

Mineral Industry Surveys

For information, contact:

Adam M. Merrill, Aluminum Commodity Specialist
National Minerals Information Center
Telephone: (703) 648-7715
Email: amerrill@usgs.gov

Susan M. Weaver (Data)

Telephone: (703) 648-7979

Email: sweaver@usgs.gov

Internet: <https://www.usgs.gov/centers/national-minerals-information-center/mineral-industry-surveys>

ALUMINUM IN MAY 2024

Domestic primary aluminum production in May 2024 was 57,000 metric tons (t). The average daily production in May 2024 was 1,840 t, unchanged from that in April 2024, 12% less than that in May 2023, and 32% less than that in May 2022 (fig. 1, table 1).

Total aluminum recovered from scrap in May 2024 was 299,000 t, essentially unchanged from the revised amount in April 2024, 6% more than that in May 2023, and 4% more than that in May 2022. Of this, 167,000 t of aluminum was recovered from new scrap, and 132,000 t was recovered from old scrap (fig. 1, table 1).

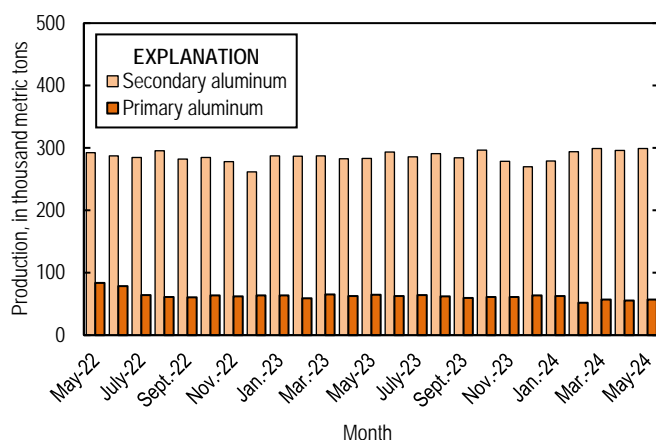


Figure 1. Monthly domestic primary and secondary aluminum production from May 2022 through May 2024.

Prices and Stocks

The May 2024 average U.S. spot market price of primary aluminum ingot was \$1.37 per pound, 3% more than that in April 2024, 7% more than that in May 2023, and 18% less than that in May 2022. The average cash price in May 2024 of primary aluminum ingot on the London Metal Exchange (LME) was \$1.16 per pound, 3% more than that in April 2024, 13% more than that in May 2023, and 9% less than that in May 2022 (fig. 2, table 6).

Inventories of primary aluminum in LME-approved warehouses, including off-warrant inventories, in the United States were 12,276 t at the end of May 2024, 15% less than that

at the end of April 2024. Inventories of aluminum alloy (North American Special Aluminum Alloy Contract) in LME-approved warehouses, including off-warrant inventories, in the United States were 131 t at the end of May 2024, unchanged from that at the end of April 2024 (London Metal Exchange Ltd., 2024a–d).

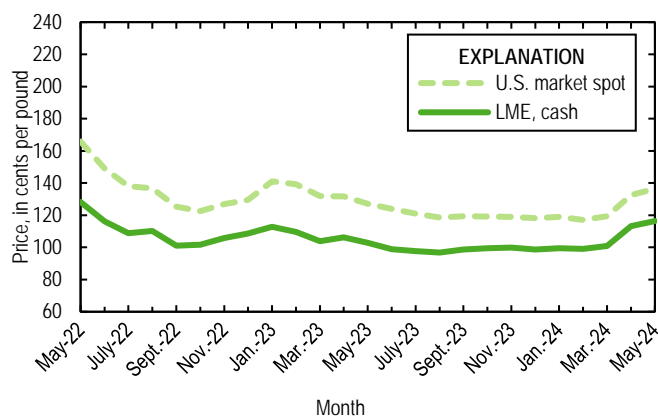


Figure 2. Average monthly prices for primary aluminum from May 2022 through May 2024. Source: S&P Global Platts Metals Week.

