

# 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 DECEMBER 2008

Domestic primary aluminum production in December was 204,000 metric tons (t), according to the U.S. Geological Survey. The average daily production was 6,580 t, slightly lower than that for the previous month and 9% lower than that for December 2007.

Total aluminum recovered from scrap in December 2008 was 243,000 t, essentially unchanged from that of the previous month and 16% lower than the total in December 2007. Of this, 148,000 t of aluminum was recovered from new scrap, slightly lower than that of the previous month and 11% lower than that in December 2007. Aluminum recovered from old scrap in December 2008 totaled 95,000 t, which was slightly higher than that in November and 22% less than that in December 2007.

Primary aluminum production for 2008 was 2.66 million metric tons (Mt), 4% higher than that in 2007. Total aluminum recovered from scrap in 2008 was 3.43 Mt, 12% lower than that of 2007. Of this, 2.09 Mt of aluminum was recovered from new scrap, 8% lower than that in 2007, and 1.35 Mt of aluminum was recovered from old scrap, 16% lower than that in 2007.

In December, the monthly average U.S. market price of primary aluminum ingot declined to \$0.715 per pound from \$0.881 per pound in November, and in January 2009, the price continued to decline to \$0.676 per pound. The annual average

U.S. market price of primary aluminum ingot was \$1.221 per pound in 2008, the same as the 2007 annual average price.

Noranda Aluminum Corp. announced that a power outage on January 28, 2009, caused by severe weather forced the shutdown of approximately 75% of the capacity of its 250,000-metric-ton-per-year (t/yr) smelter at New Madrid, MO. The company stated that restoring production to full capacity may take 12 months (Noranda Aluminum Corp., 2009).

Century Aluminum Co. announced that it would proceed with the full closure of its 270,000-t/yr smelter at Ravenswood, WV. The company had previously announced that one potline was being shut down in December, and the remaining capacity might be idled if aluminum prices did not improve. (See Aluminum in October 2008.) The closure was expected to be completed by February 20, 2009 (Century Aluminum Co., 2009).

### References Cited

- Century Aluminum Co., 2009, Century announces the curtailment of Ravenswood, WV smelter: Monterey, CA, Century Aluminum Co. news release, February 4, 1 p.  
Noranda Aluminum Corp., 2009, Noranda Aluminum Holding Corporation announces outage: Franklin, TN, Noranda Aluminum Corp. news release, January 29, 1 p.

### Used beverage can prices, cents per pound<sup>1</sup>

<b>December 5</b>	<b>44-46</b>
<b>December 12</b>	<b>47-49</b>
<b>December 19</b>	<b>44-46</b>
<b>December 26</b>	<b>44-46</b>
<b>January 2</b>	<b>44-46</b>
<b>January 9</b>	<b>47-49</b>
<b>January 16</b>	<b>44-46</b>
<b>January 23</b>	<b>39-41</b>
<b>January 30</b>	<b>40-42</b>

<sup>1</sup>Source: American Metal Market.

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		
2007 <sup>P</sup>	2,554	2,280	1,610	3,890	2,950	1,070	4,020	10,500	1,400
2007:									
December	225	167	122	288	215	70	285	798	1,400
2008:									
January	233	189	125	315	240	78	318	865	1,380
February	219	180	109	289	208	74	282	790	1,350
March	234	183	116	299	247	77	324	857 <sup>r</sup>	1,320
April	228	180	114	295	238	78	316	839	1,320
May	236	179	123	302	237	81	318	855	1,320
June	224	177	115	292	263	80	343	859	1,310
July	225	179	117	296	227	82	309	830 <sup>r</sup>	1,310
August	222	178	112	290	204	77	281	793	1,330
September	214	172	110	281	229	78	307	803	1,290
October	217	174	113	287	249	75	324	827 <sup>r</sup>	1,270
November	202	150	94	244	219	69	289	736	1,260
December	204	148	95	243	NA	NA	NA	NA	NA
January-December	2,658	2,090	1,350	3,430	NA	NA	NA	NA	XX

<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 <sup>2</sup>		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
2007 <sup>P</sup>	2,310	1,800	2,190	2,010	95	83	5	5	4,600	3,890
2007:										
December	178	138	157	143	8	7	(3)	(3)	343	288
2008:										
January	168	133	195	174	8	7	(3)	(3)	372	315
February	150	117	185	164	8	7	(3)	(3)	343	289
March	148	116	197	175	8	7	(3)	(3)	354	299
April	150	118	190	169	8	7	(3)	(3)	349	295
May	150	117	200	177	8	7	(3)	(3)	358	302
June	150	117	189	167	8	7	(3)	(3)	347	292
July	149	117	194	173	7	7	(3)	(3)	352	296
August	148	116	188	167	7	7	(3)	(3)	344	290
September	146	114	181	160	7	7	(3)	(3)	335	281
October	147	115	186	160	7	7	(3)	(3)	341	287
November	146	114	140	123	7	7	(3)	(3)	295	244
December	146	114	139	121	7	7	(3)	(3)	293	243
January-December	1,800	1,410	2,180	1,930	93	81	(3)	(3)	4,080	3,430

<sup>P</sup>Preliminary.

