









The background situation

The customer's process is made of mainly two different melting furnaces: a single chamber furnace and a front charging double chamber furnace. The furnaces melt scrap and ingots. The plant is mainly focused on producing wheels for the automotive market. The production process is over all constant.



The request from the customer

The customer is often faced with high temperature abrasion and corundum growth. The melters also suffer from mechanical abuse. The customer requested a solution that had the following characteristics:

- Lifetime expectation > 2 years without equipment outage time
- Warranty expectations linked to refractory lifetime
- Reliable refractory concrete with a good quality / price ratio
- No dry out issues



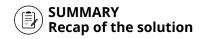




















Analysis of the customer request

- Continuous process >1,050°C and no daily furnace cleaning
- Melters with thin erosion layer (est. 150 mm)
- Oxidation issues with the atmosphere
- Quick corundum build leading to deformation
- High abrasion

Description of the solution developed by Calderys

In this particular case, Calderys offered a full turnkey solution:

- Review of the refractory construction
- Wrecking of the old lining
- Refractory relining after insulation with a key product: ALKON®SOL **CAST HT 2 C/P.** This product is suitable for all areas and known for resisting major impacts.
- Warranty fitted to customer expectations















Benefits brought by the solution

The full turnkey offer granted the following benefits:

- Almost no wear after 2 years in operation
- A doubled lifetime for all lintel sections (repairs are usually necessary after 1 year of operation)
- Material development fitted the customer needs and exceeded overall performance expectations
- Great resistance with ALKON®SOL CAST HT 2 C/P
- No need for external burners for dry out



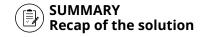














Product presentation

ALKON®SOL CAST HT can be described as the best of a monolithic and brick in just one product. It is particularly suited to:

- The harsh environments of secondary melting furnaces
- Furnace melting very corrosive alloys
- Furnaces regularly operating at high temperatures >1,200°C
- Timely sensitive maintenance projects

Services - Expertise

Alongside products dedicated to Aluminum producers, Calderys has developed a full set of services over the years. From material selection, design layout and drawing to full turnkey projects including installation, dry out, maintenance and technical support. Customers worldwide benefit from a global network of experts, with local expertise.







Thank you for your attention

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