

Feed Rotor for CHP plant protected

ID: 9633

Industry: Power
Application: PDP-Positive Displacement Pumps

Customer Location: Newark UK
Application Date: October 2024

Substrate: Stainless-steel
Products: Belzona 1341 (Supermetalglide)

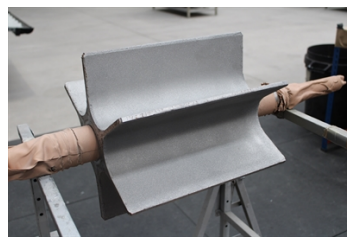
Problem

A stainless Fuel feeding rotor had suffered wear and damage, creating issues with leaks, back pressure and unwanted vacuums in the feeder process to the boiler in an industrial CHP (Combined Heat and Power plant)

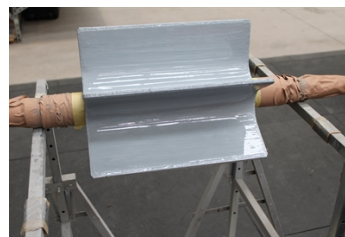
The client required the dimensions of the stainless rotor to be brought back to the originals, then coated to help prevent and slow down future wear



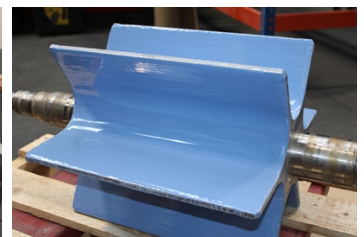
The rotor whilst still in it's original housing



Blasted with aluminium oxide to achieve SA2.5 and min 75 micron profile



First coat Belzona 1341 completed



Final coat of Belzona 1341 complete

Application Situation

The worn rotor had a restricted flow of fuel to the boiler, the boiler could not achieve the peak efficiency and was running "colder" than service design, therefore Belzona was approached to offer a solution and return the Rotor to full design specs and operate to maximum efficiency

This stainless Rotor runs at around 30RPM

It operates around 35 degrees centigrade

Application Method

Grit blasted with Aluminium oxide to min 75 micron profile and SA2.5

1st coat Belzona 1341 applied at 250µm

2nd coat Belzona 1341 applied at 250µm

Rotor collected by client and returned to service

Belzona Facts

The rotor was a specific piece of equipment and very difficult to source, having a lead time of 3 months minimum. The wear was allowing the back pressure to restrict the flow of the fuel which is Meat and Bonemeal (MBM).

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

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