

Mineral Industry Surveys

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ALUMINUM IN OCTOBER 2011

Domestic primary aluminum production in October 2011 was 175,000 metric tons (t). The average daily production was 5,630 t, slightly higher than that for the previous month and 18% higher than that for October 2010.

Total aluminum recovered from scrap in October 2011 was 254,000 t, the same as the amount recovered in the previous month and 14% higher than the aluminum recovered in October 2010. Of this, 136,000 t of aluminum was recovered from new scrap, slightly more than the amount in the previous month but 5% more than that in October 2010. Aluminum recovered from old scrap in October 2011 totaled 118,000 t, slightly less than the amount in September but 26% more than the amount in October 2010.

Total imports for consumption of aluminum in the first three quarters of 2011 (table 8) were slightly more than those in the same period in 2010; imports of crude metal and alloys increased by 5%, imports of semifabricated products decreased by 14%, and imports of aluminum scrap increased by 16%. Canada continued to be the leading source of imported aluminum materials, supplying 60% of all aluminum imports during the first three quarters of 2011, followed by the United Arab Emirates with 6%, and Russia with 5%.

Total exports of aluminum (table 9) increased by 13% during the first three quarters of 2011 compared with those of the same period in the previous year. Exports of crude metal and alloys increased by 12%, exports of semifabricated aluminum products increased by 14%, and exports of aluminum scrap increased by 13%. The leading destinations of total aluminum products during the first 9 months of 2011, in descending order of volume, were China (43%), Mexico (18%), and Canada (18%).

Rio Tinto plc announced that it intends to close the 169,000-metric-ton-per-year (t/yr) smelter at Lynemouth, United Kingdom. The smelter, which started production in 1972, would be permanently shut down in early 2012, and options to sell the associated powerplant were being explored. Higher costs associated with emerging regulatory requirement compliance were cited as the reason for the shutdown (Rio Tinto plc, 2011).

Rio Tinto had previously identified the Lynemouth smelter and powerplant as assets to be divested as part of a restructuring of its aluminum business. (See Aluminum in September 2011.)

Aluminio Argentino SAIC (Victoria, Argentina) shut down approximately 10% of production capacity at its Puerto Madryn smelter on November 6 because of damage caused by flooding. Full production would be restored at the 450,000-t/yr smelter in approximately 3 or 4 months according to sources at the company (Metal Bulletin, 2011; Platts Metals Week, 2011a).

Det. AL Group (Detal) (Baku, Azerbaijan) started production from its new 100,000-t/yr Ganja smelter. Output would be at about 50% of capacity during the first year of production. Detal was planning to restart its 60,000-t/yr Sumgait smelter at an unspecified date and was in the process of restarting its 450,000-t/yr alumina refinery in Azerbaijan during the fourth quarter of the year. The Sumgait smelter and the refinery were shut down in 2009 because of declining prices for aluminum that resulted from the financial crisis and subsequent recession (Platts Metals Week, 2011b).

Update

The downward trend of the monthly average U.S. market price of primary aluminum ingot continued, with the monthly average price falling to \$1.059 per pound in October from \$1.124 per pound in September. The monthly average price in November dropped to \$1.035 per pound.

References Cited

- Metal Bulletin, 2011, Briefs: Metal Bulletin, no. 9226, November 14, p. 8.
- Platts Metals Week, 2011a, Argentina Aluar smelter output loss small: Platts Metals Week, v. 82, no. 48, November 28, p. 4.
- Platts Metals Week, 2011b, Detal starts production at Ganja smelter: Platts Metals Week, v. 82, no. 48, November 28, p. 5.
- Rio Tinto plc, 2011, Rio Tinto Alcan announces intention to close Lynemouth aluminium smelter: London, United Kingdom, Rio Tinto plc media release, November 16, 1 p.

