



ALUMINIUM: THE HISTORY

Aluminium is the third most abundant element in the earth's crust, making up about 8%. Aluminium-bearing compounds have been used by man from the earliest times. Pottery was made from clays rich in hydrated silicate of aluminium. Ancient Middle Eastern civilisations used aluminium salts for the preparation of dyes and medicines; they are used to this day in indigestion tablets and toothpaste.

A brief history

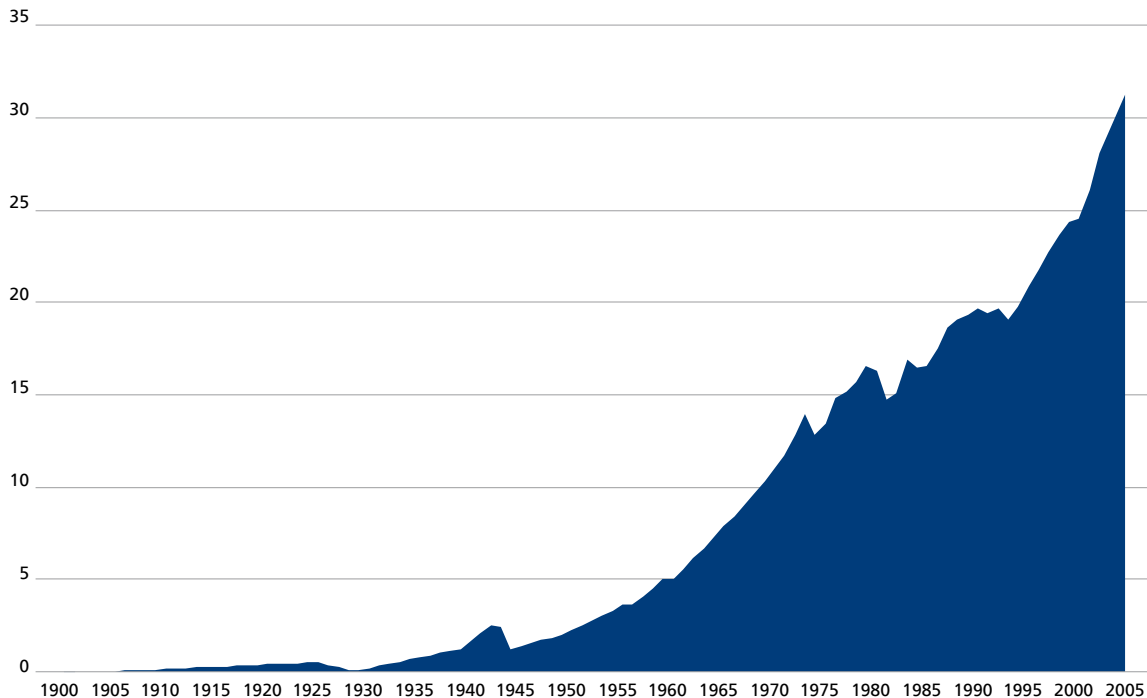
In 1807, the English chemist Sir Humphrey Davy established the existence of aluminium – although the name only came into common usage some time later. In 1825, the Danish physicist H.C. Oersted produced the first nodules of aluminium. In 1831, P. Berthier discovered bauxite in the village of Les Baux – hence the name. By 1854, the Frenchman Henri Sainte-Claire Deville had developed a process that allowed the production of this high-cost metal in limited quantities. Finally, in 1886, the smelting process that is still used today was discovered almost simultaneously by Charles Martin Hall in the US and Paul Louis Toussaint Héroult in France. In 1888, Karl Bayer further improved the process, which greatly reduced the cost of aluminium – by around 80% – making it a commercial commodity.



Unknown treasure

Initially, aluminium was considered to be an extremely valuable material, a precious metal, ranked alongside silver and gold. Napoleon III used the occasion of the 1855 World Fair in Paris to showcase this remarkable new metal, and later commissioned a variety of pieces in aluminium for his personal use. He impressed his guests with aluminium tableware and even had an aluminium rattle specially crafted for his baby son. All manner of luxury goods made of aluminium began to appear on the market – jewellery, opera glasses, sculptures, office and household accessories – all taking advantage of its diverse properties.

World Primary Aluminium Production (1900-2005)



A thoroughly modern metal

Although low-cost mass production of aluminium began at the end of the 19th century, it was only in the period between the two World Wars that aluminium truly came into its own, as the extent of its potential began to be more widely recognised. Increasingly employed by the transport and construction sectors, production boomed after World War II (see graph above).

All modes of transport were soon adopting the metal for a vast range of applications. Architects began incorporating it into their designs, realising that it possessed all the qualities to satisfy modern-day demands, as well as fulfilling the most stringent of aesthetic considerations. In domestic appliances and food packaging it was also making its mark, to this day remaining the irreplaceable material of choice for food preservation.

For further information, please contact us or go to our website:

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Thanks to its unique properties, aluminium is able to provide intelligent solutions for present and future generations. It is lightweight yet strong, durable and corrosion-resistant, formable, highly conductive, aesthetically pleasing and, above all, recyclable. The European Aluminium Association, founded in 1981, represents the European aluminium industry, from alumina and primary production, to manufacture of semi-finished and end-use products, right through to recycling. This industry currently employs around 255 000 people in Western Europe.