

BELZONA FILLS THE VACUUM

CUSTOMER

Spain

APPLICATION DATE

June 2013

APPLICATION SITUATION

A vacuum pump in a chemical plant carrying sulphuric acid at elevated temperatures.

PROBLEM

Due to chemical attack caused by the sulphuric acid at elevated temperatures, the pump had lost material on all components. As a result the tolerances no longer provided an effective vacuum and the pump was running at low efficiency.

PRODUCTS

Belzona 4341

SUBSTRATE

Stainless Steel

APPLICATION METHOD

After cleaning with a solvent degreaser to remove chemical residues, the surface was grit blasted to achieve a surface cleanliness in accordance with Swedish Standard SA 2.5 "Near White Metal". The entire internal surface, end covers, and impeller were coated with 2 layers of Belzona 4341. On the impeller tips, the coating was rebuilt to an excess of 5mm, then machined back to the required tolerances. The application was carried out in accordance with a modified version of Belzona Know-How System Leaflet CEP-03 & CEP-07.

BELZONA FACTS

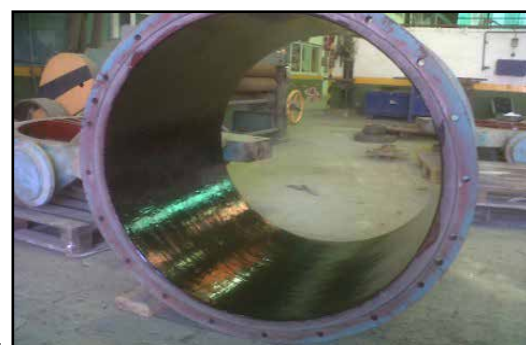
Belzona 4341 was chosen for its excellent resistance to inorganic acids at elevated temperatures. The 100% solids nature of the product meant that a precise thickness could be applied, easily allowing for the tolerances to be restored to the pump. The efficiency of the pump was fully regained, resulting in significant operating cost savings.

PICTURES

1. Internal casing after preparation
2. Internal casing after coating
3. End covers coated
4. Impeller coated



1.



2.



3.



4.

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



ISO 9001:2008
Q 09335
ISO 14001:2004
EMS 509612

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