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		
2010	1,726	1,550	1,250	2,800	2,650	967	3,610	8,140	1,010
2010:									
January–October	1,433	1,300	1,070	2,370	2,260	840	3,100	6,900	1,000
October	148	130	94	224	203	76	279	651	1,030
November	144	130	98	227	209	68	277	649	998
December	148	120	85	204	179	59	238	591	1,010
2011:									
January	152	141	104	245	211	64	276	672	1,050
February	140	132	107	239	212	63	275	653	1,060
March	162	138	122	260	232	75	307	728	1,070
April	162	135	117	252	220	68	288	702	1,110
May	170	137	123	260	285	73	358	787	1,100
June	167	137	122	259	263	74	337	763	1,090
July	171	136	121	257	220	70	290	719	1,100 ^r
August	172	144	123	268	241	85	327	766	1,090
September	169	135	119	254	263	86	349	771	1,080
October	175	136	118	254	NA	NA	NA	NA	NA
January–October	1,637	1,370	1,180	2,550	NA	NA	NA	NA	NA

^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 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
	2010	1,780	1,360	1,530	1,390	56	49	7	7	3,370
2010:										
January–October	1,470	1,130	1,320	1,200	46	41	5	5	2,840	2,370
October	163	117	111	101	5	4	1	1	280	224
November	161	117	116	106	5	4	1	1	283	227
December	152	109	99	90	5	4	1	1	257	204
2011:										
January	176	131	119	109	5	4	1	1	301	245
February	175	131	113	103	5	4	1	1	294	239
March	187	140	126	115	5	4	1	1	319	260
April	179	132	127	115	5	4	1	1	311	252
May	187	138	128	116	5	4	1	1	321	260
June	187	140	126	114	5	4	1	1	319	259
July	187	139	125	113	5	4	1	1	317	257
August	193	145	129	117	5	4	1	1	328	268
September	189	141	119	107	5	4	1	1	313	254
October	193	144	117	106	4	3	1	1	315	254
January–October	1,850	1,380	1,230	1,120	49	43	6	6	3,140	2,550

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 OCTOBER 2011¹

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
	Secondary smelters	161,000	193,000	120,000
Independent mill fabricators	107,000	117,000	96,700	106,000
Foundries	3,180	3,820	2,680	3,220
Other consumers	524	629	524	629
Total	271,000	315,000	220,000	254,000

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 2011¹

(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	19,400	31,500	31,700	19,100	417,000	419,000
Can stock clippings	16,300	23,300	21,000	18,600	219,000	206,000
Other wrought sheet/clippings	8,490	41,400	40,900	8,970	328,000	325,000
Casting	1,690	4,860	4,850	1,700	54,400	53,700
Borings and turnings	2,910	10,200	10,200	2,950	95,000	95,000
Dross and skimmings	7,450	43,800	43,800	7,450	425,000	426,000
Total new scrap	56,200	155,000	152,000	58,800	1,540,000	1,520,000
Old scrap:						
Used castings	8,770	23,900	24,400	8,300	249,000	249,000
Used extrusion	6,410	10,300	10,300	6,380	93,000	91,300
Used cans (shredded, loose, baled)	13,000	64,100	57,000	20,100	570,000	573,000
Other wrought products	4,460	20,200	20,200	4,460	206,000	208,000
Fragmentized shredder (auto shredder)	1,170	6,640	6,760	1,040	63,900	64,100
Total old scrap	33,800	125,000	119,000	40,300	1,180,000	1,190,000
Sweated pig	89	147	147	89	1,460	1,470
Total all classes	90,100	280,000	271,000	99,100	2,720,000	2,710,000

