

## BELZONA PROTECTION FOR NUCLEAR POWER STATION CW VALVES

### CUSTOMER

Nuclear Power Station, UK

### APPLICATION DATE

December 2013

### APPLICATION SITUATION

Butterfly valves controlling main cooling water inlets.

### PROBLEM

The non-pressure side of the valve had severely eroded due to corrosion and cavitation. The valve body and particularly the disc were affected.

### PRODUCTS

Belzona 1311 (Ceramic R-Metal)

Belzona 1321 (Ceramic S-Metal)

Belzona 2141 (ACR-Fluid Elastomer)

### SUBSTRATE

Steel

### APPLICATION METHOD

Application was carried out in accordance with Belzona Know-How System Leaflets VPF-1 & VPF-2. A hot chemical wash was used to remove salt contamination before completing the surface preparation and coating. The valve disc was coated with 3 coats of Belzona 2141 to provide maximum cavitation resistance. The valve body was protected from erosion-corrosion using Belzona 1321. In both cases the original profiles were restored by rebuilding with Belzona 1311.

### BELZONA FACTS

The Belzona coatings have a proven track record in this environment. Application of the system at the Belzona Authorised Coating Centre ensured the project was completed efficiently and to the highest quality standards providing long term performance in service for the valve.

### PICTURES

1. MCW Butterfly Valve prior to dismantling
2. Valve body suffering erosion-corrosion
3. Non-pressure side prior to rebuild and coating
4. Non-pressure side rebuild and coated using Belzona 2141



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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