Updates

United States.—On July 10, the President of the United States imposed new duties of 10% on imports of aluminum products and derivative aluminum products from Mexico. These duties apply to products that contain primary aluminum for which the primary or secondary country of smelt, or the most recent country of cast is Belarus, China, Iran, or Russia. The action is taken under section 232 of the Trade Expansion Act of 1962 as amended, to address circumstances that threaten to impair national security. As justification, the President noted that capacity utilization for domestic producers remained below the 80% target recommended by Secretary of Commerce, aluminum imports from Mexico increased significantly since the initial tariffs were put in place in 2018, and Mexico has no primary smelting capability. Additionally, aluminum products imported from Mexico contain primary aluminum imported

largely from countries of unknown origin (Executive Office of the President, 2024).

Global.—On July 15, Constellium SE (France) announced that it had casted its first industrial scale aluminum using hydrogen at its research and development facility in Voreppe, France. Analyses by the company determined that hydrogen combustion had not affected the metal’s quality. The 12-t slab will be processed at the company’s Neuf-Brisach facility for use in electric vehicles (Constellium SE, 2024).

References Cited

Constellium SE, 2024, World’s first successful industrial-scale production of aluminium slab using hydrogen combustion: Paris, France, Constellium SE press release, July 15. (Accessed July 16, 2024, at <https://www.constellium.com/news/worlds-first-industrial-scale-aluminium-slab-using-hydrogen-combustion>.)

Executive Office of the President, 2024, Proclamation 10782 of July 10, 2024—Adjusting imports of aluminum into the United States: Federal Register, v. 89, no. 135, July 15, p. 57339–57345. (Accessed July 18, 2024, at <https://www.govinfo.gov/content/pkg/FR-2024-07-15/pdf/2024-15632.pdf>.)

London Metal Exchange Ltd., 2024a, Off-warrant stock reporting—April 2024: London, United Kingdom, London Metal Exchange Ltd., June 10. (Accessed June 28, 2024, via <https://www.lme.com/en/Market-data/Reports-and-data/Warehouse-and-stocks-reports/Off-warrant-stock-reporting>.)

London Metal Exchange Ltd., 2024b, Off-warrant stock reporting—May 2024: London, United Kingdom, London Metal Exchange Ltd., July

10. (Accessed July 17, 2024, via <https://www.lme.com/en/Market-data/Reports-and-data/Warehouse-and-stocks-reports/Off-warrant-stock-reporting>.)

London Metal Exchange Ltd., 2024c, Stocks breakdown report: London, United Kingdom, London Metal Exchange Ltd., April 30. (Accessed June 28, 2024, via <https://www.lme.com/Market-data/Reports-and-data/Warehouse-and-stocks-reports/Stock-breakdown-report>.)

London Metal Exchange Ltd., 2024d, Stocks breakdown report: London, United Kingdom, London Metal Exchange Ltd., May 31. (Accessed July 17, 2024, via <https://www.lme.com/Market-data/Reports-and-data/Warehouse-and-stocks-reports/Stock-breakdown-report>.)

A worksheet has been added to the Excel table files that includes a button to remove text and numerical footnotes from data cells. This will allow users to only have numbers in data cells. Please see the worksheet titled “RemoveTextButton” for instructions on how to use the tool. Note: you must download the excel file to use the tool.

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Table 1. Components of aluminum supply.

[Data are rounded to no more than three significant digits, except "Primary production"; may not add to totals shown. Data are in thousand metric tons. Revised data are marked with a superscript "r". NA, not available.]

