

BELZONA RESTORES CRITICAL TOLERANCES IN LIQUID RING VACUUM PUMP

ID: 2154



PROBLEM

The pump is subjected to corrosion and “carry over” of the paper pulp. The tolerance between the outside diameter of the cone and the internal taper of the rotor was no longer correct, due to the wear on the cone flange, clearly visible near the bolt holes.

APPLICATION SITUATION

Stainless steel cone from a 14,000 CFM vacuum pump. The tolerance between the outside diameter of the cone and the taper of the rotor is critical and must be maintained to allow the pump to operate efficiently.

APPLICATION METHOD

Application was carried out in accordance with Belzona Know-How System Leaflet FBC-10. The stainless steel cone in this pump was rebuilt with Belzona® 1111 and machined to correct dimensions and taper angle.

BELZONA FACTS

The pump cone was inspected after 4 years in service. Despite the aggressive conditions, the Belzona® 1111 is showing virtually no wear. The stainless steel rotor is showing significant wear whereas the Belzona® 1111 applied to the adjacent part (the cone) is not.

INDUSTRY

Pulp & Paper

LOCATION

Paper mill, Australia

APPLICATION DATE

December 2005

PRODUCTS

Belzona 1111 (Super Metal)

SUBSTRATE

Stainless steel

PHOTOS

1. A dismantled vacuum pump from Paper Mill
2. Cone from 14,000 CFM vacuum pump undercut prior to the application
3. The stainless steel cone repaired with Belzona 1111 after 4 years in service
4. The stainless steel rotor is showing significant wear, whereas the Belzona 1111 applied to the adjacent cone is not

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