

# Mineral Industry Surveys

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## ALUMINUM IN NOVEMBER 2012

Domestic primary aluminum production in November 2012 was 166,000 metric tons (t). The average daily production was 5,530 t, slightly more than that during the previous month but 3% less than that in November 2011.

Total aluminum recovered from scrap in November 2012 was 284,000 t, 3% less than the amount recovered in October but 16% more than the amount recovered in November 2011. Of this, 151,000 t of aluminum was recovered from new scrap, 2% less than the amount in October but 18% more than the amount in November 2011. Aluminum recovered from old scrap in November 2012 totaled 132,000 t, 4% less than the amount in October but 14% more than the amount in November 2011. During the first 11 months of 2012, aluminum recovered from scrap was 10% more than during the same period of 2011. This increase in aluminum recovered from scrap was attributable to increased automobile production and sales in 2012. Sales of passenger cars and light trucks in 2012 increased by 12.9% compared with sales in 2011 (Petry, 2013). Secondary smelters, which produce ingot commonly used to manufacture auto parts, produced 17% more aluminum from scrap through November than in the same period of 2011 (table 2).

Aleris International Inc. (Beechwood, OH) planned to close the Bens Run secondary smelter in Friendly, WV, by March 2013 and cited unprofitability as the reason for the closure. The

smelter, which makes deoxidation aluminum and secondary ingot, has an estimated capacity of 45,000 metric tons per year (t/yr). Aleris was expected to fill customer orders from its other smelters (Fitzgerald, 2012).

Owl's Head Alloys Inc. (Bowling Green, KY) was expanding its secondary smelter by adding an ingot casting line to its existing sow casting line. The expansion would add an estimated 16,000 t/yr of capacity and was scheduled to be completed by late spring, 2013 (Fitzgerald, 2013).

### Update

The monthly average U.S. market price of primary aluminum ingot decreased to \$0.983 per pound in November from \$1.008 per pound in October before increasing to \$1.051 per pound in December.

### References Cited

- Fitzgerald, Daniel, 2012, Bens Run recycling plant to close by March: American Metal Market, v. 119, no. 51–2, December 18, p. 1, 10.
- Fitzgerald, Daniel, 2013, Owl's Head Alloys to add secondary ingot line in KY: American Metal Market, v. 120, no. 2–2, January 8, p. 6.
- Petry, Corinna, 2013, Automakers remain optimistic following improved sales in 2012: American Metal Market, v. 120, no. 2–1, January 7, p. 8.

TABLE 1  
COMPONENTS OF ALUMINUM SUPPLY<sup>1</sup>

(Thousand metric tons)

Period	Primary production	Secondary recovery <sup>2</sup>			Imports for consumption			Total new supply <sup>3</sup>	Stocks, end of period <sup>4</sup>
		New	Old	Total	Metals and alloys, crude	Plates, sheets, bars, etc.	Total		
2011	1,986	1,650	1,450	3,110	2,830	880	3,710	8,800	1,060
2011:									
January–November	1,809	1,530 <sup>r</sup>	1,340 <sup>r</sup>	2,870 <sup>r</sup>	2,580	810	3,390	8,070	1,050
November	171	128	116	244	192	74	266	682	1,050
December	177	125	114	239	245	70	315	731	1,060
2012:									
January	178	145	125	270	281	70	351	800	1,090
February	167	146	131	276	284	77	360	804	1,060
March	179	154	139	292	248	83	332	803	1,060
April	174	150	133	283	231	78	309	766	1,090
May	179	154	143	298	293	82	376	852	1,110
June	173	150	138	289	240	78	318	780	1,100
July	177	152	137	289	233	80	313	780	1,140
August	171	155	145	300	234	65	300	770	1,130
September	164	140	137	277	214	60	273	715	1,110
October	170	155 <sup>r</sup>	138	293 <sup>r</sup>	204	62	265	728 <sup>r</sup>	1,130
November	166	151	132	284	196	62	258	707	NA
January–November	1,899	1,650	1,500	3,150	2,660	796	3,460	8,510	NA

<sup>r</sup>Revised. NA Not available.

<sup>1</sup>Data are rounded to no more than three significant digits, except "Primary production"; may not add to totals shown.

<sup>2</sup>Metallic recovery from purchased, tolled, or imported scrap, expanded for full coverage of industry.

<sup>3</sup>Primary production, secondary recovery, and imports for consumption.