Period	Primary production	Secondary recovery ¹			Imports for consumption			Total new supply ²	Stocks, end of period ³
		New	Old	Total	Metals and alloys, crude	Plates, sheets, bars, etc.	Total		
2023									
Total	750	1,860 ^r	1,560	3,430	3,810	1,040 ^r	4,860	9,030 ^r	1,820
May	65	153	130	283	407	93	500	848	1,930
June	62	156	137	293	345	94	439	794	1,910
July	64	149	137	286	331	86	417	767	1,860
August	62	153	138	291	283	94	377	730	1,860
September	60	157	127	284	309	80	389	733	1,890
October	61	166	130	297	313	85	398	756	1,830
November	61	154	125	278	277	81	358	697	1,780
December	64	150 ^r	119 ^r	270 ^r	311	86	397	731 ^r	1,820
January–May	315 ^r	779 ^r	648 ^r	1,430 ^r	1,640	438	2,080	3,820 ^r	1,820
2024									
January	63	158 ^r	121 ^r	279 ^r	297	98	395	737 ^r	1,780
February	52	162 ^r	132 ^r	294 ^r	344	98	442	788 ^r	1,770
March	57	165 ^r	134 ^r	299 ^r	270	96	366	722 ^r	1,730
April	55	163 ^r	133 ^r	296 ^r	330	113	443	794 ^r	1,720
May	57	167	132	299	270	120	390	746	NA
January–May	284	815	652	1,470	1,510	525	2,040	3,790	NA

¹ Metallic recovery from purchased, tolled, or imported scrap, expanded for full coverage of industry.

² Primary production, secondary recovery, and imports for consumption.

³ Inventory levels reflect total for U.S. and Canadian producers; data from the Aluminum Association Inc.

Table 2. Estimated full coverage consumption of and metallic recover from purchased new and old aluminum scrap.

[Data are rounded to no more than three significant digits; may not add to totals shown. Data are in thousand metric tons. Revised data are marked with a superscript "r"].

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
2023										
Total	2,520	1,880 ^r	1,590	1,450	101	93	3	3	4,210 ^r	3,430
May	212	157	130	118	8	8	(¹)	(¹)	350	283
June	210	158	141	128	8	8	(¹)	(¹)	360	293
July	210	157	133	120	8	8	(¹)	(¹)	352	286
August	212	159	137	124	8	8	(¹)	(¹)	357	291
September	207	156	131	120	8	8	(¹)	(¹)	347	284
October	210	158	143	131	8	8	(¹)	(¹)	362	297
November	210	157	124	113	8	8	(¹)	(¹)	343	278
December	206 ^r	154 ^r	119	108	8	8	(¹)	(¹)	333 ^r	270 ^r
January–May	1,050 ^r	784 ^r	662 ^r	602	42	39	1	1	1,760 ^r	1,430 ^r
2024										
January	206 ^r	155 ^r	127	116	8	8	(¹)	(¹)	342 ^r	279 ^r
February	209 ^r	158 ^r	141	128	8	8	(¹)	(¹)	359 ^r	294 ^r
March	213 ^r	159 ^r	145	132	8	8	(¹)	(¹)	367 ^r	299 ^r
April	214 ^r	160 ^r	141	128	8	8	(¹)	(¹)	364 ^r	296 ^r
May	209	156	148	135	8	8	(¹)	(¹)	366	299
January–May	1,050	788	702	640	42	39	1	1	1,800	1,470

¹Less than ½ unit.

Table 3. Consumption of and recovery from purchased new and old aluminum scrap in May 2024.

[Data are rounded to no more than three significant digits; may not add to totals shown.]

Aluminum scrap	Consumption (metric tons)		Calculated metallic recovery (metric tons)	
	Tabulated reports	Estimated full coverage	Tabulated reports	Estimated full coverage
Secondary smelters	174,000	209,000	130,000	156,000
Independent mill fabricators	134,000	148,000	122,000	135,000
Foundries	7,040	8,450	6,440	7,730
Other consumers	242	290	242	290
Total	315,000	366,000	259,000	299,000

Table 4. Purchased and toll-treated aluminum-base scrap in May 2024.

[Data are rounded to no more than three significant digits; may not add to totals shown. Data are in metric tons.]

