

# Mineral Industry Surveys

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**For information, contact:**

E. Lee Bray, Aluminum Commodity Specialist  
U.S. Geological Survey  
989 National Center  
Reston, VA 20192  
Telephone: (703) 648-4979, Fax: (703) 648-7757  
E-mail: lbray@usgs.gov

Paula R. Neely (Data)  
Telephone: (703) 648-7949  
Fax: (703) 648-7975  
E-mail: pneely@usgs.gov

**Internet:** <http://minerals.usgs.gov/minerals>

## ALUMINUM IN APRIL 2010

Domestic primary aluminum production in April was 142,000 metric tons (t), according to the U.S. Geological Survey. The average daily production was 4,730 t, slightly higher than that for the previous month and slightly lower than that for April 2009.

Total aluminum recovered from scrap in April 2010 was 210,000 t, 7% lower than that of the previous month and 13% lower than the total in April 2009. Of this, 112,000 t of aluminum was recovered from new scrap, 21% lower than that of the previous month and 22% lower than that in April 2009. Aluminum recovered from old scrap in April 2010 totaled 97,000 t, which was 15% higher than that in March 2010 and slightly lower than that in April 2009.

Total imports for consumption of aluminum in the first quarter of 2010 (table 8) were essentially unchanged compared with those in the same period in 2009; imports of crude metal and alloys decreased by 16%, while imports of semifabricated products increased by 54%, and imports of aluminum scrap during the first quarter of 2010 increased by 39% compared with the amounts imported in the first quarter of 2009. Canada continued to be the leading source of imported aluminum materials, supplying 65% of all aluminum imports during the first quarter of 2010, followed by China with 7%.

Total exports of aluminum (table 9) increased by 29% during the first quarter of 2010 compared with those of the same period in the previous year. Exports of aluminum scrap increased by 44% and accounted for most of the increase; exports of crude metal and alloys increased by 45%, and exports of semifabricated aluminum products increased by 3%. The leading destinations of total aluminum products, in descending order of importance, were China (38%), Canada (20%), and Mexico (19%), and accounted for 76% of all aluminum exports during the first 3 months of 2010.

In April, the monthly average U.S. market price of primary aluminum ingot increased to \$1.109 per pound from \$1.057 per

pound in March, but in May, the price decreased to \$0.987 per pound.

Members of the United Steelworkers (USW) union rejected a contract covering the employees at the Century Aluminum Co. (Monterey, CA) smelter in Hawesville, KY. According to a USW spokesperson, proposals by Century regarding management rights as well as health care benefits for employees and retirees were unacceptable. Although a strike had been authorized by the union membership, production at the 244,000-metric-ton-per-year (t/yr) smelter has continued since the expiration of the previous contract on March 31, and negotiations were continuing (United Steelworkers, 2010). (See Aluminum in March 2010).

Alcoa Inc. (Pittsburgh, PA) and the USW reached a contract agreement covering approximately 5,400 employees at 10 locations. The previous 4-year contract had expired May 31. The new contract addressed issues such as health care and workplace flexibility. If ratified by the union membership in a vote scheduled for June 30, the contract would be in effect until May 31, 2014 (Alcoa Inc., 2010a).

Alcoa announced that the 93,000-t/yr Aviles, Spain, smelter was shut down as a result of flooding caused by heavy rains. Water entered an electrical substation and the smelter forcing the closure. Assessment of the damage was underway, and plans for restarting the smelter had not been determined (Alcoa Inc., 2010b).

### References Cited

- Alcoa Inc., 2010a, Alcoa and USW reach tentative labor agreement: Cincinnati, OH, Alcoa Inc. news release, June 1, 1 p.
- Alcoa Inc., 2010b, Severe flooding forces temporary idling of Alcoa's Aviles, Spain aluminum smelter: Pittsburgh, PA, Alcoa Inc. news release, June 14, 1 p.
- United Steelworkers, 2010, Steelworkers reject Century Aluminum's offer at Hawesville; continue bargaining: Hawesville, KY, United Steelworkers news release, June 15, 1 p.