<sup>4</sup>Inventory 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 SCRAP<sup>1</sup>

(Thousand metric tons)

Period	Secondary smelters		Independent mill fabricators		Foundries		Other consumers		Total	
	Consumption	Metal recovery	Consumption	Metal recovery	Consumption	Metal recovery	Consumption	Metal recovery	Consumption	Metal recovery
2011	2,250	1,650	1,560	1,410	61	49	6	6	3,880	3,110
2011:										
January–November	2,070 <sup>r</sup>	1,510 <sup>r</sup>	1,450 <sup>r</sup>	1,310 <sup>r</sup>	56	44 <sup>r</sup>	5 <sup>r</sup>	5 <sup>r</sup>	3,580 <sup>r</sup>	2,870 <sup>r</sup>
November	184	137	113	102	5	4	1	1	303	244
December	182	135	109	99	5	4	1	1	298	239
2012:										
January	208	149	128	116	5	4	1	1	342	270
February	211	155	129	117	5	4	1	1	346	276
March	216	157	143	130	5	4	1	1	365	292
April	217	156	129	117	10	9	1	1	356	283
May	214	156	146	133	10	9	1	1	371	298
June	227	167	126	113	10	9	1	1	363	289
July	223	163	130	117	10	9	1	1	363	289
August	227	168	136	123	10	9	1	1	373	300
September	226	164	116	104	10	9	1	1	351	277
October	222	163 <sup>r</sup>	133	121	10	9	1	1	366 <sup>r</sup>	293 <sup>r</sup>
November	225	164	121	110	10	9	1	1	357	284
January–November	2,420	1,760	1,440	1,300	93	82	6	6	3,950	3,150

<sup>r</sup>Revised.

<sup>1</sup>Data 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 NOVEMBER 2012<sup>1</sup>

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
Secondary smelters	187,000	225,000	137,000	164,000
Independent mill fabricators	110,000	121,000	99,300	110,000
Foundries	8,110	9,730	7,180	8,610
Other consumers	482	579	481	577
Total	306,000	357,000	244,000	284,000

<sup>1</sup>Data 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 NOVEMBER 2012<sup>1</sup>

(Metric tons)

	November			Stocks, closing	January–November <sup>2</sup>	
	Stocks, opening <sup>2</sup>	Net receipts <sup>3</sup>	Melted or consumed		Net receipts <sup>3</sup>	Melted or consumed
New scrap:						
Extrusion	19,400	41,300	41,600	19,100	431,000	432,000
Can stock clippings	24,000	22,600	22,100	24,400	256,000	255,000
Other wrought sheet/clippings	10,400	36,300	37,700	9,030	415,000	419,000
Casting	2,330	5,490	5,460	2,360	61,300	61,300
Borings and turnings	4,230	11,700	11,600	4,330	129,000	129,000
Dross and skimmings	16,300	56,000	56,000	16,300	605,000	605,000
Total new scrap	76,700	173,000	175,000	75,500	1,900,000	1,900,000
Old scrap:						
Used castings	6,380	26,900	26,600	6,720	293,000	292,000
Used extrusion	7,100	13,300	13,900	6,500	147,000	150,000
Used cans (shredded, loose, baled)	30,300	59,400	59,000	30,700	690,000	690,000
Other wrought products	13,100	26,100	23,900	15,400	281,000	275,000
Fragmentized shredder (auto shredder)	1,550	7,750	7,710	1,580	87,200	87,000
Total old scrap	58,400	133,000	131,000	60,800	1,500,000	1,490,000
Sweated pig	55	33	33	55	358	358
Total all classes	135,000	307,000	306,000	136,000	3,400,000	3,400,000

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

<sup>2</sup>May include revisions to previously published data.

<sup>3</sup>Includes data on imported aluminum-base scrap.

TABLE 5  
ALUMINUM ALLOYS PRODUCED AT SECONDARY SMELTERS IN THE UNITED STATES IN NOVEMBER 2012<sup>1,2</sup>

(Metric tons)