Aluminum-base scrap	May			January–May		
	Stocks, opening ¹	Net receipts ²	Melted or consumed	Stocks, closing	Net receipts ²	Melted or consumed
New scrap						
Extrusions	18,600	48,900	48,900	18,600	225,000	225,000
Can stock clippings	96,400	33,700	33,700	96,400	156,000	156,000
Other wrought sheet/clippings	157,000	39,300	39,000	157,000	206,000	206,000
Castings	20,100	4,510	4,510	20,100	23,400	23,400
Borings and turnings	41,500	11,400	11,400	41,500	58,000	58,000
Dross and skimmings ³	340,000	47,700	47,700	340,000	238,000	238,000
Total new scrap	674,000	185,000	185,000	674,000	907,000	906,000
Old scrap						
Used castings	24,700	27,300	27,300	24,700	138,000	138,000
Used extrusions	15,600	13,200	13,200	15,600	66,000	66,000
Used cans (shredded, loose, baled)	73,600	51,600	51,600	73,600	243,000	243,000
Other wrought products	36,700	25,300	25,300	36,700	133,000	133,000
Fragmentized shredder (auto shredder)	3,500	12,600	12,600	3,500	61,900	61,900
Total old scrap	154,000	130,000	130,000	154,000	641,000	641,000
Grand total, all classes	828,000	315,000	315,000	828,000	1,550,000	1,550,000

¹May include revisions to previously published data.²Includes data on imported aluminum-base scrap.³Gross volume of dross and skimmings. Recoverable aluminum content ranges from 15% to 50% of gross weight.

Table 5. Aluminum alloys produced at secondary smelters in the United States in May 2024.

[Data are rounded to no more than three significant digits; may not add to totals shown. Excludes integrated aluminum companies. Data are in metric tons. —, not applicable.]

Aluminum alloys	May			January–May		
	Stocks, opening ¹	Production	Net shipments	Stocks, closing	Production	Net shipments
Die-cast alloys						
13% Si, 360, etc. (0.6% Cu, max.)	4,370	2,700	2,700	4,370	13,500	11,100
380 and variations	7,750	17,600	17,600	7,750	88,200	85,000
Sand and permanent mold						
95/5 Al-Si, 356, etc. (0.6% Cu, max.)	1,940	2,130	2,130	1,940	10,600	10,600
No. 319 and variations	1,200	1,390	1,390	1,200	6,940	6,940
F-132 alloy and variations	89	233	233	89	1,170	1,170
Al-Zn alloys	339	71	71	339	355	355
Al-Si alloys (0.6% to 2.0% Cu)	230	195	195	230	973	973
Al-Cu alloys (1.5% Si, max.)	139	724	724	139	3,620	3,620
Other ²	3,730	4,450	4,450	3,730	22,200	22,200
Other						
Wrought alloys, extrusion billets	14,200	60,600	60,600	14,200	303,000	303,000
Total all alloys	34,000	90,100	90,100	34,000	451,000	445,000
Less						
Primary aluminum consumed	—	15,200	—	—	75,900	—
Primary silicon consumed	—	1,600	—	—	7,990	—
Other alloying ingredients consumed	—	839	—	—	4,200	—
Other						
Net metallic recovery from aluminum scrap consumed in production of secondary aluminum ingot ³	—	72,500	—	—	363,000	—

¹May include revisions to previously published data.

²Includes alloys No. 12, Al-Mg, Al-Zn, Al-Cu, Al-Si-Cu-Ni, aluminum-base hardeners, variations of these alloys, plus other aluminum alloys.

³No 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.

[Data are in cents per pound. Source: S&P Global Platts Metals Week.]

Period	Midwest U.S. market price	LME cash price Grade A
2023		
May	127.088	102.837
June	124.000	98.917
July	121.012	97.614
August	118.557	96.787
September	119.429	98.756
October	119.136	99.433
November	119.011	99.877
December	118.250	98.610
January–December	125.863	102.113
2024		
January	118.966	99.514
February	117.083	98.984
March	119.438	100.791
April	132.536	113.285
May	136.524	116.334
January–May	124.909	105.782

Table 7. Average buying prices for aluminum scrap.

