

Mineral Industry Surveys

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ALUMINUM IN DECEMBER 2013

Domestic primary aluminum production in December 2013 was 154,000 metric tons (t). The average daily production was 4,970 t, the same as that during the previous month and 10% less than that in December 2012.

Total aluminum recovered from scrap in December 2013 was 270,000 t, 3% more than the amount recovered in November and 3% less than the amount recovered in December 2012. Of this, 147,000 t of aluminum was recovered from new scrap, 3% more than that during the previous month but 4% less than the amount recovered in December 2012, and 123,000 t was recovered from old scrap, slightly more than the amount in November but 3% less than the amount in December 2012.

Primary aluminum production for the full year 2013 was 1.95 million metric tons (Mt), 6% less than that in 2012. Total aluminum recovered from scrap in 2013 was 3.48 Mt, 6% more than that in 2012. Of this, 1.85 Mt of aluminum was recovered from new scrap, slightly more than that in 2012, and 1.63 Mt of aluminum was recovered from old scrap, 13% more than that in 2012.

Total imports of aluminum (table 8) in 2013 were 9% more than those in 2012. Imports of crude metal and alloys increased by 14%, imports of semifabricated aluminum products decreased slightly, and imports of aluminum scrap decreased by 4%. Canada accounted for 64% of total aluminum imported in 2013, 81% of which were crude metal and alloys. Imports of crude metal and alloys from Canada accounted for 52% of all aluminum imported during the year.

Total exports of aluminum (table 9) during 2013 were 3% less than those of 2012. Exports of crude metal and alloys increased slightly, exports of semifabricated aluminum products increased by 7%, and exports of aluminum scrap decreased by 8%. The leading destinations of total aluminum in 2013 were China (39%), Mexico (21%), and Canada (18%). Exports of scrap to China accounted for 37% of all aluminum exports during the year.

Update

Aleris International Inc. (Cleveland, OH) signed a deal to acquire Nichols Aluminum LLC (Davenport, IA) from Quanex Building Products Corp. (Houston, TX). Nichols produced aluminum sheet products from recycled scrap for the building and construction, consumer durables, electrical, machinery, and transportation industries. The sale would include a remelt facility in Davenport and rolling mills in Davenport, Decatur, AL, and Lincolnshire, IL. The sale was pending regulatory approval (Laliberte, 2014).

The provincial government of Quebec, Canada, approved power supply agreements between Alcoa Inc. (Pittsburgh, PA) and Hydro-Quebec. The agreements were for Alcoa to purchase power for the 413,000-metric-tons-per-year (t/yr) Becancour and the 260,000-t/yr Deschambault smelters from Hydro-Quebec through 2030. Hydro-Quebec would also supply power to the 280,000-t/yr Baie-Comeau smelter through 2036. Alcoa planned modernization projects to increase the efficiency of the smelters that would be completed in 2019, but the capacity of the smelters would not increase. A previously announced project to construct a new potline to replace two potlines at the Baie-Comeau smelter that were permanently shut down in mid-2013 was cancelled. (See Aluminum in March 2013.) (Alcoa Inc., 2014).

The monthly average U.S. market price of primary aluminum ingot increased to \$0.894 per pound in December 2013 from \$0.89 per pound in November 2013 and increased to \$0.959 per pound in January 2014. The upward trend continued in February 2014, with the monthly average price increasing to \$0.962 per pound.

References Cited

- Alcoa Inc., 2014, Alcoa reaches power agreement to improve competitiveness of Quebec smelters, secure 3,000 jobs: New York, NY, Alcoa Inc. press release, February 25. (Accessed February 26, 2014, at http://www.alcoa.com/global/en/news/news_detail.asp?pageID=20140225000195en&newsYear=2014.)
- Laliberte, Nathan, 2014, Aleris in \$110M deal to buy Nichols Aluminum: American Metal Market, v. 122, no. 7-2, February 11, p. 1-9.

