

ALKEGEN APPLICATION STORY



Product Solution: Silplate®

Industry: Steel

Application: Steel Ladle / Silplate® Board

Location: Brazil

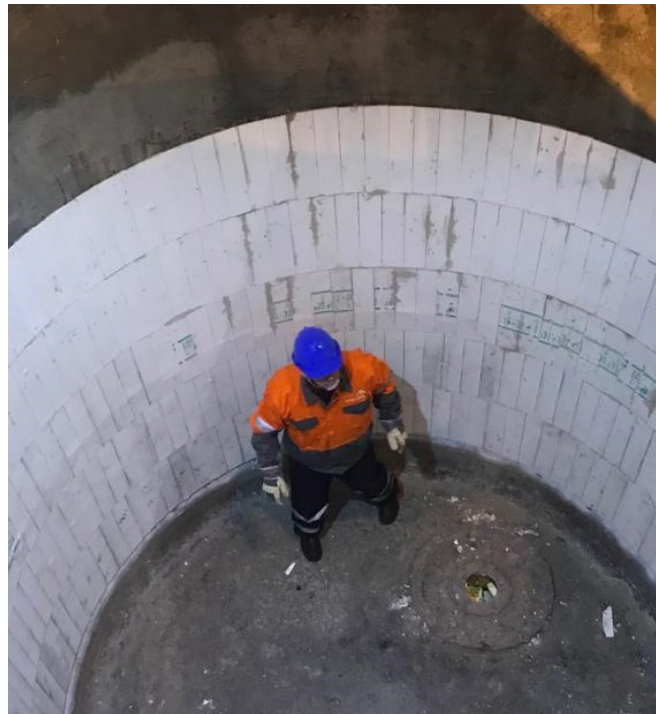
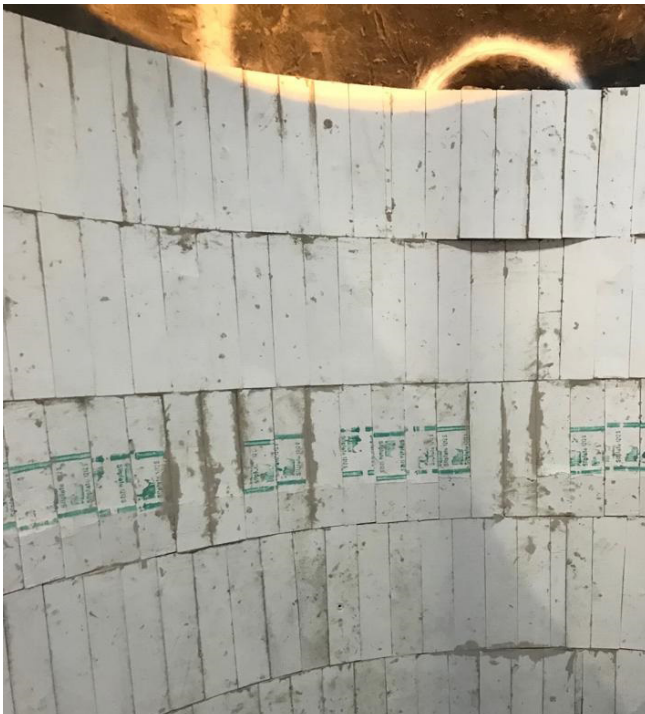
Silplate® Board

BUSINESS CHALLENGE

Due to the new operational conditions for the production of more noble steels and the use of high carbon content work lining, the temperature of the metallic shell exceeded those specified in the AISE Report 9. It requires the use of insulation lining in these equipment of molten metal transport.

SOLUTION

Alkegen developed a Silplate® Board family with characteristic of good insulation, with high refractoriness and mechanical resistance. Silplate® is a structural insulation board which resists high temperatures, with high compressive strength and low thermal conductivity. It also maintains its physical properties even under high temperature operations.



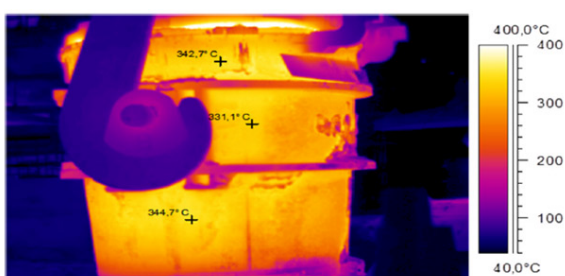
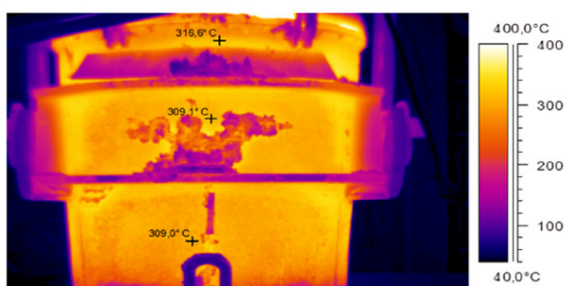
Silplate® Board

BENEFITS

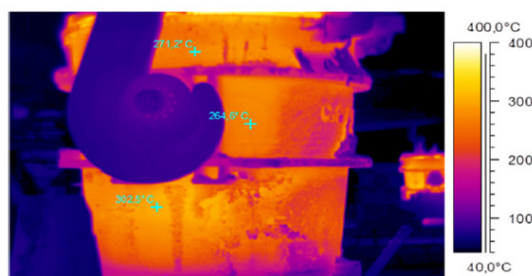
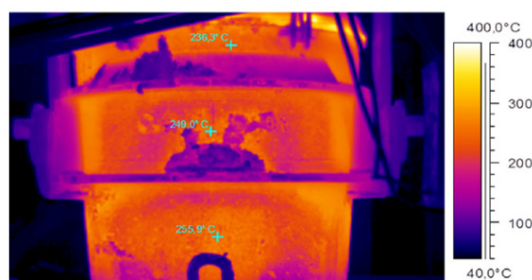
The use of Silplate® as a backup in the lining of steel ladles results in the following benefits:

- Lower temperature in the metal casing of the ladle, giving greater operational safety and ensuring energy savings.
- Possibility to reduce the thickness of the permanent lining and consequently increase the volume of liquid metal in the ladle and/or increase the free edge.
- Capacity to absorb the refractory expansion reducing the joint attacks of the working lining (increase of the operation life). The Silplate is capable of absorbing up to 15% of its volume without losing its physical-chemical characteristics.
- Due to the high degree of purity and free of Fe_2O_3 and CaO in its composition, the Silplate® product presents an excellent operational safety, avoiding leakage of the liquid metal.
- Silplate® is a low thermal load material.

Conventional Lining



Lining with Silplate



The following are registered trademarks of Alkegen: Silplate

The test data shown are average results of tests conducted under standard procedures and are subject to variation. Results should not be used for specification purposes. Product Information Sheets are periodically updated by Alkegen. Before relying on any data or other information in this Product Information Sheet, you should confirm that it is still current and has not been superseded. A Product Information Sheet that has been superseded may contain incorrect, obsolete and/or irrelevant data and other information.

Alkegen

Email: info@Alkegen.com

Telephone: 716-768-6500

Canada: 1-800-635-4464