

# Mineral Industry Surveys

---

**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 MARCH 2010

Domestic primary aluminum production in March was 146,000 metric tons (t), according to the U.S. Geological Survey. The average daily production was 4,710 t, slightly higher than that for the previous month and 5% lower than that for March 2009.

Total aluminum recovered from scrap in March 2010 was 224,000 t, the same as that of the previous month and 12% lower than the total in March 2009. Of this, 140,000 t of aluminum was recovered from new scrap, 4% higher than that of the previous month and 9% lower than that in March 2009. Aluminum recovered from old scrap in March 2010 totaled 84,000 t, which was 6% lower than that in February 2010 and 16% lower than that in March 2009.

Primary aluminum production during the first quarter of 2010 was 16% lower than in the same quarter of 2009. Total aluminum recovered from scrap for January through March was 11% less than the total for the first quarter of 2009. Aluminum recovered from new scrap for January through March was 9% less than the total for the same period of 2009. Recovery of aluminum from old scrap for January through March was 15% less than the total for the same period of the previous year.

In March, the monthly average U.S. market price of primary aluminum ingot increased to \$1.057 per pound from \$0.987 per pound in February, and in April, the price increased to \$1.109 per pound.

Century Aluminum Co. (Monterey, CA) and the United Steelworkers union continued negotiations on a contract covering approximately 540 employees at the Hawesville, KY, smelter. The previous contract had expired March 31 and had been extended three times during the negotiations. The third

contract extension expired May 7, but company and union spokespersons said that production at the 244,000-metric-ton-per-year (t/yr) smelter was continuing normally and further negotiations were scheduled (Century Aluminum Co., 2010; Platts Metals Week, 2010b).

Norsk Hydro ASA (Oslo, Norway) and Vale SA (Rio de Janeiro, Brazil) announced a deal in which Hydro would purchase bauxite, alumina, and aluminum assets from Vale in exchange for \$1.1 billion in cash plus \$3.8 billion in stock of Hydro, resulting in Vale owning 22% of Hydro. Hydro would receive 51% ownership in the 455,000-t/yr Albras smelter (Brazil), increase its ownership of the 6.3-million-metric-ton-per-year (Mt/yr) Alunorte refinery (Brazil) to 91% from 34%, and increase its ownership of the 1.86 Mt/yr Companhia de Alumina do Para refinery project (Brazil) to 81% from 20%. Hydro would also gain ownership of 60% of the Paragominas bauxite mine (Brazil) which had a capacity of 9.9 Mt/yr with an option to purchase the remaining 40% of the mine by the end of 2015. The deal was expected to be finalized by yearend but would require regulatory approval as well as consent of Vale's other joint-venture partners (Platts Metals Week, 2010a).

## References Cited

- Century Aluminum Co., 2010, Century Aluminum subsidiary CBA negotiations continue; smelter operating normally: Monterey, CA, Century Aluminum Co. news release, May 7, 1 p.
- Platts Metals Week, 2010a, Hydro to become alumina major with \$4.9 billion Vale deal: Platts Metals Week, v. 81, no. 19, May 10, p. 1, 9-10.
- Platts Metals Week, 2010b, USW, Century race to beat deadline: Platts Metals Week, v. 81, no. 19, May 10, p. 12.

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:									
March	154	154	100	255	333	54	387	796	1,020
April	145	144	98	242	233	55	288	675	952
May	147	150	100	250	292	68	361	757	997
June	132	156	110	267	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-March	496	450	301	750	807	157	965	2,210	XX
2010:									
January	142	135	82 <sup>r</sup>	217 <sup>r</sup>	238	82	319	678 <sup>r</sup>	984
February	130	135 <sup>r</sup>	89 <sup>r</sup>	224 <sup>r</sup>	209	67	276	630	975
March	146	140	84	224	NA	NA	NA	NA	NA
January-March	418	410	255	665	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:										
March	127	97	174	150	7	7	(2)	(2)	309	255
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	267
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)	305	251
December	128	98	162	139	7	7	(2)	(2)	298	244
January-March	379	289	509	440	22	20	(2)	(2)	913	750
2010:										
January	117	89	144 <sup>r</sup>	123 <sup>r</sup>	5	4	(2)	(2)	267 <sup>r</sup>	217 <sup>r</sup>
February	121 <sup>r</sup>	93 <sup>r</sup>	145 <sup>r</sup>	126	5	4	(2)	(2)	272 <sup>r</sup>	224 <sup>r</sup>
March	130	98	140	121	5	4	(2)	(2)	276	224
January-March	368	281	429	369	15	13	(2)	(2)	814	665

