

# Belzona Repairs and Protects Vacuum Pumps from Chemical Attack

ID: 9284

Industry: Oil & Gas

Customer Location: Rayong, Thailand

Application: CEP-Centrifugal Pumps

Application Date: March 2016

Substrate: Stainless-steel

Products: Belzona 4301 (Magma CR1 Hi-Build), Belzona 4311 (Magma CR1)

## Problem

The vacuum pumps in oil and gas industry were damaged by Chlorobenzene (CB) attack.



Disassembled pump components



After sand blasting



The impeller rebuilt with Belzona 4301



The suction and discharge disks after coating with Belzona 4311

## Application Situation

The client was seeking a cost-effective solution to restore the profiles of vacuum pump components and additionally protect them from further chemical attack.

## Application Method

1. The vacuum pumps were disassembled into its individual components in preparation for repair.
2. The surface preparation was done by sand blasting.
3. The pump components were rebuilt with Belzona 4301 and coated with Belzona 4311.
4. After the products were fully cured, the repairs were machined back to their original dimension before reassembling.

## Belzona Facts

Belzona 4301 and Belzona 4311 can extend the service life of the vacuum pumps by additional 6-12 months. This proves to be a more cost-effective solution compared to either purchasing new pumps or upgrading to higher alloy materials.

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

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