[Data are in cents per pound. Source: Fastmarkets–AMM.]

Period	Used beverage cans	Mixed low copper clips	Old sheet	Old cast	Turnings (clean and dry)
2023					
May	73.13	69.50	69.88	73.63	64.00
June	69.20	67.30	68.70	70.60	60.30
July	68.00	68.38	68.50	70.00	57.88
August	67.80	67.40	67.00	69.40	59.60
September	67.75	66.50	67.25	68.50	59.25
October	68.00	66.50	68.75	68.75	59.50
November	69.50	68.00	69.50	69.40	61.60
December	70.38	68.25	68.88	69.75	65.50
January–December	73.84	68.35	69.03	70.37	59.88
2024					
January	74.13	69.13	70.25	72.13	68.63
February	76.00	69.90	71.80	73.80	71.40
March	78.00	71.13	73.00	78.00	72.50
April	87.88	73.00	76.25	79.50	74.63
May	92.60	78.60	82.60	82.00	80.20
January–May	81.72	72.35	74.78	77.09	73.47

Table 8. U.S. imports for consumption of aluminum in May 2024.

[Data are rounded to no more than three significant digits; may not add to totals shown. Data are in metric tons. Source: U.S. Census Bureau].

Country or locality	Metals and alloys, crude		Plates, sheets, bars ¹		Scrap		Total	
	May	January–May	May	January–May	May	January–May	May	January–May
Argentina	7,740	56,500	17	17	0	0	7,760	56,500
Australia	3,880	32,600	17	71	0	0	3,900	32,600
Austria	0	4	2,180	9,700	6	28	2,180	9,730
Bahrain	8,590	37,800	4,530	20,100	0	0	13,100	57,900
Belgium	0	63	1,700	9,660	0	0	1,700	9,730
Brazil	0	5	3,280	16,600	787	1,650	4,060	18,200
Canada	202,000	1,170,000	19,200	97,900	34,200	164,000	256,000	1,430,000
Chile	0	0	0	19	198	1,240	198	1,260
China ²	40	248	19,900	76,900	40	84	19,900	77,200
Colombia	0	0	639	2,440	961	2,590	1,600	5,030
Costa Rica	0	0	105	257	136	524	241	781
France	867	3,900	1,010	3,040	14	52	1,890	7,000
Germany	52	388	1,300	7,420	639	2,780	1,990	10,600
Greece	0	0	3,740	18,800	0	60	3,740	18,900
Guatemala	0	0	0	18	1,130	4,990	1,130	5,010
Honduras	0	0	872	3,600	43	503	915	4,100
India	6,590	27,900	2,070	13,400	0	(³)	8,660	41,300
Indonesia	38	417	1,180	7,110	0	0	1,220	7,530
Italy	170	1,300	1,220	5,930	14	20	1,400	7,250
Japan	4	4	1,050	7,760	14	28	1,070	7,790
Korea, Republic of	641	3,370	19,200	59,500	0	27	19,900	62,900
Malaysia	0	0	1,330	5,680	0	2	1,330	5,680
Mexico	151	2,200	5,230	23,900	17,500	82,100	22,900	108,000
Netherlands	94	566	100	352	14	14	208	932
New Zealand	50	3,270	1	2	0	0	51	3,270
Norway	363	1,880	1,260	3,920	0	0	1,620	5,800
Oman	0	0	6,780	22,200	0	0	6,780	22,200
Qatar	1,710	21,500	(³)	5	0	0	1,710	21,500
Romania	0	0	16	141	0	20	16	161
Russia	0	0	0	26	0	0	0	26
Saudi Arabia	0	0	991	3,820	0	0	991	3,820
South Africa	0	121	1,160	4,690	0	101	1,160	4,920
Spain	272	753	1,630	5,290	0	0	1,900	6,040
Sweden	0	0	957	4,270	0	0	957	4,270
Switzerland	0	0	597	2,510	0	0	597	2,510
Taiwan	30	150	352	1,530	18	18	400	1,700
Thailand	175	818	1,320	7,390	2	11	1,490	8,220
Turkey	0	192	2,460	15,100	0	0	2,460	15,300
United Arab Emirates	36,200	148,000	195	971	0	0	36,400	149,000
United Kingdom	20	48	735	4,890	27	352	783	5,290
Vietnam	0	0	2,100	24,200	5	5	2,110	24,200
Other	0	80	9,770	34,200	1,630	8,620	11,400	42,900
Total	270,000	1,510,000	120,000	525,000	57,400	269,000	448,000	2,310,000

