

DAL ALUMINISED BURNER PLATES MORE THAN DOUBLE LIFE EXPECTANCY

A more than doubling of life expectancy for burner plates operating under metal dusting type conditions has been confirmed by the application of DAL aluminide diffusion coating.

Burner plates, used in the burner systems for steam reformer units, operate in high temperature reducing hydro-carbon atmospheres and unprotected can have an average life expectancy of 3-5 years resulting in a potential for significant replacement of burner plates at each major outage.

For over 10 years DAL has been applying a high temperature aluminide diffusion coating to more than 5,000 burner plates for Lanemark Combustion Engineering Ltd., a leader in the supply of technically advanced burners.

During this period, DAL and Lanemark have worked closely together to define the coating process for Lanemark burner plates to ensure uniform coverage, adequate coating thickness and coating consistency which enables high quality post processing welding by Lanemark coded welders resulting in a high quality durable burner head.

Over this period burner plate material selection has changed (Incoloy 800, Inconel 600, RA 330) and in all cases the DAL diffusion coating has proven to provide the same level of protection and increased serviceable life.

Burner plates that had undergone 10 years in operation were recently returned to Lanemark for analysis. Metallurgical analysis showed that after 10 years, the aluminised coating of the Incoloy 800 plates was still in good condition and only the top plate outer face presented an early warned indicator of a limit in remaining life through reduced weight percentage aluminium content.

The analysis vindicated Lanemark's confidence in the aluminide coating as a highly economical solution for their customers to extend the serviceable life of the burner plates as well as providing real data on which customers could plan their purchasing forecast of replacement stocks.

"Lanemark have been using the DAL aluminide coating on our burner plates since 1998 and are extremely satisfied with the effectiveness of the tried and tested DAL process of aluminide coating combined with the excellent customer service we have received from all areas of their business."

For more information, please contact us at enquiries@diffusion-alloys.com.

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