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		
2012	2,070	1,830	1,440	3,270	2,900	855	3,760	9,100	1,140
2012, December	171	153	127	280	244	59	303	754	1,140
2013:									
January	171	154	140	294	248	70	318	783	1,170
February	155	149	133	282	220	58	278	715	1,200
March	172	156	137	293	283	70	352	817	1,190
April	167	148	134	282	457	78	535	984	1,200
May	171	148	137	285	314	67	380	836	1,150
June	165	162	142	304	267	70	336	806	1,170
July	168	158	142	300	273	71	344	811	1,170
August	163	159	133	292	271	73	344	799	1,210
September	157	155	135	290	242	72	314	761	1,170
October	154	171	155	326	219	79	298	779	1,160
November	149	143	121	264	299	69	368	781	1,140 ^r
December	154	147	123	270	220	68	288	713	1,130
January–December	1,946	1,850	1,630	3,480	3,310	845	4,160	9,580	1,130

^rRevised.

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.

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
	2012	2,640	1,940	1,550	1,400	103	91	7	7	4,300
2012, December	222	173	108	98	10	9	1	1	341	280
2013:										
January	210	160	138	125	10	9	1	1	358	294
February	203	154	130	118	10	9	1	1	344	282
March	208	158	138	125	10	10	1	1	357	293
April	209	159	127	115	10	9	1	1	345	282
May	207	157	131	118	10	9	1	1	348	285
June	223	167	141	128	10	9	1	1	374	304
July	219	168	135	123	10	9	1	1	365	300
August	207	158	137	125	10	9	1	1	355	292
September	211	162	131	119	10	9	1	1	353	290
October	209	159	174	158	10	9	1	1	394	326
November	207	159	106	96	10	9	1	1	322	264
December	201	154	118	107	10	9	1	1	330	270
January–December	2,520	1,920	1,610	1,460	117	103	7	7	4,250	3,480

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

TABLE 3
CONSUMPTION OF AND RECOVERY FROM PURCHASED
NEW AND OLD ALUMINUM SCRAP IN DECEMBER 2013¹

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
Secondary smelters	168,000	201,000	128,000	154,000
Independent mill fabricators	111,000	118,000	100,000	107,000
Foundries	8,100	9,730	7,180	8,610
Other consumers	1,020	1,220	775	930
Total	287,000	330,000	237,000	270,000

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 DECEMBER 2013¹

(Metric tons)

	December			January–December ²		
	Stocks, opening ²	Net receipts ³	Melted or consumed	Stocks, closing	Net receipts ³	Melted or consumed
New scrap:						
Extrusion	20,800	49,900	50,100	20,700	544,000	544,000
Can stock clippings	7,490	25,700	26,300	6,830	282,000	284,000
Other wrought sheet/clippings	12,100	29,700	28,500	13,200	474,000	472,000
Casting	2,130	5,190	5,290	2,020	63,100	63,100
Borings and turnings	5,030	11,100	11,300	4,860	146,000	146,000
Dross and skimmings	13,600	41,100	41,500	13,100	524,000	524,000
Total new scrap	61,100	163,000	163,000	60,700	2,030,000	2,030,000
Old scrap:						
Used castings	7,720	23,700	24,400	6,960	313,000	313,000
Used extrusion	7,850	19,200	18,500	8,530	212,000	212,000
Used cans (shredded, loose, baled)	30,200	59,400	59,100	30,600	775,000	776,000
Other wrought products	10,300	15,500	14,400	11,400	229,000	233,000
Fragmentized shredder (auto shredder)	2,510	7,530	7,830	2,210	96,600	96,500
Total old scrap	58,600	125,000	124,000	59,700	1,620,000	1,630,000
Sweated pig						
	183	143	143	183	1,720	1,720
Total all classes	120,000	288,000	287,000	121,000	3,660,000	3,660,000

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 DECEMBER 2013^{1,2}

(Metric tons)

