

## refractories NEWS



### CERAMIC FIBRE TECHNOLOGY EMPLOYED IN GAS REHEAT FURNACE

Insulcon, which recently merged with polyurethane innovation experts Uretech, specialize in heat management solutions that save energy and increase the control and reliability of its clients' processes. Insulcon products and engineered systems, that are now fully supported and distributed by Uretech, can be used in almost any thermal process, even when exceptionally-high temperatures are involved.

Such was the case recently where Uretech Operations Director Robert Martin, formerly managing director of Insulcon, says the company was awarded a contract which required the installation of FOAMFRAX II ceramic fibre foam into a gas reheat furnace. "The aim of the project was to install an insulating roof lining that would replace the traditional ceramic fibre blanket, lower installation costs and reduce down-time."

Martin notes that, until recently, anchored and bonded ceramic fibre module systems were considered state-of-the-art for refits and repairs in situations like these. However, FOAMFRAX II - a gunnable foam/fibre insulation - provides exceptional fuel and energy savings, speedy installation and overall cost savings. These benefits make the system an important innovation in high temperature technology for the maintenance of lightweight furnace and heater linings. "Insulcon began work in late November 2008, and the project took just six days to complete. FOAMFRAX II was installed at a rate of 2m<sup>3</sup> per hour, with minimum rebound and wastage, leading to a clean, safe

and environmentally friendly installation. The continuous use temperature supplied in this case was 1260oC, but temperature ratings of up to 1 600oC are available," he says.

Martin explains that FOAMFRAX II was used at this blue chip client's plant as it is a superior insulation product, which met the company's requirements. "It lasts longer because it does not need to be completely removed from the heater roof when regulatory inspections are done. The areas to be inspected can be opened and inspected and Foamfrax II can be seamlessly re-installed in those areas only," Martin says that the product offers fast installation times in areas that are extremely difficult to access. "What's more, the head room in the reheat furnace is incredibly small due to the pipe work that runs very close to the roof. The traditional installation method was to use a ceramic fibre blanket, but access was very difficult. This resulted in time-consuming installation which, of course, costs the company in down time."

Unlike traditional installation techniques that often require five or more installers; a three-person installation crew is all that is required with FOAMFRAX II technology. This ensures that the product can be installed rapidly, thus offering the client lower downtimes and greater plant availability. As the sole installer of FOAMFRAX II in South Africa, prospects for the product and Insulcon look good, given the benefits of insulating with a product of this calibre. In order for the company to fully understand the business and requirements of its clients, the Insulcon Group has experienced sales