Colombia	--	83	150	1,020	--	--	150	1,110
Dominican Republic	--	1,240	123	1,350	--	1	123	2,590
France	533	5,090	982	9,570	295	2,820	1,810	17,500
Germany	198	1,800	1,020	11,900	1,340	8,660	2,560	22,300
Guatemala	214	1,220	1,030	6,210	--	47	1,240	7,470
Hong Kong	--	23	257	1,690	2,360	45,600	2,620	47,400
India	8	114	76	1,060	9,330	64,000	9,410	65,200
Indonesia	--	--	36	397	4,540	26,500	4,580	26,900
Ireland	--	23	12	345	--	469	12	837
Israel	7	27	926	7,660	--	--	933	7,690
Italy	4	73	127	1,390	--	1	131	1,470
Jamaica	--	10	32	172	--	327	32	509
Japan	233	1,670	747	12,300	2,010	13,600	2,990	27,600
Korea, Republic of	153	446	1,990	28,400	16,400	141,000	18,600	169,000
Malaysia	7	37	705	4,730	9,180	37,500	9,890	42,300
Mexico	12,100	126,000	38,700	366,000	15,100	130,000	65,900	622,000
Netherlands	5	58	50	384	82	2,360	137	2,800
New Zealand	1	8	61	618	--	8	62	634
Norway	--	1	11	87	--	--	11	88
Pakistan	--	1	--	13	280	6,040	280	6,050
Panama	--	2	12	1,810	--	--	12	1,810
Philippines	--	4	15	273	270	1,510	285	1,780
Poland	12	82	78	726	--	20	90	828
Romania	18	84	44	426	--	--	62	510
Russia	--	1	4	63	943	2,380	947	2,450
Saudi Arabia	2	57	30	1,080	--	--	32	1,130
Singapore	47	286	430	4,230	--	60	477	4,570
Spain	7	67	129	1,380	--	419	136	1,870
Taiwan	578	3,650	309	4,680	2,420	23,300	3,310	31,600
Thailand	--	9	320	4,400	388	2,060	708	6,470
Turkey	--	141	203	3,660	--	49	203	3,850
United Arab Emirates	445	3,470	8	718	19	1,150	472	5,340
United Kingdom	60	602	1,030	11,100	195	649	1,280	12,400
Vietnam	--	40	52	100	79	298	131	438
Other	94	376	636	5,040	492	1,620	1,220	7,040
Total	23,900	234,000	89,500	876,000	156,000	1,270,000	269,000	2,380,000

-- Zero.

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

Source: U.S. Census Bureau.