

# BELZONA COMBATS A MAJOR VACUUM PUMP WEAR PROBLEM

ID: 2156

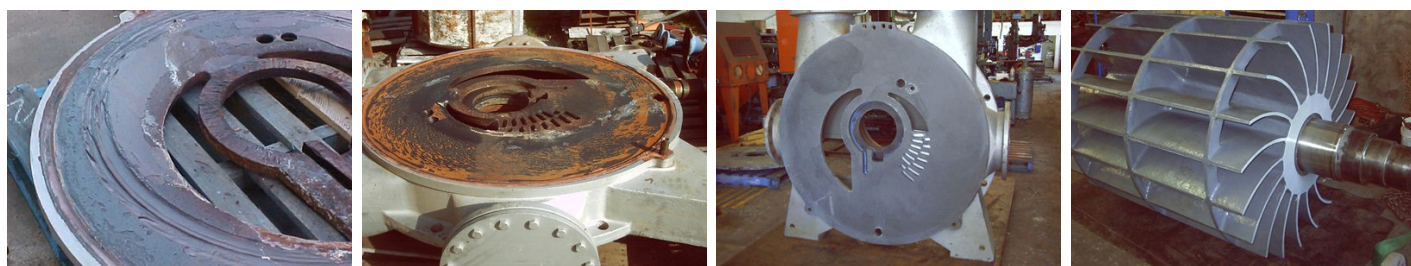
Industry: *Pulp & Paper*  
Application: *FBC-Fans, Blowers and Compressors*

Customer Location: *Paper mill, Australia*  
Application Date: *2002*

Substrate: *Stainless steel*  
Products: *\* Belzona® 1111 (Super Metal) ,*  
*\* Belzona® 1311 (ceramic R Metal) ,*  
*\* Belzona® 1321 (Ceramic S Metal) ,*

## Problem

*A pump was removed from service and inspected. On dismantling the pump, it was found that excessive "carry over" from the process had caused major erosion and corrosion damage to the pump components and the critical tolerances had been lost.*



## Photograph Descriptions

- \* Worn port plate ,
- \* Worn head ,
- \* Port plate completed ,
- \* Rotor completed ,

## Application Situation

10 liquid ring vacuum pumps in service for 12 months experienced wear problems and have suffered significant losses in performance.

## Application Method

Application was carried out in accordance with Belzona Know-How System Leaflets FBC-2, 5 & 10.

## Belzona Facts

The first pump was repaired and protected with Belzona in late 2002 and placed back into service. In December 2003, an internal inspection of the pump proved the Belzona material was completely intact and was providing complete protection of the pump. It

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FS 695214  
ISO 14001:2015  
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manufactured under an ISO  
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should be noted that no change in the process had occurred and an unprotected pump was almost destroyed in less than 12 months. The “Belzona treated” pumps remained in service for approximately 6 years before requiring another overhaul and no pumps have required replacement. In this case, Belzona is providing a pump service life 6 times longer than a new pump.

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