<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 MARCH 2010<sup>1</sup>

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
Secondary smelters	109,000	130,000	82,100	98,500
Independent mill fabricators	126,000	140,000	108,000	121,000
Foundries	4,230	5,070	3,690	4,420
Other consumers	547	656	503	604
Total	239,000	276,000	195,000	224,000

<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 MARCH 2010<sup>1</sup>

(Metric tons)

	March			January-March <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
New scrap:						
Extrusion	27,300	53,000	52,900	27,400	156,000	158,000
Can stock clippings	4,440	20,400	21,000	3,880	62,800	62,600
Other wrought sheet/clippings	5,290	26,100	25,900	5,500	74,600	74,600
Casting	811	4,660	4,690	784	12,500	12,600
Borings and turnings	1,590	9,130	9,150	1,570	25,800	26,000
Dross and skimmings	2,250	39,700	39,700	2,250	110,000	110,000
Total new scrap	41,700	153,000	153,000	41,400	442,000	444,000
Old scrap:						
Used castings	10,600	17,700	17,300	11,000	49,900	45,200
Used extrusion	3,580	7,620	7,540	3,660	20,400	20,300
Used cans (shredded, loose, baled)	11,200	41,900	42,400	10,600	143,000	142,000
Other wrought products	5,220	13,700	13,800	5,190	39,300	39,400
Fragmentized shredder (auto shredder)	722	4,300	4,410	608	12,300	12,500
Total old scrap	31,300	85,200	85,400	31,100	265,000	259,000
Sweated pig	1	156	156	1	467	467
Total all classes	73,000	238,000	239,000	72,500	707,000	704,000

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

<sup>2</sup>May include revised data from previous month(s).

<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)

	March			January-March <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.)	1,550	788	984	1,350	2,960	2,770
380 and variations	2,600	10,900	10,900	2,600	33,700	33,700
<b>Sand and permanent mold:</b>						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	1,940	1,660	1,660	1,940	4,980	4,980
No. 319 and variations	1,690	2,150	2,210	1,630	6,560	6,510
F-132 alloy and variations	422	339	339	422	1,020	1,020
Al-Zn alloys	291	152	152	291	457	457
Al-Si alloys (0.6% to 2.0% Cu)	254	293	293	254	878	878
Al-Cu alloys (1.5% Si, max.)	48	48	48	48	145	145
Other <sup>3</sup>	13,000	7,420	7,940	12,500	22,400	23,700
Wrought alloys, extrusion billets	20,800	58,500	59,000	20,400	168,000	167,000
<b>Total all alloys</b>	<b>42,600</b>	<b>82,300</b>	<b>83,500</b>	<b>41,400</b>	<b>241,000</b>	<b>241,000</b>
<b>Less:</b>						
Primary aluminum consumed	XX	21,800	XX	XX	63,300	XX
Primary silicon consumed	XX	1,150	XX	XX	3,280	XX
Other alloying ingredients consumed	XX	681	XX	XX	2,240	XX
Net metallic recovery from aluminum scrap and sweated pig consumed in production of secondary aluminum ingot <sup>5</sup>						
	XX	58,700	XX	XX	173,000	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 revised data from previous month(s).

<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:		
March	63.813	60.578
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 <sup>f</sup>	79.433	75.499
2010:		
January	106.875	101.372
February	98.688	92.923
March	105.700	100.028
January-March	103.754	98.108

<sup>f</sup>Revised.

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:				
March	41.91	36.77	33.59	27.57
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 <sup>f</sup>	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
January-March	72.48	69.55	67.24	65.60

<sup>f</sup>Revised.