	November				January–November <sup>3</sup>	
	Stocks, opening <sup>3</sup>	Production	Net shipments	Stocks, closing	Production	Net shipments
<b>Die-cast alloys:</b>						
13% Si, 360, etc. (0.6% Cu, max.)	3,130	3,840	4,050	2,910	44,900	44,800
380 and variations	10,500	13,300	13,300	10,500	186,000	186,000
<b>Sand and permanent mold:</b>						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	1,900	4,240	4,240	1,900	47,000	47,000
No. 319 and variations	3,580	5,630	5,660	3,560	63,500	63,400
F-132 alloy and variations	450	439	439	450	4,870	4,870
Al-Zn alloys	99	143	143	99	1,800	1,800
Al-Si alloys (0.6% to 2.0% Cu)	111	292	292	111	3,260	3,260
Al-Cu alloys (1.5% Si, max.)	170	162	162	170	2,110	2,110
Other <sup>4</sup>	5,650	6,510	6,020	6,130	80,000	76,000
Wrought alloys, extrusion billets	16,500	43,500	42,900	17,100	469,000	468,000
Total all alloys	42,100	78,000	77,100	42,900	902,000	897,000
<b>Less:</b>						
Primary aluminum consumed	XX	8,670	XX	XX	114,000	XX
Primary silicon consumed	XX	1,720	XX	XX	21,100	XX
Other alloying ingredients consumed	XX	1,150	XX	XX	14,600	XX
Net metallic recovery from aluminum scrap and sweated pig consumed in production of secondary aluminum ingot <sup>5</sup>	XX	66,400	XX	XX	752,000	XX

XX Not applicable.

<sup>1</sup>Excludes integrated aluminum companies.

<sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>3</sup>May include revisions to previously published data.

<sup>4</sup>Includes alloys No. 12, Al-Mg, Al-Si-Cu-Ni, aluminum-base hardeners, variations of these alloys, plus other aluminum alloys.

<sup>5</sup>No 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
2011:		
November	102.563	94.038
December	98.150	91.694
January–December	116.121	108.768
2012:		
January	103.375	97.244
February	107.000	99.953
March	107.900	99.002
April	101.563	92.815
May	100.100	90.727
June	95.375	85.481
July	95.125	84.997
August	93.850	83.359
September	103.250	93.146
October	100.813	89.580
November	98.300	88.123
January–November	100.605	91.312

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)
2011:					
November	76.63	73.85	67.90	70.30	68.60
December	73.18	73.03	67.76	70.26	68.13
January–December	86.68	81.94	74.96 <sup>1</sup>	76.80 <sup>1</sup>	75.68
2012:					
January	77.30	75.60	70.98	72.28	69.88
February	79.83	77.93	73.60	75.85	72.88
March	79.86	78.41	74.14	76.36	73.66
April	75.65	76.65	73.50	76.05	72.65
May	74.27	76.41	72.91	75.73	73.25
June	69.76	74.02	69.48	71.43	70.14
July	70.81	71.02	66.83	69.74	68.10
August	70.35	70.59	65.37	69.39	66.74
September	77.82	73.87	69.21	72.00	69.63
October	75.72	74.37	70.43	73.33	70.09
November	74.33	73.35	69.50	73.00	69.10
January–November	75.06	74.75	70.54	73.20	70.56

<sup>1</sup>Average price for April–December; prices for January through March were not available.

Source: American Metal Market.

TABLE 8  
U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN NOVEMBER 2012<sup>1</sup>

(Metric tons)

Country or territory	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	November	January– November	November	January– November	November	January– November	November	January– November
Argentina	--	64,000	--	4	--	--	--	64,000
Australia	3,000	23,600	(2)	46	--	40	3,000	23,600
Austria	--	8	1,840	22,500	--	22	1,840	22,600
Bahamas, The	--	--	--	--	261	2,670	261	2,670
Bahrain	1,870	23,400	1,810	20,800	--	14	3,680	44,200
Belgium	38	740	227	2,160	--	193	265	3,090
Brazil	36	9,200	834	17,500	18	2,860	888	29,600
Canada	142,000	1,740,000	15,900	279,000	28,600	324,000	186,000	2,340,000
Chile	--	--	--	49	927	4,750	927	4,800
China	24	1,270	8,160	100,000	15	102	8,190	102,000
Colombia	--	949	193	1,990	619	1,880	812	4,820
Costa Rica	--	447	--	24	314	3,470	314	3,940
Egypt	--	--	263	3,060	--	--	263	3,060
El Salvador	--	201	16	59	338	2,890	354	3,150
France	216	3,660	267	3,970	20	38	503	7,670
Germany	231	733	8,310	72,100	40	204	8,580	73,100
Greece	--	--	1,690	13,700	--	18	1,690	13,700
Guatemala	--	219	--	--	1,130	12,200	1,130	12,500
Honduras	--	--	--	--	291	2,930	291	2,930
Hong Kong	--	--	534	4,570	--	--	534	4,570
India	--	2,030	1,320	14,700	--	6	1,320	16,700
Indonesia	--	--	2,980	72,700	42	85	3,030	72,800
Italy	48	5,380	502	5,030	36	528	586	10,900
Japan	--	31	400	3,940	548	1,630	948	5,590
Korea, Republic of	1,120	11,500	396	3,560	707	1,040	2,230	16,100
Malaysia	(2)	471	382	4,620	--	--	382	5,090
Mexico	565	35,000	2,430	28,300	9,960	119,000	13,000	182,000
New Zealand	1,900	18,100	(2)	19	--	119	1,900	18,200
Qatar	5,750	123,000	--	19	--	--	5,750	123,000
Romania	--	249	835	8,980	23	1,110	858	10,300
Russia	18,000	276,000	1,020	13,900	--	--	19,000	290,000
Saudi Arabia	--	312	--	--	169	22,900	169	23,200
South Africa	--	4,580	5,910	55,400	--	--	5,910	60,000
Sweden	--	98	568	4,950	--	8	568	5,060
Switzerland	23	111	1,230	3,820	--	--	1,250	3,930
Taiwan	--	44	583	5,750	--	--	583	5,790
Tajikistan	--	13,900	--	--	--	--	--	13,900
United Arab Emirates	17,900	237,000	1	13	198	1,130	18,100	238,000
United Kingdom	52	623	1,360	10,500	1,400	6,070	2,810	17,100
Venezuela	501	42,200	206	613	--	2,480	707	45,300
Other	2,890	18,800	1,600	17,600	2,270	30,200	6,760	66,600
Total	196,000	2,660,000	61,700	796,000	48,000	545,000	306,000	4,000,000

