

Mytilineos “Bauxite to Aluminium” Production, an Example of Competitiveness Longevity

Spiros Kasdas

Vice-Chairman

Mytilineos SA, Athens, Greece

Corresponding author: spiros.kasdas@mytilineos.gr

Abstract

Greenfield aluminium smelters require a huge construction investment capital. Ensuring competitive energy and alumina costs, over a reasonable period of time, is also a prerequisite condition for such a smelter project, but even in this case the project payback period is long. During this time, the initial situation often changes dramatically. New market, environmental, geopolitical, social, or technological conditions, may affect the viability of the smelter and lead to an early closure. However, some old smelters are demonstrating that competitiveness longevity is possible.

Mytilineos’ integrated “bauxite to aluminium” production, is such an interesting case. It has preserved its competitiveness over more than 5 decades and is facing with optimism the current challenges of the European aluminium industry. This keynote is intended to explain the achievement of such competitiveness longevity, by describing how:

- Successive operational improvements, environmental solutions, product developments, production capacity creeping and technology updates, were made over the decades without any major structural replacement such as the replacement of the busbars in the potlines.
- The alumina production equipment and processes have been progressively updated.
- The overall competitiveness of the chain “bauxite to aluminium” has been enhanced through continuous improvement (C.I.) actions and successive cost cutting projects.
- The energy and CO₂ footprint issues are being addressed by Mytilineos.

Three people related factors have been crucial in this long journey:

- The engagement of the whole workforce in C.I. processes.
- The technological awareness of the management and its capability of developing tailored projects allowing to introduce production capacity creeping and technology updates, at a minimum investment cost.
- The buildup of the shareholders’ trust to the capacity of the organization and its commitment, to systematically deliver the operational and project objectives.

Keywords: Mytilineos, Aluminium of Greece, Bauxite to aluminium, Smelter life duration, Competitiveness of aluminium smelters.