

# BELZONA SAVES REFINERY \$50,000

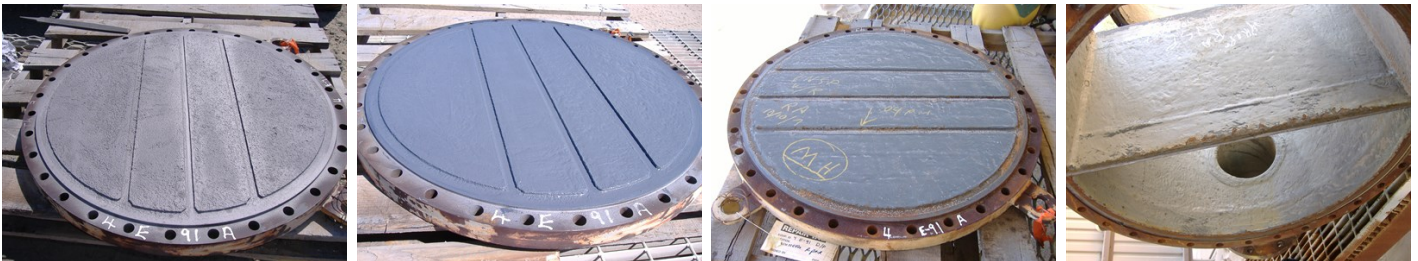
ID: 1013

Industry: Fluid Flow  
 Application: HEX-Heat Exchangers  
 Substrate: Carbon Steel  
 Products: \* Belzona® 1111 (Super Metal) ,  
 \* Belzona® 1321 (Ceramic S-Metal) ,

Customer Location: Refinery - Sweeny, Texas USA  
 Application Date: January 2003 and January 2008

## Problem

Galvanic corrosion and erosion resulting in loss of thickness and gasket sealing surfaces. This allows for working fluid to bypass portions of the multi-pass exchanger thereby greatly decreasing the efficiency of the heat exchanger.



## Photograph Descriptions

- \* Heat exchanger dollar plate prior to repair ,
- \* Heat exchanger dollar plate after repair and coating ,
- \* Heat exchanger after five years in service ,
- \* Heat exchanger channel head after five years in service ,

## Application Situation

Multiple heat exchanger components severely damaged by erosion/corrosion.

## Application Method

Belzona® 1111 and Belzona® 1321 were applied in accordance with Belzona Know-How System Leaflet HEX-2.

## Belzona Facts

Conventional repair involves weld build up followed by the machining of new gasket surfaces at a cost of \$2,500-\$5,000 per dollar plate. The Belzona solution costs less than half of the conventional repair. This results in cost savings of more than \$50,000 per unit turnaround.

For more examples of Belzona Know - How In Action, please visit <https://khia.belzona.com>

ISO 9001:2015  
 FS 695214  
 ISO 14001:2015  
 EMS 695213

Belzona products are  
 manufactured under an ISO  
 9000 Registered Quality  
 Management System.

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