

Hydraulic Efficiency coating is the Belzona solution for Cooling Water Pump

ID: 10221

Industry: Oil & Gas
Application: CEP-Centrifugal Pumps
Substrate: Cast Iron
Products: Belzona 1321 (Ceramic S-Metal)

Customer Location: Pembrokeshire
Application Date: March 2026

Problem

Although the operating environment is generally clean, there is evidence that sediment can pass through the pump, resulting in cavitation damage in isolated areas. As the pump is exposed to an erosive/corrosive environment, a solution is required to repair the affected areas, but also to offer long term protection, whilst improving efficiency.



Salt water environment had caused cavitation damage in isolated areas



The pump is grit blasted to minimum surface profile and subject to salt test.



After satisfactory testing, the first coating of Belzona 1321 (Ceramic S-Metal) is applied



Completed application of Belzona 1321 (Ceramic S-Metal), offers long-term protection and efficiency enhancement

Application Situation

We were approached to offer a solution for the internal of a cooling water pump that was subject to cavitation damage due to the erosive/corrosive environment. The Distributor offered a solution that offered long-term protection and also increases efficiency, with long-term saving implications. The customer was happy with our proposal, and the pump was sent to our dedicated application facility

Application Method

The pump as grit blasted to minimum surface profile, and the substrate was salt tested. As there were high levels of salt on the substrate, it required a salt bath and retesting until salt levels were low. A two-coat system of Belzona 1321 (Ceramic S-Metal) was then hand applied to the internal lining of the pump.

Belzona Facts

The customer was happy with the solution of long-term protection and increasing efficiency, which offered long-term savings with minimal maintenance required.

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ISO 9001:2015
FS 695214
ISO 14001:2015
EMS 695213

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