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>	Total stocks, end of period <sup>4</sup>
		New	Old	Total	Metals and alloys, crude	Plates, sheets, bars, etc.	Total		
2009 <sup>p</sup>	1,727	1,850	1,250	3,100	2,900	786	3,680	8,510	937
2009:									
April	145	144	98	242	233	55	288	675	952
May	147	150	100	250	292	68	361	757	997
June	132	156	110	266 <sup>r</sup>	200	57	256	655	947
July	135	155	108	263	299	70	369	767	978
August	133	173	103	276	216	68	284	694	944
September	129	165	107	272	212	77	289	690	925
October	137	168	117	285	207	79	286	708	892
November	133	147	104	251	211	83	294	678	896
December	140	141	103	244	217	73	290	674	937
January-April	641	594 <sup>r</sup>	399 <sup>r</sup>	993 <sup>r</sup>	1,040	212	1,250	2,890	XX
2010:									
January	142	135	83 <sup>r</sup>	217	238	82	319	679 <sup>r</sup>	984
February	130	134 <sup>r</sup>	90 <sup>r</sup>	223 <sup>r</sup>	209	67	276	629 <sup>r</sup>	975
March	146	141 <sup>r</sup>	84	225 <sup>r</sup>	230	94	325	695	957
April	142	112	97	210	NA	NA	NA	NA	NA
January-April	560	522	352	875	NA	NA	NA	NA	NA

<sup>p</sup>Preliminary. <sup>r</sup>Revised. NA Not available. XX Not applicable.

<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	
	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
	2009 <sup>P</sup>	1,490	1,160	2,140	1,860	90	78	10	9	3,730
2009:										
April	119	93	165	142	7	7	(2)	(2)	292	242
May	118	92	174	151	7	7	(2)	(2)	300	250
June	118	92	192	167	7	7	(2)	(2)	319	266 <sup>r</sup>
July	117	91	189	164	7	7	(2)	(2)	315	263
August	125	100	193	169	7	7	(2)	(2)	327	276
September	128	98	190	166	7	7	(2)	(2)	326	272
October	130	104	201	175	7	7	(2)	(2)	339	285
November	129	100	168	144	7	7	(2)	(2)	304 <sup>r</sup>	251
December	128	98	162	139	7	7	(2)	(2)	298	244
January-April	498 <sup>r</sup>	381 <sup>r</sup>	674	582	30	26	3	3	1,210	993
2010:										
January	117	89	144	123	5	4	(2)	(2)	267	217
February	120 <sup>r</sup>	93	145	126	5	4	(2)	(2)	271 <sup>r</sup>	223 <sup>r</sup>
March	130	98	141 <sup>r</sup>	122 <sup>r</sup>	5	4	(2)	(2)	277 <sup>r</sup>	225 <sup>r</sup>
April	110	82	144	123	5	4	(2)	(2)	260	210
January-April	477	362	574	494	20	16	3	2	1,080	880

<sup>P</sup>Preliminary. <sup>r</sup>Revised.

<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.

TABLE 3  
CONSUMPTION OF AND RECOVERY FROM PURCHASED  
NEW AND OLD ALUMINUM SCRAP IN APRIL 2010<sup>1</sup>

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
	Secondary smelters	92,000	110,000	68,000
Independent mill fabricators	133,000	148,000	114,000	127,000
Foundries	4,220	5,070	3,680	4,420
Other consumers	535	642	492	590
Total	229,000	264,000	186,000	213,000

<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 APRIL 2010<sup>1</sup>

(Metric tons)

	April			January-April <sup>2</sup>		
	Stocks, opening <sup>2</sup>	Net receipts <sup>3</sup>	Melted or consumed	Stocks, closing	Net receipts <sup>3</sup>	Melted or consumed
<b>New scrap:</b>						
Extrusion	26,300	36,800	39,000	24,200	190,000	197,000
Can stock clippings	3,880	18,800	18,100	4,590	81,400	80,600
Other wrought sheet/clippings	5,560	24,100	23,400	6,240	98,700	98,000
Casting	812	3,900	3,880	828	16,300	16,400
Borings and turnings	1,620	7,170	7,120	1,670	32,700	32,800
Dross and skimmings	2,250	37,300	37,300	2,250	148,000	148,000
Total new scrap	40,400	128,000	129,000	39,700	567,000	572,000
<b>Old scrap:</b>						
Used castings	11,000	19,100	18,400	11,700	69,800	64,500
Used extrusion	3,680	7,540	7,550	3,680	28,100	28,200
Used cans (shredded, loose, baled)	11,200	57,200	55,600	12,800	201,000	198,000
Other wrought products	5,210	14,400	14,400	5,210	54,200	54,300
Fragmentized shredder (auto shredder)	627	4,510	4,390	743	17,200	17,400
Total old scrap	31,800	103,000	100,000	34,200	370,000	362,000
Sweated pig	1	118	118	1	585	585
Total all classes	72,200	231,000	229,000	73,900	938,000	934,000

