

# BELZONA EXTENDS THE LIFE OF LIME SLURRY ELBOWS

ID: 5915

Industry: Power  
Application: VPF-Valves, Pipes and Fittings  
Substrate: Fiber Reinforced Plastic (FRP)  
Products: \* Belzona 1311 (Ceramic R-Metal) ,  
\* Belzona 9811 ,  
\* Belzona 1811 (Ceramic Carbide) ,  
\* Belzona 1812 (Ceramic Carbide FP) ,

Customer Location: Power Plant, Illinois, USA  
Application Date: Spring 2015

## Problem

FRP elbows were starting to get holes as a result from abrasion from the slurry.



## Photograph Descriptions

- \* Surface preparation ,
- \* View of the inside and application of Belzona 9811 tiles ,
- \* Finished backing ,
- \* Belzona 1812 was sloped over and into the tile to not leave an edge for the lime slurry to get under ,

## Application Situation

FRP elbows.

## Application Method

The customer had the elbow's inner diameter made 1/2" bigger to allow for the thickness of the applied Belzona products. This was done to avoid the original diameter to become enclosed, which would create a smaller area of the inner diameter and create more vortex that would result in the elbows wearing faster. The surface preparation was carried out using a MBX bristle blaster. Then, a

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thin layer of Belzona 1311 was used to bond the Belzona 9811 tiles in place. Belzona 1812 was then used as a grout. The customer also asked we make a thick tiled area on the back of the elbow to see if it would result in lasting longer.

## Belzona Facts

The original FRP elbows were only lasting 4-6 months so the customer came to Belzona looking for an alternative solution to get more life out of the equipment. Elbows were picked up from the plant, repairs were done in our shop the next day and the elbows returned on the third day. The elbows have already surpassed the time of the previous non tiled elbows

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