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

<sup>2</sup>Includes plants previously categorized as "Integrated aluminum companies."

<sup>3</sup>Less than 1/2 unit.

TABLE 3  
CONSUMPTION OF AND RECOVERY FROM PURCHASED  
NEW AND OLD ALUMINUM SCRAP IN DECEMBER 2008<sup>1</sup>

(Metric tons)

	Consumption		Calculated metallic recovery	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
Secondary smelters	122,000	146,000	95,200	114,000
Independent mill fabricators <sup>2</sup>	125,000	139,000	110,000	121,000
Foundries	6,230	7,480	5,450	6,530
Other consumers	608	730	522	626
Total	254,000	293,000	211,000	243,000

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

<sup>2</sup>Includes plants previously categorized as "Integrated aluminum companies."

TABLE 4  
PURCHASED AND TOLL-TREATED ALUMINUM-BASE SCRAP AND SWEATED PIG IN DECEMBER 2008<sup>1</sup>

(Metric tons)

	December			January-December <sup>2</sup>		
	Stocks, opening	Net receipts <sup>3</sup>	Melted or consumed	Stocks, closing	Net receipts <sup>3</sup>	Melted or consumed
New scrap:						
Extrusions	26,200	70,200	70,300	26,100	1,030,000	1,030,000
Can stock clippings	2,760	13,400	13,800	2,310	200,000	201,000
Other wrought sheet/clippings	5,330	20,500	20,400	5,380	290,000	289,000
Castings	690	5,850	5,800	739	70,500	70,700
Borings and turnings	4,180	11,200	11,200	4,180	139,000	139,000
Dross and skimmings	3,670	34,700	34,700	3,670	417,000	417,000
Total new scrap	42,800	156,000	156,000	42,300	2,150,000	2,150,000
Old scrap:						
Used castings	4,360	17,400	13,900	7,860	220,000	220,000
Used extrusions	2,000	6,300	6,300	2,000	75,500	75,500
Used cans (shredded, loose, baled)	3,310	43,900	44,100	3,160	671,000	673,000
Other wrought products	3,270	17,900	17,900	3,270	236,000	236,000
Fragmentized shredder (auto shredder)	5,850	15,400	15,500	5,810	188,000	188,000
Total old scrap	18,800	101,000	97,600	22,100	1,390,000	1,390,000
Sweated pig	82	246	246	82	2,960	2,960
Total all classes	61,700	257,000	254,000	64,500	3,540,000	3,550,000

<sup>1</sup>Revised.

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

<sup>2</sup>Includes 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 2008<sup>1,2</sup>

(Metric tons)

	December			January-December <sup>3</sup>		
	Stocks, opening	Production	Net shipments	Stocks, closing	Production	Net shipments
<b>Die-cast alloys:</b>						
13% Si, 360, etc. (0.6% Cu, max.)	3,350	1,870	1,940	3,280	23,900	23,900
380 and variations	4,190	13,200	13,200	4,190	164,000	165,000
<b>Sand and permanent mold:</b>						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	1,360	2,730	2,730	1,360	32,800	32,800
No. 319 and variations	1,920	3,380	3,380	1,920	41,400	41,800
F-132 alloy and variations	508	482	482	508	11,100	11,400
Al-Zn alloys	292	168	168	292	2,040	2,060
Al-Si alloys (0.6% to 2.0% Cu)	86	213	213	86	2,560	2,560
Al-Cu alloys (1.5% Si, max.)	283	411	411	283	4,940	4,940
Other <sup>3</sup>	8,420	33,200	33,900	7,790	312,000	312,000
Wrought alloys, extrusion billets	18,800	53,800	53,800	18,800	657,000	657,000
Total all alloys	39,200	110,000	110,000	38,500	1,250,000	1,250,000
<b>Less:</b>						
Primary aluminum consumed	XX	19,300	XX	XX	231,000	XX
Primary silicon consumed	XX	1,690	XX	XX	21,300	XX
Other alloying ingredients consumed	XX	623	XX	XX	7,660	XX
Net metallic recovery from aluminum scrap and sweated pig consumed in production of secondary aluminum ingot <sup>4</sup>	XX	87,900	XX	XX	991,000	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>No allowance made for melt-loss of primary aluminum and alloying ingredients.