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 FOR 2011^{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.)	1,560	2,190	2,470	1,290	28,100	28,500
380 and variations	2,400	23,900	23,900	2,400	238,000	239,000
Sand and permanent mold:						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	2,570	1,710	1,710	2,570	22,100	22,200
No. 319 and variations	2,270	5,280	5,290	2,260	55,500	56,400
F-132 alloy and variations	939	596	596	939	6,420	5,940
Al-Zn alloys	278	130	130	278	1,300	1,300
Al-Si alloys (0.6% to 2.0% Cu)	391	175	175	391	2,120	2,130
Al-Cu alloys (1.5% Si, max.)	48	34	34	48	340	340
Other ⁴	9,100	11,400	11,700	8,750	104,000	109,000
Wrought alloys, extrusion billets	16,500	38,200	38,400	16,300	406,000	406,000
Total all alloys	36,000	83,600	84,500	35,200	864,000	870,000
Less:						
Primary aluminum consumed	XX	8,800	XX	XX	108,000	XX
Primary silicon consumed	XX	1,500	XX	XX	15,000	XX
Other alloying ingredients consumed	XX	859	XX	XX	10,300	XX
Net metallic recovery from aluminum scrap and sweated pig consumed in production of secondary aluminum ingot ⁵	XX	72,500	XX	XX	731,000	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
2010:		
October	112.438	106.418
November	111.938	105.807
December	111.950	106.600
January–December	104.382	98.553
2011:		
January	116.313	110.638
February	119.438	113.752
March	121.800	115.767
April	128.313	120.762
May	126.063	117.558
June	124.350	115.896
July	121.625	113.926
August	116.563	108.508
September	112.400	104.160
October	105.875	98.515
January–October	119.274	111.948

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 and cast	Turnings (clean and dry)
2010:				
October	82.57	76.86	70.74	68.38
November	79.38	76.90	71.35	68.93
December	82.26	77.68	72.47	70.05
January–December	74.16	72.63	67.81	65.97
2011:				
January	86.78	82.23	76.53	73.53
February	89.11	85.34	79.95	78.08
March	90.96	87.07	81.96	81.00
April	96.07	87.19	82.83 ¹	81.93
May	94.71	86.10	80.69 ¹	79.31
June	94.05	84.50	79.30 ¹	79.11
July	90.95	84.55	79.43 ¹	79.00
August	86.54	83.91	77.56 ¹	76.87
September	83.07	80.64	74.27 ¹	73.64
October	78.07	74.88	70.13 ¹	68.90
January–October	89.03	83.64	78.26	77.14

¹Beginning in April 2011, old sheet and old cast were reported separately. The average of the two prices is presented in this table.

Source: American Metal Market.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN SEPTEMBER 2011¹

(Metric tons)

Country	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	September	January– September	September	January– September	September	January– September	September	January– September
Argentina	--	80,000	1	14	--	--	1	80,000
Australia	107	21,800	28	68	--	20	134	21,900
Austria	--	14	1,860	13,500	--	--	1,860	13,500
Bahamas, The	--	--	--	--	64	2,860	64	2,860
Bahrain	20	40	2,130	13,100	--	--	2,150	13,100
Belgium	9	282	98	906	20	208	127	1,400
Brazil	1,550	25,500	2,210	12,500	--	74	3,760	38,000
Canada	186,000	1,450,000	25,400	242,000	28,800	260,000	241,000	1,950,000
Chile	--	--	--	--	208	2,060	208	2,060
China	48	1,270	26,200	116,000	7	79	26,300	117,000
Colombia	--	162	248	2,810	--	40	248	3,010
Costa Rica	20	22	3	27	388	3,250	411	3,300
Egypt	--	--	151	4,050	--	--	151	4,050
El Salvador	--	--	--	16	357	3,370	357	3,390
France	512	2,730	354	3,720	--	--	867	6,450
Germany	3	719	5,990	59,500	857	992	6,850	61,200
Greece	--	--	727	10,900	7	48	734	10,900
Guatemala	--	80	--	--	951	9,710	951	9,790
Honduras	--	--	--	--	232	2,560	232	2,560
Hong Kong	--	(2)	470	3,510	--	--	470	3,510
India	56	453	1,230	10,900	--	1	1,290	11,300
Indonesia	--	--	6,580	51,700	--	18	6,580	51,700
Italy	(2)	(2)	415	3,950	30	272	446	4,220
Japan	54	514	324	6,360	20	397	397	7,270
Korea, Republic of	234	7,240	433	2,470	--	170	668	9,890
Malaysia	--	--	841	6,400	59	612	901	7,010
Mexico	834	13,700	2,420	22,300	11,800	103,000	15,000	139,000
New Zealand	1,890	18,400	--	94	36	137	1,930	18,600
Qatar	4,900	44,400	--	--	--	--	4,900	44,400
Romania	158	219	571	2,160	67	878	796	3,260
Russia	26,000	165,000	1,220	10,400	--	--	27,200	175,000
Saudi Arabia	--	45	--	1	2,110	12,800	2,110	12,900
South Africa	--	12,100	3,510	34,400	--	--	3,510	46,500
Sweden	--	6	168	2,280	137	137	305	2,430
Switzerland	(2)	10	354	1,820	--	(2)	354	1,830
Taiwan	17	617	637	5,610	80	185	734	6,410
Tajikistan	--	4,450	--	--	--	--	--	4,450
United Arab Emirates	20,600	185,000	--	2	246	486	20,800	185,000
United Kingdom	36	425	357	3,290	730	8,380	1,120	12,100
Venezuela	19,000	114,000	20	938	250	1,350	19,300	117,000
Other	336	2,910	986	10,200	3,280	14,400	4,600	27,600
Total	263,000	2,150,000	85,900	658,000	50,700	429,000	399,000	3,230,000

