

ALUMINUM¹

(Data in thousand metric tons of metal, unless otherwise noted)

Domestic Production and Use: In 2003, 7 companies operated 15 primary aluminum reduction plants; 6 smelters were temporarily idled. Based upon published market prices, the value of primary metal production was \$4 billion. Aluminum consumption was centered in the East Central United States. Transportation accounted for an estimated 35% of domestic consumption; the remainder was used in packaging, 24%; building, 16%; consumer durables, 8%; electrical, 7%; and other, 10%.

Salient Statistics—United States:	1999	2000	2001	2002	2003^e
Production:					
Primary	3,779	3,668	2,637	2,707	2,700
Secondary (from old scrap)	1,570	1,370	1,210	1,170	1,100
Imports for consumption	4,000	3,910	3,740	4,060	4,300
Exports	1,650	1,760	1,590	1,590	1,500
Consumption, apparent ²	7,770	7,530	6,230	6,310	6,500
Price, ingot, average U.S. market (spot), cents per pound	65.7	74.6	68.8	64.9	67.0
Stocks:					
Aluminum industry, yearend	1,870	1,550	1,300	1,320	1,300
LME, U.S. warehouses, yearend ³	14	(⁴)	28	45	200
Employment, number ⁵	76,300	77,800	71,200	62,200	60,000
Net import reliance ⁶ as a percentage of apparent consumption	31	33	38	39	41

Recycling: In 2003, aluminum recovered from purchased scrap was about 2.8 million tons, of which about 60% came from new (manufacturing) scrap and 40% from old scrap (discarded aluminum products). Aluminum recovered from old scrap was equivalent to about 17% of apparent consumption.

Import Sources (1999-2002): Canada, 58%; Russia, 18%; Venezuela, 5%; Mexico, 2%; and other, 17%.

Tariff: Item	Number	Normal Trade Relations 12/31/03
Unwrought (in coils)	7601.10.3000	2.6% ad val.
Unwrought (other than aluminum alloys)	7601.10.6000	Free.
Waste and scrap	7602.00.0000	Free.

Depletion Allowance: Not applicable.¹

Government Stockpile: None.

ALUMINUM

Events, Trends, and Issues: Domestic primary aluminum production was relatively unchanged compared with that for the previous year. Most of the smelter capacity that was idled at the end of 2002 remained off line.

Imports for consumption continued to increase, filling some of the supply deficit created by increasing demand and a stagnant domestic supply. Canada and Russia accounted for approximately three-fourths of total imports. U.S. exports continued to decrease. Canada and Mexico received an estimated two-thirds of total U.S. exports.

The price of primary aluminum ingot fluctuated through September 2003. In January, the average monthly U.S. market price for primary ingot quoted by Platts Metals Week was 66.25 cents per pound; in September, the price was 66.94 cents per pound. Prices on the London Metal Exchange (LME) followed the trend of U.S. market prices. The monthly average LME cash price for September was 64.21 cents per pound. According to American Metal Market, prices in the aluminum scrap and secondary aluminum alloy markets fluctuated through September but closed the month slightly higher than the prices at the end of 2002.

World production continued to increase as capacity expansions, most notably those in China, India, Mozambique, and Norway, were brought onstream. Inventories of metal held by producers, as reported by the International Aluminium Institute, increased slightly through the end of August to more than 3 million tons. Inventories of metal held by the LME exceeded 1.37 million tons at the end of September, reaching levels not seen since February 1995.

World Smelter Production and Capacity:

	Production		Yearend capacity	
	<u>2002</u>	<u>2003^e</u>	<u>2002</u>	<u>2003^e</u>
United States	2,707	2,700	4,120	4,120
Australia	1,836	1,850	1,820	1,850
Brazil	1,318	1,390	1,330	1,400
Canada	2,709	2,800	2,730	2,800
China	4,300	5,200	5,300	6,500
France	450	430	480	440
Norway	1,096	1,150	1,050	1,180
Russia	3,347	3,400	3,350	3,400
South Africa	676	690	690	690
Venezuela	570	580	640	640
Other countries	<u>6,910</u>	<u>7,150</u>	<u>7,830</u>	<u>8,110</u>
World total (rounded)	25,900	27,300	29,300	31,100

World Resources: Domestic aluminum requirements cannot be met by domestic bauxite resources. Potential domestic nonbauxitic aluminum resources are abundant and could meet domestic aluminum demand. However, no processes for using these resources have been proven economically competitive with those now used for bauxite. The world reserve base for bauxite is sufficient to meet world demand for metal well into the 21st century.

Substitutes: Copper can replace aluminum in electrical applications; magnesium, titanium, and steel can substitute for aluminum in structural and ground transportation uses. Composites, steel, and wood can substitute for aluminum in construction. Glass, paper, plastics, and steel can substitute for aluminum in packaging.

^eEstimated.

¹See also Bauxite and Alumina.

²Domestic primary metal production + recovery from old aluminum scrap + net import reliance.

³Includes aluminum alloy.

⁴Less than ½ unit.

⁵New data series, alumina and aluminum production workers (North American Industry Classification System – 3313). Source: U.S. Bureau of Labor Statistics.

⁶Defined as imports – exports + adjustments for Government and industry stock changes.