¹Includes castings, forgings, and unclassified semifabricated forms.²Includes Hong Kong.³Less than ½ unit.

Table 9. U.S. exports of aluminum in May 2024.

[Data are rounded to no more than three significant digits; may not add to totals shown. Data are in metric tons. Source: U.S. Census Bureau].

Country or locality	Metals and alloys, crude		Plates, sheets, bars ¹		Scrap		Total	
	May	January–May	May	January–May	May	January–May	May	January–May
Australia	16	177	144	880	0	0	160	1,060
Belgium	0	1	269	1,140	803	2,380	1,070	3,520
Brazil	0	1	259	1,170	275	2,660	534	3,830
Canada	6,300	30,200	27,800	144,000	12,600	57,000	46,700	232,000
China ²	295	2,030	1,060	5,940	13,600	81,100	14,900	89,100
Colombia	6	100	80	219	0	324	86	643
Dominican Republic	0	0	17	159	351	1,890	368	2,050
France	470	3,160	1,080	5,690	310	1,000	1,860	9,860
Germany	218	1,890	476	2,090	76	729	771	4,710
Guatemala	0	1	27	68	0	0	27	69
India	56	399	395	1,970	44,700	173,000	45,100	175,000
Indonesia	0	36	(³)	15	4,470	17,400	4,470	17,500
Ireland	0	0	28	115	0	806	28	921
Israel	2	3	609	3,390	0	0	611	3,390
Italy	58	137	249	1,060	143	2,000	450	3,200
Jamaica	0	4	3	44	0	0	3	48
Japan	170	592	1,460	5,680	3,170	12,300	4,800	18,500
Korea, Republic of	162	1,610	2,090	10,900	25,100	113,000	27,300	126,000
Malaysia	33,900	160,000	365	2,080	35,600	160,000	69,900	322,000
Mexico	16,500	76,300	27,900	132,000	12,900	54,300	57,400	263,000
Netherlands	128	248	35	221	1,000	3,430	1,170	3,900
New Zealand	1	2	59	263	0	0	60	265
Norway	0	91	1	9	169	621	170	720
Pakistan	656	675	(³)	7	1,170	7,240	1,830	7,930
Panama	0	6	1	13	0	0	1	19
Philippines	0	54	33	129	25	420	57	602
Poland	(³)	12	172	584	0	20	172	616
Romania	(³)	(³)	124	644	0	0	124	644
Saudi Arabia	0	0	14	136	0	0	14	136
Singapore	370	1,300	114	654	0	98	484	2,050
Spain	6	12	257	1,040	639	2,440	902	3,500
Taiwan	21	81	317	1,800	3,990	21,000	4,330	22,800
Thailand	694	3,250	196	504	26,700	133,000	27,600	137,000
Turkey	(³)	(³)	250	2,100	19	364	270	2,470
United Arab Emirates	(³)	1	23	385	561	1,080	585	1,470
United Kingdom	9	33	609	3,960	38	642	657	4,630
Vietnam	306	812	125	612	1,440	9,670	1,870	11,100
Other	10	1,300	329	1,930	1,760	6,810	2,100	10,000
Total	60,300	285,000	67,000	334,000	192,000	867,000	319,000	1,490,000

¹Includes castings, forgings, and unclassified semifabricated forms.²Includes Hong Kong.³Less than ½ unit.