	December				January–December ³	
	Stocks, opening ³	Production	Net shipments	Stocks, closing	Production	Net shipments
Die-cast alloys:						
13% Si, 360, etc. (0.6% Cu, max.)	2,700	3,620	3,730	2,590	45,500	45,100
380 and variations	7,280	22,600	12,900	17,100	173,000	163,000
Sand and permanent mold:						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	1,610	4,820	4,820	1,610	58,100	58,100
No. 319 and variations	2,580	6,730	6,730	2,580	82,100	82,200
F-132 alloy and variations	602	385	385	602	4,640	4,640
Al-Zn alloys	306	173	173	306	2,230	2,230
Al-Si alloys (0.6% to 2.0% Cu)	68	283	283	68	3,420	3,420
Al-Cu alloys (1.5% Si, max.)	25	145	145	25	1,890	1,890
Other ⁴	3,310	6,640	6,800	3,150	75,100	79,100
Wrought alloys, extrusion billets	18,000	41,100	41,600	17,500	515,000	514,000
Total all alloys	36,500	86,600	77,500	45,500	960,000	954,000
Less:						
Primary aluminum consumed	XX	7,680	XX	XX	113,000	XX
Primary silicon consumed	XX	1,020	XX	XX	13,000	XX
Other alloying ingredients consumed	XX	716	XX	XX	8,780	XX
Net metallic recovery from aluminum scrap and sweated pig consumed in production of secondary aluminum ingot ⁵	XX	77,100	XX	XX	825,000	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
2012:		
December	105.125	94.635
January–December	100.981	91.589
2013:		
January	103.050	92.430
February	103.875	93.130
March	97.625	86.763
April	95.063	84.199
May	94.050	83.021
June	93.375	82.374
July	91.750	80.167
August	92.550	82.304
September	89.188	79.838
October	91.550	82.192
November	89.000	79.331
December	89.375	78.857
January–December	94.204	83.717

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)
2012:					
December	80.08	75.72	72.44	74.72	70.44
January–December	75.48	74.83	70.70	73.32	70.55
2013:					
January	79.02	77.12	73.05	75.00	71.10
February	79.18	78.32	73.95	75.47	73.63
March	75.69	76.08	72.05	75.03	73.00
April	76.25	74.32	72.41	75.41	72.77
May	75.18	73.09	70.00	72.68	70.41
June	73.08	72.85	67.95	70.75	69.10
July	71.07	71.68	67.84	70.00	68.00
August	72.27	72.00	68.00	70.00	68.00
September	68.95	71.45	67.18	70.00	67.45
October	69.74	71.00	66.50	70.00	66.17
November	68.16	70.14	66.11	68.92	66.00
December	687.76	69.00	65.87	68.97	65.74
January–December	124.70	73.09	69.24	71.85	69.28

Source: American Metal Market.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN DECEMBER 2013¹

(Metric tons)

Country or territory	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	December	January– December	December	January– December	December	January– December	December	January– December
Argentina	7,610	97,300	(2)	31	--	--	7,610	97,300
Australia	1,910	27,300	23	67	--	--	1,930	27,400
Austria	1,020	3,050	1,270	20,400	--	18	2,290	23,500
Bahamas, The	--	--	--	--	202	2,140	202	2,140
Bahrain	2,480	29,300	2,640	25,400	--	--	5,120	54,700
Belgium	135	1,310	263	2,730	--	457	398	4,490
Brazil	1	33,900	205	8,240	179	710	385	42,900
Canada	165,000	2,440,000	16,100	213,000	23,500	345,000	205,000	3,000,000
Chile	--	195	--	13	372	8,230	372	8,440
China	80	10,400	18,700	194,000	34	967	18,800	205,000
Colombia	16	2,660	115	2,450	4	3,440	135	8,540
Costa Rica	--	--	--	16	195	3,100	195	3,110
Egypt	--	--	592	3,760	--	--	592	3,760
El Salvador	--	--	17	75	157	3,520	174	3,590
France	356	4,510	408	3,520	1	33	765	8,070
Germany	7	1,290	5,920	80,600	6	281	5,930	82,200
Greece	--	--	1,130	19,000	--	100	1,130	19,100
Guatemala	--	57	--	--	990	14,300	990	14,300
Honduras	--	--	--	(2)	80	3,260	80	3,260
Hong Kong	--	(2)	229	4,190	--	--	229	4,190
India	(2)	8	1,770	21,300	1	9	1,770	21,300
Indonesia	--	4	5,280	61,900	137	317	5,420	62,200
Italy	12	15	450	6,360	72	1,490	534	7,860
Japan	2	213	450	5,210	317	868	769	6,290
Korea, Republic of	1,280	14,800	746	4,650	20	176	2,050	19,600
Malaysia	--	--	404	5,170	--	59	404	5,230
Mexico	485	8,180	2,160	33,500	9,400	129,000	12,000	170,000
New Zealand	963	10,100	20	50	--	24	983	10,200
Norway	980	17,800	1	49	--	--	981	17,800
Qatar	7,000	94,900	--	--	--	--	7,000	94,900
Romania	--	--	445	5,550	--	162	445	5,710
Russia	6,810	190,000	1,150	15,400	--	--	7,960	205,000
Saudi Arabia	--	469	--	1	75	6,490	75	6,960
South Africa	--	12,400	4,810	59,300	--	84	4,810	71,800
Sweden	--	--	186	4,000	--	--	186	4,000
Switzerland	(2)	35	149	5,840	--	--	149	5,880
Taiwan	33	415	385	6,000	--	82	418	6,500
United Arab Emirates	19,400	250,000	--	402	--	1,980	19,400	253,000
United Kingdom	49	504	613	14,900	45	10,600	707	26,000
Venezuela	4,010	49,400	--	2	148	1,740	4,150	51,100
Other	271	7,090	1,860	18,100	1,230	27,500	3,360	52,700
Total	220,000	3,310,000	68,500	845,000	37,200	565,000	325,000	4,720,000

