

Mineral Industry Surveys

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ALUMINUM IN MAY 2016

Following recent smelter shutdowns, only two companies reported domestic production of primary aluminum. Consequently, beginning in February 2016, monthly production data were withheld to avoid the release of proprietary data. At the end of May, approximately 750,000 metric tons per year of capacity was operating at primary aluminum smelters in the United States according to public statements by the two companies that own the smelters.

Total aluminum recovered from scrap in May 2016 was 298,000 metric tons (t), 3% more than that recovered in April and 11% more than that in May 2015 (fig. 1, table 1). Of this, 172,000 t of aluminum was recovered from new scrap, 3% more than the amount in the preceding month and 14% more than the amount recovered in May 2015. The amount of aluminum recovered from old scrap was 126,000 t, 3% more than the revised amount recovered in the preceding month and 7% more than that in May 2015.

Update

On June 29, an explosion injured five employees and shut down the casthouse of Bonnell Aluminum Inc.'s extrusion plant in Newnan, GA. The company said that billet production would not resume for several months but that production from the extrusion presses would continue using billet obtained from other sources (Maltais, 2016a, b).

Production from Kaiser Aluminum Corp.'s billet casthouse in Sherman, TX, was temporarily shut down in June or early July for an unspecified reason. The casthouse, which produced extrusion billet used to manufacture automobile parts, was not expected to restart until October (Maltais, 2016c).

Century Aluminum Co. extended its power supply contract with Santee Cooper through 2018 for its 231,000-metric-ton-per-year Mount Holly, SC, smelter. Only one-half of capacity was operating at the time of the extension (Maltais, 2016d). (See Aluminum in October 2015.)

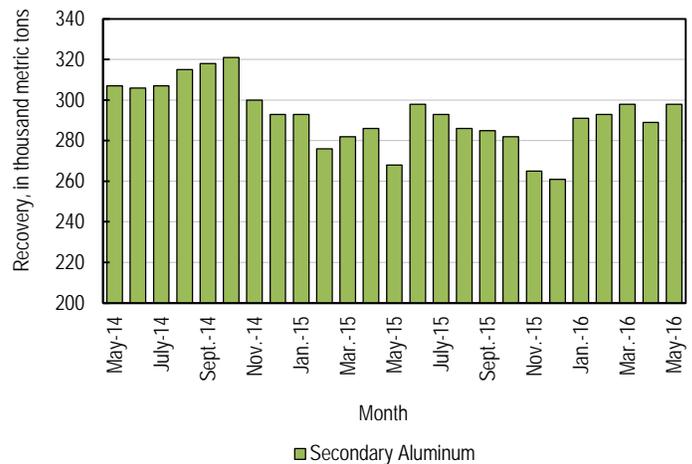


Figure 1. Monthly domestic secondary aluminum recovery from May 2014 through May 2016. Source: U.S. Geological Survey.

Prices and Stocks

The monthly average U.S. market price of primary aluminum ingot decreased to \$0.786 per pound in May from \$0.793 per pound in April (fig. 2).

Inventories of primary aluminum in London Metal Exchange Ltd. approved warehouses in the United States continued their downward trend, decreasing to 280,000 t at the end of May, their lowest level since September 2007.

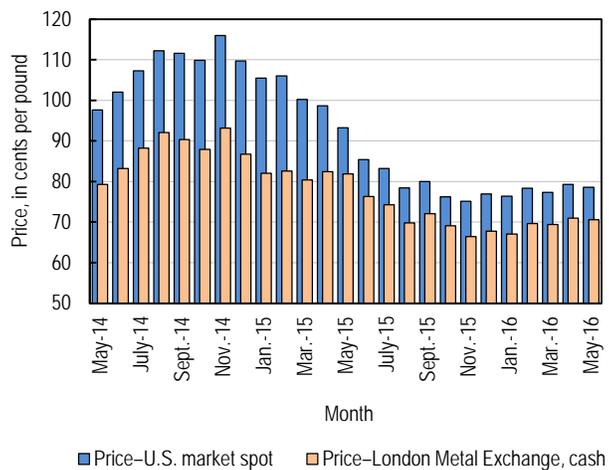


Figure 2. Average monthly prices for primary aluminum from May 2014 through May 2016. Source: Platts Metals Week.