<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 from previous month(s) data.

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

TABLE 5  
ALUMINUM ALLOYS PRODUCED AT SECONDARY SMELTERS IN THE UNITED STATES FOR 2010<sup>1,2</sup>

(Metric tons)

	April			January-April <sup>3,4</sup>		
	Stocks, opening <sup>4</sup>	Production	Net shipments	Stocks, closing	Production	Net shipments
<b>Die-cast alloys:</b>						
13% Si, 360, etc. (0.6% Cu, max.)	1,400	2,770	2,890	1,280	9,340	9,260
380 and variations	2,710	13,800	13,800	2,710	55,900	55,900
<b>Sand and permanent mold:</b>						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	1,950	2,970	2,970	1,950	11,700	11,700
No. 319 and variations	1,650	2,640	2,640	1,650	10,600	10,600
F-132 alloy and variations	431	501	501	431	1,950	1,950
Al-Zn alloys	291	130	130	291	587	587
Al-Si alloys (0.6% to 2.0% Cu)	261	227	227	261	1,260	1,260
Al-Cu alloys (1.5% Si, max.)	48	39	39	48	184	184
Other <sup>3</sup>	12,600	5,810	5,540	12,800	28,800	29,900
Wrought alloys, extrusion billets	20,600	42,100	42,500	20,200	211,000	210,000
Total all alloys	41,900	71,000	71,200	41,700	331,000	331,000
<b>Less:</b>						
Primary aluminum consumed	XX	13,000	XX	XX	82,500	XX
Primary silicon consumed	XX	1,250	XX	XX	5,160	XX
Other alloying ingredients consumed	XX	1,000	XX	XX	4,020	XX
Net metallic recovery from aluminum scrap and sweated pig consumed in production of secondary aluminum ingot <sup>5</sup>	XX	55,700	XX	XX	239,000	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>Includes alloys No. 12, Al-Mg, Al-Si-Cu-Ni, aluminum-base hardeners, variations of these alloys, plus other aluminum alloys.

<sup>4</sup>May include revisions from previous month(s) data.

<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
2009:		
April	67.850	64.434
May	70.000	66.230
June	74.625	71.366
July	79.650	75.639
August	92.125	87.700
September	88.313	83.172
October	89.400	85.194
November	93.125	88.404
December	103.800	98.871
January-December	79.433	75.499
2010:		
January	106.875	101.372
February	98.688	92.923
March	105.700	100.028
April	110.875	105.072
January-April	105.535	99.849

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)
2009:				
April	44.00	43.88	40.52	32.93
May	46.80	45.90	43.10	34.00
June	50.64	44.61	41.93	33.14
July	54.27	50.59	46.98	40.09
August	61.62	58.21	54.50	49.93
September	58.00	59.50	56.50	52.83
October	61.43	59.69	57.26	53.02
November	64.42	59.71	56.58	54.50
December	71.16	63.55	46.15	57.34
January-December	53.28	49.36	45.08	41.04
2010:				
January	73.95	73.34	66.76	64.76
February	68.05	64.50	64.71	63.18
March	75.45	70.80	70.26	68.85
April	78.77	78.00	73.36	70.73
January-April	74.06	71.66	68.77	66.88

Source: American Metal Market.