-- 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 DECEMBER 2013¹

(Metric tons)

Country or territory	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	December	January– December	December	January– December	December	January– December	December	January– December
Australia	19	129	127	2,110	--	--	146	2,240
Belgium	--	25	46	1,720	20	295	66	2,040
Brazil	1	398	1,760	16,400	44	695	1,810	17,500
Canada	8,540	109,000	24,900	404,000	6,420	98,900	39,900	612,000
Chile	--	18	549	7,490	--	185	549	7,690
China	328	6,420	2,640	36,100	100,000	1,270,000	103,000	1,310,000
Colombia	4	5,600	642	4,620	--	7	646	10,200
France	786	8,280	1,280	15,600	190	1,540	2,260	25,500
Germany	260	3,610	1,530	12,600	211	1,360	2,000	17,600
Guatemala	--	7	1,580	18,400	--	103	1,580	18,500
Hong Kong	66	256	121	1,960	4,860	35,600	5,050	37,800
India	1	22	115	1,410	4,360	52,300	4,480	53,700
Indonesia	--	13	24	1,370	769	14,600	793	16,000
Ireland	(2)	87	1,050	10,600	--	--	1,050	10,700
Israel	(2)	1,160	781	9,320	20	164	801	10,600
Italy	--	13	294	4,110	60	121	354	4,240
Japan	289	1,390	1,730	19,800	1,120	15,400	3,140	36,600
Jordan	(2)	(2)	534	4,980	--	--	534	4,980
Korea, Republic of	(2)	311	2,630	26,200	16,000	150,000	18,600	176,000
Kuwait	--	--	1,050	14,400	--	--	1,050	14,400
Malaysia	--	17	525	3,330	123	1,160	648	4,510
Mexico	14,500	215,000	26,600	388,000	7,470	115,000	48,600	718,000
Netherlands	6	292	106	9,740	14	450	126	10,500
New Zealand	(2)	1	151	2,170	1	25	152	2,200
Norway	1	2	214	1,460	--	1,540	215	3,000
Pakistan	6	6	9	66	840	10,000	855	10,100
Panama	--	34	186	4,330	--	61	186	4,420
Romania	30	1,260	56	460	--	--	86	1,720
Saudi Arabia	--	112	3,500	68,200	--	--	3,500	68,300
Singapore	183	1,510	525	3,780	2	120	710	5,410
Spain	--	15	157	1,020	22	332	179	1,370
Taiwan	802	4,340	403	5,620	6,390	73,400	7,590	83,400
Thailand	--	19	39	1,200	252	7,730	291	8,950
Tunisia	--	--	126	4,210	--	--	126	4,210
Turkey	15	70	235	4,140	153	379	403	4,590
United Arab Emirates	--	15	1,120	10,800	--	540	1,120	11,300
United Kingdom	39	1,060	1,130	14,400	14	1,070	1,180	16,500
Vietnam	--	(2)	21	272	56	12,900	77	13,200
Other	70	1,750	1,570	18,500	500	5,410	2,140	25,700
Total	25,900	363,000	80,000	1,150,000	150,000	1,870,000	256,000	3,390,000

-- 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.