References Cited

Maltais, Kirk, 2016a, Bonnell casthouse remains offline: American Metal Market, v. 124, no. 28-3, July 13, p. 9.
 Maltais, Kirk, 2016b, Explosion at Bonnell extrusion plant injures five workers: American Metal Market, v. 124, no. 26-4, June 30, p. 8.
 Maltais, Kirk, 2016c, Kaiser's Texas casthouse out until Oct.-Source: American Metal Market, v. 124, no. 28-3, July 13, p. 9.
 Maltais, Kirk, 2016d, Mount Holly to stay open, operate at half capacity: American Metal Market, v. 124, no. 27-3, July 7, p. 6-7.

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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		
2015 ^P	1,587	1,910 ^r	1,470 ^r	3,380 ^r	3,380	1,180	4,560	9,530 ^r	1,350
2015:									
May	142	150 ^r	117 ^r	268 ^r	299	118	417	826 ^r	1,370
June	133	174 ^r	123 ^r	298 ^r	301	100	401	832 ^r	1,350
July	134	162 ^r	131 ^r	293 ^r	301	100	401	828 ^r	1,380
August	135	161 ^r	126 ^r	286 ^r	251	89	339	761 ^r	1,320
September	128	161 ^r	124 ^r	285 ^r	283	87	370	784 ^r	1,310
October	128	157 ^r	126 ^r	282 ^r	270	88	358	769 ^r	1,320
November	121	153 ^r	112 ^r	265 ^r	267	85	353	739 ^r	1,350
December	113	151 ^r	110 ^r	261 ^r	259	87	346	721 ^r	1,350
January–May	694	787 ^r	617 ^r	1,400 ^r	1,450	543	1,990	4,090 ^r	1,370
2016:									
January	106	172 ^r	119 ^r	291 ^r	362	91	453	850 ^r	1,340
February	W	169 ^r	123 ^r	293 ^r	270	89	359	652 ^{r,5}	1,370
March	W	172 ^r	126 ^r	298 ^r	385	96	481	779 ^{r,5}	1,330
April	W	167 ^r	122 ^r	289 ^r	350	97	447	736 ^{r,5}	1,340
May	W	172	126	298	336	107	443	740 ^{r,5}	NA
January–May	W	852	617	1,470	1,700	480	2,180	3,660 ^{r,5}	NA

^PPreliminary. ^rRevised. NA Not available. W Withheld to avoid disclosing company proprietary data.

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.

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

⁵Excludes primary production.

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
	2015 ^p	1,980 ^r	1,510 ^r	1,930 ^r	1,760 ^r	117	103	3	3	4,030 ^r
2015:										
May	167 ^r	127 ^r	145 ^r	132 ^r	10	9	(2)	(2)	322 ^r	268 ^r
June	166 ^r	126 ^r	178 ^r	163 ^r	10	9	(2)	(2)	354 ^r	298 ^r
July	167 ^r	127 ^r	173 ^r	158 ^r	10	9	(2)	(2)	349 ^r	293 ^r
August	166 ^r	126 ^r	166 ^r	151 ^r	10	9	(2)	(2)	342 ^r	286 ^r
September	167 ^r	127 ^r	163 ^r	149 ^r	10	9	(2)	(2)	341 ^r	285 ^r
October	166 ^r	126 ^r	162 ^r	148 ^r	10	9	(2)	(2)	338 ^r	282 ^r
November	165 ^r	125 ^r	144 ^r	132 ^r	10	9	(2)	(2)	319 ^r	265 ^r
December	163 ^r	124 ^r	140 ^r	128 ^r	10	9	(2)	(2)	313 ^r	261 ^r
January–May	823 ^r	626 ^r	804 ^r	734 ^r	49	43	1	1	1,680 ^r	1,400 ^r
2016:										
January	181 ^r	139 ^r	157 ^r	144 ^r	8	8	(2)	(2)	348 ^r	291 ^r
February	180 ^r	138 ^r	160 ^r	147 ^r	8	8	(2)	(2)	349 ^r	293 ^r
March	185 ^r	140 ^r	163 ^r	149 ^r	8	8	(2)	(2)	357 ^r	298 ^r
April	183 ^r	140 ^r	154 ^r	141 ^r	8	8	(2)	(2)	346 ^r	289 ^r
May	185	142	162	148	8	8	(2)	(2)	356	298
January–May	916	699	797	729	42	39	2	2	1,760	1,470