TABLE 6  
U.S. IMPORTS FOR CONSUMPTION OF ALUMINUM IN NOVEMBER 2008<sup>1</sup>

(Metric tons)

Country	Metals and alloys, crude		Plates, sheets, bars, etc.		Scrap		Total	
	November	January- November	November	January- November	November	January- November	November	January- November
Argentina	402	79,000	--	--	--	--	402	79,000
Australia	--	37,500	15	109	--	109	15	37,700
Bahrain	1,490	8,930	1,890	16,400	--	--	3,390	25,300
Belgium	--	87	343	4,420	--	--	343	4,510
Brazil	5,830	70,900	321	13,400	--	367	6,150	84,700
Canada	168,000	1,820,000	30,100	360,000	23,200	313,000	222,000	2,500,000
China	250	21,700	10,500	132,000	--	33	10,800	154,000
France	172	499	208	3,950	26	799	407	5,250
Germany	148	2,140	7,370	82,500	29	378	7,550	85,000
Hungary	--	--	10	168	--	--	10	168
Italy	--	32	936	5,610	--	18	936	5,670
Japan	37	962	982	10,100	19	770	1,040	11,900
Korea, Republic of	262	820	195	1,920	--	144	457	2,880
Mexico	1,210	23,400	1,130	17,000	5,500	107,000	7,850	148,000
Netherlands	31	1,110	258	2,270	58	191	347	3,570
Norway	4	2,670	1	11	--	--	5	2,680
Russia	25,300	270,000	3,410	42,400	--	1,290	28,700	314,000
South Africa	3,000	9,440	2,200	35,800	--	500	5,200	45,700
Spain	6	152	18	142	--	8	24	301
Sweden	--	7	126	1,710	--	--	126	1,720
Switzerland	--	3	474	6,160	--	--	474	6,160
Tajikistan	--	782	--	--	--	--	--	782
United Arab Emirates	4,670	74,300	--	19	--	278	4,670	74,600
United Kingdom	9	1,720	868	6,990	847	5,810	1,720	14,500
Venezuela	7,040	96,400	308	3,440	69	2,430	7,420	102,000
Other	1,150	34,200	7,760	102,000	1,490	35,300	10,400	171,000
Total	219,000	2,560,000	69,400	849,000	31,300	468,000	320,000	3,880,000

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 7  
U.S. EXPORTS OF ALUMINUM IN NOVEMBER 2008<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	1	1,720	103	2,070	--	113	104	3,900
Azerbaijan	--	--	--	(2)	--	--	--	(2)
Belgium	56	1,010	95	1,580	38	919	190	3,510
Brazil	3	395	726	8,750	115	4,300	844	13,400
Canada	7,320	97,500	25,500	394,000	9,440	154,000	42,300	645,000
China	6	1,020	3,290	37,300	47,700	851,000	51,000	889,000
Czech Republic	--	13	8	211	--	--	8	224
Dominican Republic	10	367	37	543	--	21	47	931
France	169	728	803	10,300	4	52	976	11,100
Germany	125	2,550	565	9,750	171	1,190	862	13,500
Hong Kong	(2)	203	1,670	16,100	3,220	91,700	4,890	108,000
India	--	197	63	1,300	1,350	27,500	1,410	29,000
Israel	96	509	390	5,320	--	9	486	5,840
Italy	--	36	248	3,130	--	429	248	3,600
Japan	52	9,330	1,090	19,300	3,290	56,800	4,430	85,500
Korea, Republic of	28	854	1,330	15,000	10,500	214,000	11,900	230,000
Malaysia	10	22	338	8,480	204	1,430	552	9,930
Mexico	9,010	169,000	19,400	241,000	3,980	83,900	32,400	494,000
Netherlands	10	413	72	1,730	40	1,290	122	3,430
Russia	--	--	5	125	--	--	5	125
Saudi Arabia	--	264	2,750	40,900	--	18	2,750	41,200
Singapore	8	286	233	1,390	--	691	241	2,360
Spain	4	23	193	1,900	6	568	202	2,490
Sweden	--	9	14	152	--	--	14	161
Taiwan	24	84	471	7,840	2,860	315,000	3,360	323,000
Thailand	113	256	1,780	11,100	871	72,700	2,760	84,000
Ukraine	--	--	13	14	--	--	13	14
United Kingdom	148	921	1,880	23,000	6	790	2,040	24,700
Venezuela	21	42	60	771	14	251	95	1,060
Other	111	4,820	6,310	60,800	568	28,900	6,990	94,500
Total	17,300	293,000	69,400	924,000	84,300	1,910,000	171,000	3,120,000

-- 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.