

REFURBISHMENT OF VERTICAL PUMP SUCTION BELLS USING BELZONA FOR PROTECTION AGAINST SALTWATER EXPOSURE

ID: 10011



PROBLEM

The supports and flow straighteners on the suction bell were heavily corroded and eroded due to prolonged exposure in seawater service.

APPLICATION SITUATION

The suction bell was fully corroded and eroded especially at the support areas.

1. The worn-out metal at the support/flow straightener areas were rebuilt with Belzona 1111 (Super Metal) and reinforcement sheet.
2. The rebuilt sections and the remaining surfaces were overcoated with Belzona 5821 to enhance durability under immersed operating conditions.

APPLICATION METHOD

Belzona 1111 (Super Metal) was applied to rebuild all pitted areas. For heavily worn areas at the supports/flow straighteners, additional reinforcement sheet was installed to strengthen the repair. The suction bell was subsequently top coated with Belzona 5821 for long term immersion protection in seawater service.

BELZONA FACTS

Although the suction bell was beyond repair using conventional methods, the implemented Belzona solution successfully prevented costly replacement.

INDUSTRY

Oil & Gas

LOCATION

Saudi Arabia

APPLICATION DATE

April 2024

PRODUCTS

Belzona 1111 (Super Metal)
Belzona 5821

SUBSTRATE

Cast Iron

PHOTOS

1. The suction bells exhibit severe corrosion and erosion as a result of prolonged exposure to saltwater.
2. Suction bells deteriorated by severe saltwater corrosion and erosion
3. Suction bells repaired with Belzona 1111 (Super Metal) and overcoated with Belzona 5821
4. Belzona 5821 overcoat applied to protect equipment operating in immersed conditions

For more examples of Belzona Know-How in Action, please visit khia.belzona.com

Belzona products are manufactured under an ISO 9001 Registered Quality Management System.

www.belzona.com