^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 MAY 2016¹

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
	Secondary smelters	154,000	185,000	118,000
Independent mill fabricators	148,000	162,000	135,000	148,000
Foundries	7,040	8,450	6,440	7,730
Other consumers	301	361	301	361
Total	310,000	356,000	260,000	298,000

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 MAY 2016¹

(Metric tons)

	May			January–May ²		
	Stocks, opening ²	Net receipts ³	Melted or consumed	Stocks, closing	Net receipts ³	Melted or consumed
New scrap:						
Extrusion	13,200	56,100	56,100	13,200	273,000	274,000
Can stock clippings	6,970	19,600	19,600	6,940	102,000	102,000
Other wrought sheet/clippings	7,410	52,200	52,600	7,000	255,000	262,000
Casting	2,510	8,000	7,530	2,980	33,400	33,100
Borings and turnings	2,840	9,100	9,200	2,740	46,500	46,700
Dross and skimmings	7,130	38,900	38,900	7,130	194,000	194,000
Total new scrap	40,100	184,000	184,000	40,000	903,000	912,000
Old scrap:						
Used castings	6,780	22,400	22,300	6,820	110,000	110,000
Used extrusion	7,440	14,800	15,300	6,920	72,000	75,000
Used cans (shredded, loose, baled)	5,480	54,800	54,500	5,800	258,000	258,000
Other wrought products	18,800	27,300	27,700	18,400	135,000	140,000
Fragmentized shredder (auto shredder)	2,200	6,490	6,090	2,600	31,000	31,300
Total old scrap	40,700	126,000	126,000	40,600	606,000	614,000
Sweated pig						
Total all classes	80,900	310,000	310,000	80,700	1,510,000	1,530,000

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 MAY 2016^{1,2}

(Metric tons)

	May			January–May ³		
	Stocks, opening ³	Production	Net shipments	Stocks, closing	Production	Net shipments
Die-cast alloys:						
13% Si, 360, etc. (0.6% Cu, max.)	3,560	2,880	2,980	3,460	14,400	15,100
380 and variations	7,890	12,900	12,900	7,890	64,300	64,300
Sand and permanent mold:						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	1,690	4,160	4,160	1,690	20,800	20,800
No. 319 and variations	3,260	6,880	6,880	3,260	34,400	34,400
F-132 alloy and variations	714	352	352	714	1,760	1,760
Al-Zn alloys	477	178	178	477	891	891
Al-Si alloys (0.6% to 2.0% Cu)	150	233	233	150	1,170	1,170
Al-Cu alloys (1.5% Si, max.)	148	72	72	148	359	359
Other ⁴	6,790	5,840	5,270	7,370	30,500	26,500
Wrought alloys, extrusion billets	22,000	63,200	62,300	22,800	313,000	312,000
Total all alloys	46,700	96,600	95,300	48,000	482,000	477,000
Less:						
Primary aluminum consumed	XX	18,700	XX	XX	90,000	XX
Primary silicon consumed	XX	2,080	XX	XX	10,400	XX
Other alloying ingredients consumed	XX	1,230	XX	XX	6,260	XX
Net metallic recovery from aluminum scrap and sweated pig consumed in production of secondary aluminum ingot ⁵	XX	74,500	XX	XX	375,000	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
2015:		
May	93.250	81.865
June	85.420	76.348
July	83.217	74.287
August	78.388	69.828
September	79.989	72.053
October	76.227	69.112
November	75.155	66.469
December	76.905	67.762
January–December	88.244	75.426
2016:		
January	76.350	67.090
February	78.345	69.637
March	77.345	69.409
April	79.274	70.940
May	78.563	70.577
January–May	77.975	69.531

