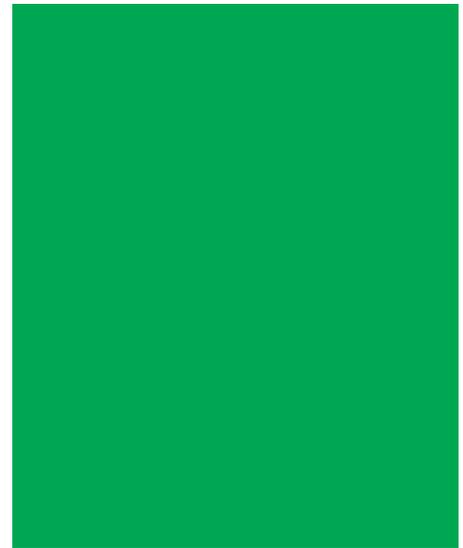


UNIFRAX APPLICATION STORY



Product Solutions: Anchor-Loc® Modules
Industry: Glass
Applications: Thermal insulation lining to Cover and Kiln Car
Location: Germany

NOVEMBER 2018

Business Challenge

Our client is a European based supplier of kilns and equipment for the ceramics and glass markets. With over 30 years of experience to date, they are dedicated to providing state of the art equipment that offers the end user handling ease, thermal efficiency, quality and improved output when using their equipment.

Unifrax were approached with the task of developing a series of thermally efficient lining solutions for three designs of cover, plus their associated kiln cars, used for the heat treatment and bending of glass.

Application

We carried out several steady state thermal profile calculations to determine the most suitable Anchor-Loc Module lining solution for each unit. The hot face temperature requirements varied with each unit, including 650 °C, 850 °C and 1100 °C. Our lining proposals were based on Insulfrax® and Isofrax® grade modules (for the 1100 °C unit). The module types were mainly RX2 (side fixing) with several Thread-Loc (centre fixing) types where required.

“We also received very positive feedback from the client regarding the practical training that Unifrax had provided.”



Explanation of the lining design at the corner location within the cover.

Solution

Upon receipt of the order for the first of the units, incorporating a 150mm thick module, 170 kg/m³ density with an edge-stack construction, we developed a series of drawings for both installation, stud layout and welding. The lining was for a cover and a kiln car. The cover incorporated a number of openings for heating elements and sight ports.

This was the first time that our client had used the Unifrax Anchor-Loc Module system. We were asked to provide on-site, practical training and installation guidance at their client's premises in the Czech Republic. Two Application Engineers provided comprehensive training in the installation concept and practical installation supervision of our Anchor-Loc Modules. It was essential that the client could install these modules unaided after we had left site. Hard copies of relevant installation guides were left with the client to back up the practical training.

The client's installation team understood the installation requirements and very quickly were installing modules themselves. The modules were installed efficiently, and in accordance with our design and recommendations.

Shortly after completion of the training we received several orders for similar units.

We also received very positive feedback from the client regarding the practical training that we had provided.

Customer Advantages

A summary of the advantages and benefits are outlined below.

- Anchor-Loc Modules providing ease of installation.
- Thermally efficient linings
- Tailored design to meet client requirements
- On-site practical training - well received.
- Opportunity to develop the business further.



Kiln Car perimeter

About Unifrax

Unifrax is a global leader in high-performance specialty products used by many industries in a diverse group of industrial applications. Our products provide substantial improvement in thermal performance, save thousands of dollars in energy costs and can help reduce your operations environmental footprint.

Contact Us

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