TABLE 8  
U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN MARCH 2010<sup>1</sup>

(Metric tons)

Country	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	March	January- March <sup>2</sup>	March	January- March <sup>2</sup>	March	January- March <sup>2</sup>	March	January- March <sup>2</sup>
Argentina	6,410	32,600	--	--	--	--	6,410	32,600
Australia	109	3,390	(3)	19	--	103	109	3,510
Bahrain	--	--	1,160	3,290	--	6	1,160	3,300
Belgium	20	39	422	616	--	--	442	655
Brazil	1,740	9,530	1,170	3,500	--	--	2,910	13,000
Canada	178,000	517,000	28,800	78,900	29,700	81,700	236,000	678,000
China	128	392	28,900	71,100	2	8	29,000	71,500
France	295	641	711	1,060	41	41	1,050	1,740
Germany	45	75	7,650	16,000	26	71	7,720	16,100
Hungary	12	12	7	12	--	--	19	24
Italy	(3)	(3)	283	650	28	58	311	708
Japan	69	196	1,120	2,320	49	63	1,240	2,580
Korea, Republic of	544	949	155	315	--	27	699	1,290
Mexico	1,110	4,000	1,610	4,520	9,360	26,000	12,100	34,500
Netherlands	38	77	222	430	71	284	330	791
Norway	299	690	1	3	--	--	300	693
Russia	17,500	33,600	1,330	3,830	--	--	18,800	37,500
South Africa	--	3,000	4,280	13,500	--	--	4,280	16,500
Spain	28	64	9	23	--	--	37	87
Sweden	--	--	103	355	--	--	103	355
Switzerland	--	--	507	1,460	--	--	507	1,460
United Arab Emirates	5,950	16,600	--	--	--	--	5,950	16,600
United Kingdom	42	176	888	2,090	706	1,980	1,640	4,250
Venezuela	17,600	45,900	82	690	281	383	17,900	47,000
Other	886	8,280	14,600	37,500	4,780	11,100	20,300	56,900
Total	230,000	678,000	94,000	242,000	45,000	122,000	370,000	1,040,000

-- Zero.

<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 from previous month(s) data.

<sup>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 9  
U.S. EXPORTS OF ALUMINUM IN MARCH 2010<sup>1</sup>

(Metric tons)

Country or territory	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	March	January- March <sup>2</sup>	March	January- March <sup>2</sup>	March	January- March <sup>2</sup>	March	January- March <sup>2</sup>
Australia	28	28	227	865	--	--	255	893
Belgium	16	38	106	308	--	--	122	346
Brazil	16	23	999	3,950	452	1,300	1,470	5,270
Canada	7,320	22,100	32,000	88,200	11,300	28,900	50,700	139,000
China	365	844	2,690	8,280	89,200	250,000	92,300	259,000
Czech Republic	1	1	25	71	--	--	25	71
Dominican Republic	--	--	24	78	1	1	25	80
France	207	337	791	2,240	208	208	1,210	2,790
Germany	503	874	977	2,670	19	38	1,500	3,590
Hong Kong	--	6	1,580	3,840	4,740	16,000	6,330	19,800
India	1	8	189	439	1,710	6,620	1,900	7,070
Israel	53	191	539	1,300	--	--	592	1,490
Italy	4	5	217	530	--	18	220	553
Japan	68	212	641	1,480	1,740	4,500	249	6,190
Korea, Republic of	49	105	1,030	2,520	12,700	40,000	13,800	42,700
Malaysia	1	2	125	230	566	1,460	692	1,690
Mexico	13,300	38,700	18,400	52,000	14,300	37,600	46,000	128,000
Netherlands	7	15	58	197	--	19	65	230
Russia	1	1	1	11	--	--	1	12
Saudi Arabia	--	3	988	1,950	--	--	988	1,960
Singapore	57	176	216	523	--	37	273	736
Spain	9	9	150	339	--	--	158	348
Sweden	--	--	1	11	--	--	1	11
Taiwan	94	169	181	902	13,300	41,400	13,600	42,500
Thailand	(3)	(3)	157	372	144	788	302	1,160
United Kingdom	36	213	712	2,230	71	179	819	2,620
Venezuela	--	--	7	149	--	--	27	149
Other	220	429	4,950	15,100	1,750	5,650	6,920	21,200
Total	22,400	64,500	68,100	191,000	152,000	434,000	243,000	690,000

-- Zero.

<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 from previous month(s) data.

<sup>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.