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)
2015:					
May	61.70	65.45	61.70	63.70	58.00
June	56.14	60.14	57.59	60.14	59.14
July	57.86	58.50	55.91	59.45	51.91
August	58.00	56.10	52.33	56.33	49.57
September	60.24	54.52	50.62	54.42	49.33
October	59.30	52.39	49.00	53.00	47.91
November	56.84	51.00	47.74	52.08	47.00
December	59.89	51.59	47.36	52.36	47.36
January–December	65.09	61.04	57.20	60.12	55.94
2016:					
January	60.63	54.00	49.74	54.32	49.74
February	61.60	54.85	50.90	55.00	51.10
March	59.87	56.00	52.91	55.91	52.91
April	60.71	57.00	53.14	56.48	53.57
May	59.90	58.00	55.14	57.93	56.79
January–May	60.54	55.97	52.37	55.93	52.82

Source: American Metal Market.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN MAY 2016¹

(Metric tons)

Country or territory	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	May	January–	May	January–	May	January–	May	January–
		May		May		May		May
Argentina	12,000	60,100	--	--	--	15	12,000	60,100
Australia	--	4,350	18	94	392	788	410	5,230
Austria	6	13	2,960	13,800	153	758	3,120	14,600
Bahamas, The	--	--	--	--	88	740	88	740
Bahrain	7,830	52,100	5,960	21,500	--	--	13,800	73,600
Belgium	14	487	545	2,580	--	--	559	3,070
Brazil	145	14,000	1,250	5,560	1,600	5,120	3,000	24,700
Canada	193,000	936,000	23,100	111,000	31,500	147,000	247,000	1,190,000
Chile	--	--	--	--	643	1,560	643	1,560
China	236	607	35,700	144,000	14	379	35,900	145,000
Colombia	--	--	732	2,610	56	224	788	2,840
Costa Rica	--	--	--	(2)	280	1,360	280	1,360
El Salvador	--	--	31	114	139	1,060	170	1,170
France	885	4,580	1,240	6,490	50	995	2,180	12,100
Germany	22	377	6,130	28,400	77	379	6,230	29,100
Greece	--	--	1,630	7,200	--	20	1,630	7,220
Guatemala	--	--	--	--	791	3,230	791	3,230
Honduras	--	--	--	--	137	172	137	172
Hong Kong	--	--	446	1,640	--	--	446	1,640
India	501	13,500	2,500	12,600	--	51	3,000	26,100
Indonesia	--	--	2,510	14,500	--	--	2,510	14,500
Italy	2	548	1,110	4,860	18	69	1,130	5,480
Japan	--	--	2,840	11,300	77	348	2,910	11,700
Korea, Republic of	--	5,110	1,390	7,620	989	2,100	2,380	14,800
Malaysia	1	1,060	530	2,470	--	64	531	3,600
Mexico	859	4,410	3,770	19,000	10,700	48,700	15,400	72,200
New Zealand	68	6,150	--	(2)	--	(2)	68	6,150
Norway	221	6,740	4	14	--	--	225	6,760
Qatar	11,400	42,500	--	--	--	--	11,400	42,500
Romania	--	2	174	1,750	--	--	174	1,760
Russia	48,200	274,000	1,520	5,780	--	--	49,700	280,000
Saudi Arabia	6,970	23,400	--	--	--	142	6,970	23,600
South Africa	5,940	5,940	4,580	24,800	43	77	10,600	30,800
Sweden	--	--	478	2,720	--	--	478	2,720
Switzerland	--	--	70	396	--	40	70	436
Taiwan	17	97	596	2,530	106	1,430	719	4,060
United Arab Emirates	40,500	226,000	--	--	238	1,030	40,700	227,000
United Kingdom	3	388	738	4,740	285	2,190	1,030	7,320
Venezuela	5,530	18,000	--	466	1,310	3,260	6,840	21,700
Other	1,800	2,880	4,540	19,500	2,680	13,900	9,020	36,200
Total	336,000	1,700,000	107,000	480,000	52,400	237,000	495,000	2,420,000