Source: American Metal Market.

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

(Metric tons)

Country	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	February	January- February	February	January- February	February	January- February	February	January- February
Argentina	16,200	26,200	--	--	--	--	16,200	26,200
Australia	3,170	3,280	1	19	--	103	3,170	3,400
Bahrain	--	--	965	2,140	--	6	965	2,140
Belgium	--	20	71	193	--	--	71	213
Brazil	3,100	7,800	1,210	2,320	--	--	4,310	10,100
Canada	148,000	339,000	25,800	50,100	23,000	52,100	197,000	442,000
China	122	264	15,700	42,200	6	6	15,800	42,500
France	129	346	280	349	--	(2)	409	695
Germany	12	30	4,140	8,310	12	45	4,170	8,390
Hungary	--	--	4	5	--	--	4	5
Italy	(2)	(2)	240	367	--	30	240	397
Japan	84	127	610	1,200	11	13	704	1,340
Korea, Republic of	22	405	66	160	8	27	96	591
Mexico	859	2,890	1,560	2,910	7,920	16,600	10,300	22,400
Netherlands	33	39	43	209	77	213	153	461
Norway	343	392	(2)	2	--	--	343	394
Russia	11,900	16,100	1,050	2,500	--	--	13,000	18,600
South Africa	--	3,000	3,220	9,240	--	--	3,220	12,200
Spain	33	36	13	14	--	--	46	50
Sweden	--	--	176	252	--	--	176	252
Switzerland	--	--	283	949	--	--	283	949
United Arab Emirates	6,270	10,700	--	--	--	--	6,270	10,700
United Kingdom	106	135	457	1,200	473	1,280	1,040	2,610
Venezuela	17,500	28,400	151	608	--	101	17,700	29,100
Other	1,160	7,390	10,500	22,900	2,610	6,320	14,300	36,600
Total	209,000	447,000	66,500	148,000	34,100	76,800	310,000	672,000

-- 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 FEBRUARY 2010<sup>1</sup>

(Metric tons)

Country or territory	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	February	January- February	February	January- February	February	January- February	February	January- February
Australia	(2)	1	337	638	--	--	337	638
Belgium	--	21	127	203	--	--	127	224
Brazil	6	6	1,120	2,950	534	850	1,660	3,800
Canada	8,050	14,800	28,900	56,200	8,600	17,600	45,500	88,600
China	264	479	2,290	5,590	80,900	160,000	83,500	167,000
Czech Republic	--	--	20	46	--	--	20	46
Dominican Republic	--	--	42	44	--	--	42	55
France	79	130	761	1,450	--	--	841	1,580
Germany	267	371	744	168	--	18	1,010	2,090
Hong Kong	(2)	6	1,170	2,250	4,860	11,200	6,030	13,500
India	1	7	185	250	2,300	4,910	2,480	5,170
Israel	56	139	417	762	--	--	472	901
Italy	--	1	184	314	18	18	202	333
Japan	94	143	446	841	1,250	2,760	1,790	3,740
Korea, Republic of	10	56	743	1,490	14,700	27,300	15,500	28,900
Malaysia	--	(2)	43	105	205	895	248	1,000
Mexico	12,800	25,400	16,700	33,500	11,200	23,300	40,600	82,300
Netherlands	7	7	68	139	19	19	94	165
Russia	--	--	10	10	--	--	10	10
Saudi Arabia	1	3	699	965	--	--	700	967
Singapore	74	118	170	307	25	37	269	463
Spain	--	--	152	190	--	--	152	190
Sweden	--	--	4	10	--	--	4	10
Taiwan	50	75	421	721	15,700	28,100	16,200	28,900
Thailand	--	--	138	215	320	644	458	859
United Kingdom	65	177	755	1,520	63	108	883	1,800
Venezuela	--	--	21	122	--	--	21	122
Other	153	208	5,510	10,200	2,730	3,900	8,400	14,300
Total	22,000	42,100	62,100	123,000	143,000	282,000	228,000	447,000

-- 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.