-- Zero.

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

<sup>2</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 9  
U.S. EXPORTS OF ALUMINUM IN NOVEMBER 2012<sup>1</sup>

(Metric tons)

Country or territory	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	November	January– November	November	January– November	November	January– November	November	January– November
Australia	23	485	355	2,840	45	45	423	3,370
Belgium	--	42	187	4,420	--	334	187	4,800
Brazil	1	112	510	8,400	75	3,400	586	11,900
Canada	8,900	92,000	34,100	378,000	8,130	97,100	51,200	567,000
Chile	5	1,430	125	6,930	--	29	130	8,390
China	548	4,140	4,720	37,900	98,500	1,280,000	104,000	1,320,000
Colombia	--	504	158	1,500	--	65	158	2,060
France	156	2,870	1,260	18,400	134	230	1,550	21,500
Germany	245	3,520	840	10,400	59	442	1,140	14,300
Guatemala	--	7	939	14,900	--	93	939	15,000
Hong Kong	(2)	148	155	1,820	2,410	27,700	2,570	29,700
India	--	315	92	1,490	3,060	52,100	3,150	53,900
Indonesia	--	114	196	2,210	306	3,410	502	5,740
Ireland	3	37	79	640	--	--	82	677
Israel	129	937	694	7,000	--	18	823	7,950
Italy	(2)	32	342	3,340	--	20	342	3,390
Japan	33	905	1,130	15,700	534	9,310	1,700	25,900
Jordan	--	--	308	8,670	--	--	308	8,670
Korea, Republic of	--	301	1,720	18,900	15,200	176,000	17,000	195,000
Kuwait	16	25	624	6,140	--	--	640	6,170
Malaysia	--	34	106	2,530	375	5,220	481	7,780
Mexico	22,000	220,000	27,300	316,000	11,300	123,000	60,500	659,000
Netherlands	--	44	69	849	60	709	129	1,600
New Zealand	1	19	118	2,360	1	6	120	2,380
Norway	--	1	20	126	279	1,450	299	1,570
Pakistan	--	--	18	76	1,270	25,300	1,290	25,400
Panama	1	23	426	3,890	5	29	432	3,940
Romania	24	858	15	484	--	--	39	1,340
Saudi Arabia	(2)	63	4,530	60,000	--	--	4,530	60,100
Singapore	58	990	280	4,060	32	248	370	5,300
Spain	--	7	145	1,490	15	192	160	1,690
Taiwan	102	2,330	374	9,900	6,740	68,400	7,220	80,600
Thailand	--	9	326	1,490	519	6,080	845	7,570
Tunisia	--	17	523	2,430	--	--	523	2,440
Turkey	133	157	234	2,670	--	--	367	2,830
United Arab Emirates	--	1	686	10,400	--	317	686	10,800
United Kingdom	34	945	1,270	16,500	5	522	1,310	18,000
Vietnam	--	--	12	201	1,290	6,250	1,300	6,450
Other	584	1,930	794	17,900	63	3,560	1,440	23,400
Total	33,000	336,000	85,800	1,000,000	150,000	1,890,000	269,000	3,230,000

-- Zero.

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

<sup>2</sup>Less than ½ unit.

Source: U.S. Census Bureau.