# **Pump Casing Internal Repair**

ID: 9049

Industry: Chemical & Petrochemical Customer Location: Pasadena, TX, USA Application: **CEP-Centrifugal Pumps** Application Date: March 2023

Substrate: Carbon steel

**Products:** Belzona 1511 (Super HT-Metal), Belzona 1593, Belzona 9111 (Cleaner Degreaser)

#### Problem

Customer had small through wall pin holes in the internals of a pump. Customer was facing a six month time before a new manufactured pump internal could be made and put into service. The issue may have been caused by corrosion or cavitation.









Pump internals after it was abrasive blasted. Two small holes shown.

Pump internals were coated with Belzona 1593.

Close up on patched area with Back side view of completed coating over top.

project.

### **Application Situation**

Belzona Houston was able to be onsite to look at the casing on the same day as receiving the call. This allowed us to complete a repair plan and have the casing picked up the next day, and brought to our shop for repair. Within three days, that's including delivery time, we were able to patch the holes and seal the internals of the casing. This was a significant benefit for the customer who needed this asset back in service as soon as possible.

The casing was 11" diameter. Three small 1/8" size through wall holes. Max operating temp = 338 deg F Max pressure = 133 psi

## **Application Method**

- 1. We picked up the pump casing onsite of customer and brought it to our shop.
- 2. We complete surface preparation via vapor blasting, with emerald grit.
- 3. We patched the through wall defects by using Belzona 1511 and Belzona 9341 reinforcing mesh.
- 4. We applied a two coat system of Belzona 1593.

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

ISO 9001:2015 Belzona products are FS 695214 manufactured under an ISO ISO 14001:2015 9000 Registered Quality EMS 695213 Management System.

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## **Belzona Facts**

Quick turnaround to get this asset back in service saved customer down time, and significant amount of money.

An effective solution to get this asset back in service provided the customer time to order a new casing to replace in a timely cost efficient manner.

Relatively inexpensive cost compared to replacing.

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