

## RESTORATION OF BRONZE IMPELLER WITH BELZONA

### CUSTOMER

AEP/PSO - Oolagah, OK

### APPLICATION DATE

June, 2005

### APPLICATION SITUATION

Cooling water pump impeller.

### PROBLEM

This pump impeller, 1 of 4, normally running 24/7 had eroded to the point of replacement.

### PRODUCTS

Belzona® 1311 (Ceramic-R Metal)

Belzona® 1321 (Ceramic-S Metal)

### SUBSTRATE

Bronze

### APPLICATION METHOD

Application was carried out in accordance with Belzona Know-How System Leaflet CEP-1, CEP-3 and CEP-5. Stainless Steel mesh used to reform vanes. After rebuilding, grinding to original profiles and coating, impeller was re-balanced.

### BELZONA FACTS

Downtime was critical in this application and although replacement could be flown in within 6 days, further machining would be required. Belzona application was completed within 3 days.

### PICTURES

1. First inspection showing extent of erosion damage
2. Mesh in place and rebuild proceeding
3. Grinding to contour
4. Rebuilt and ready for service



1.



2.



3.



4.

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



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