-- 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 MAY 2016¹

(Metric tons)

Country or territory	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	May	January–	May	January–	May	January–	May	January–
		May		May		May		May
Australia	6	59	193	603	2	2	201	664
Belgium	14	28	172	572	385	1,290	571	1,890
Brazil	--	21	492	2,210	--	35	492	2,260
Canada	7,960	42,100	36,700	188,000	9,490	48,200	54,200	278,000
Chile	--	5	5	112	--	42	5	159
China	84	174	2,570	13,100	64,100	283,000	66,700	296,000
Colombia	--	6	187	1,020	7	35	194	1,060
France	695	2,370	643	4,020	226	1,180	1,560	7,570
Germany	53	544	548	3,170	105	1,580	706	5,290
Guatemala	--	1	1,680	7,800	14	21	1,700	7,820
Hong Kong	(2)	1	225	852	3,830	16,300	4,060	17,100
India	22	38	184	613	6,350	20,600	6,560	21,200
Indonesia	3	5	79	243	1,680	9,720	1,760	9,970
Ireland	4	8	69	425	--	--	73	433
Israel	(2)	25	632	3,820	--	--	632	3,840
Italy	12	28	285	1,070	--	23	297	1,120
Japan	183	680	2,620	11,400	1,540	7,470	4,340	19,600
Jordan	--	(2)	493	1,060	--	--	493	1,060
Korea, Republic of	69	369	3,420	14,900	12,900	53,900	16,400	69,200
Kuwait	--	--	1,160	2,710	--	--	1,160	2,710
Malaysia	2	16	366	1,440	3,930	16,900	4,300	18,400
Mexico	13,300	71,900	36,600	188,000	10,300	53,100	60,100	313,000
Netherlands	4	19	485	1,540	--	120	489	1,680
New Zealand	--	(2)	82	432	(2)	2	82	434
Norway	--	30	3	23	--	--	3	53
Pakistan	--	--	(2)	6	1,370	4,570	1,370	4,570
Panama	--	(2)	563	2,850	(2)	4	563	2,850
Romania	3	18	25	166	--	--	28	184
Saudi Arabia	(2)	7	261	3,030	--	--	261	3,040
Singapore	10	49	201	1,190	--	--	211	1,240
Spain	--	2	127	1,070	--	78	127	1,150
Taiwan	38	970	537	2,020	2,610	12,600	3,180	15,600
Thailand	(2)	(2)	351	2,630	116	1,070	467	3,700
Tunisia	--	--	--	151	--	--	--	151
Turkey	--	3	260	1,340	31	31	291	1,370
United Arab Emirates	--	4	681	2,930	179	302	860	3,230
United Kingdom	41	257	1,260	6,630	273	609	1,570	7,500
Vietnam	10	94	4,020	4,820	960	3,210	4,990	8,130
Other	212	516	1,290	5,230	1,490	3,860	2,990	9,600
Total	22,700	120,000	99,500	483,000	122,000	539,000	244,000	1,140,000

-- 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.