-- 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 SEPTEMBER 2011¹

(Metric tons)

Country or territory	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	September	January– September	September	January– September	September	January– September	September	January– September
Australia	58	537	115	1,540	--	11	173	2,090
Belgium	2	112	388	2,270	7	48	397	2,430
Brazil	19	34	698	6,820	405	3,720	1,120	10,600
Canada	7,040	61,700	34,100	284,000	11,400	108,000	52,600	454,000
Chile	375	3,590	1,560	3,070	--	--	1,940	6,660
China	229	3,520	2,730	25,100	134,000	1,080,000	137,000	1,110,000
Colombia	17	34	101	1,440	--	91	118	1,560
France	100	1,180	1,370	12,300	--	34	1,470	13,500
Germany	331	3,040	952	8,280	93	520	1,380	11,800
Guatemala	--	41	1,390	12,900	--	1	1,390	12,900
Hong Kong	(2)	25	71	2,780	2,860	27,700	2,930	30,500
India	28	139	98	1,350	4,670	38,000	4,800	39,500
Indonesia	--	16	106	505	939	4,160	1,050	4,680
Ireland	6	20	755	6,590	--	--	760	6,610
Israel	57	687	728	6,750	--	--	785	7,440
Italy	--	33	254	2,660	20	163	274	2,850
Japan	380	1,930	1,300	12,200	1,900	10,400	3,580	24,500
Jordan	--	(2)	396	2,450	--	--	396	2,450
Korea, Republic of	149	494	1,600	13,200	14,800	147,000	16,600	161,000
Kuwait	--	--	1,120	9,010	--	--	1,120	9,010
Malaysia	1	29	191	1,690	166	3,280	358	5,000
Mexico	13,600	152,000	26,100	220,000	7,490	101,000	47,200	473,000
Netherlands	(2)	134	72	737	75	718	148	1,590
New Zealand	1	26	191	1,700	1	21	193	1,750
Norway	--	7	3	17	--	18,200	3	18,300
Pakistan	--	(2)	--	6	526	4,430	526	4,430
Panama	(2)	1	293	3,660	--	61	293	3,720
Romania	162	1,060	10	90	--	--	172	1,150
Saudi Arabia	(2)	1	5,000	35,400	--	--	5,000	35,400
Singapore	88	621	330	3,030	67	334	485	3,980
Spain	1	22	200	1,490	--	403	201	1,920
Taiwan	187	1,710	829	7,820	4,880	42,800	5,900	52,300
Thailand	--	57	82	825	384	4,580	466	5,460
Tunisia	--	--	299	1,440	--	--	299	1,440
Turkey	1	42	187	1,900	--	36	187	1,980
United Arab Emirates	--	5	1,770	7,320	106	516	1,880	7,840
United Kingdom	78	1,520	1,780	12,300	28	566	1,880	14,400
Vietnam	10	38	17	193	372	3,500	399	3,730
Other	287	955	1,640	10,700	966	4,520	2,900	16,200
Total	23,200	236,000	88,800	726,000	186,000	1,600,000	298,000	2,560,000

-- 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.