

BELZONA SOLUTIONS FOR REBUILDING & COATING LUBE COOLER/END COVER

ID: 9891

Industry: Oil & Gas
Application: HEX-Heat Exchangers
Substrate: Bronze
Products: Belzona 1311 (Ceramic R-Metal), Belzona 1391 (Ceramic HT), Belzona 9111 (Cleaner Degreaser)

Customer Location: Abu Dhabi, United Arab Emirates
Application Date: March 2022

Problem

One of our offshore clients reported a case of corrosion affecting their heat exchanger (HEX) equipment. The root cause was identified as prolonged exposure to the highly humid and saline atmosphere typical of offshore environments. Such conditions significantly accelerate material degradation, leading to concerns regarding the structural integrity, safety, and long-term operational reliability of the equipment.



Degraded heat exchanger due to corrosion.



Surface preparation was done through grit blasting to SA 2.5 standard.



After cleaning the surface with Belzona 9111 (Cleaner Degreaser), Belzona 1311 (Ceramic R-Metal) was used to rebuild the damaged areas.



The equipment was subsequently coated with two layers of Belzona 1391 (Ceramic HT) to ensure long-term protection.

Application Situation

The corrosion issue has already led to operational delays, reduced efficiency, and higher maintenance costs. Prompt intervention is therefore essential to restore and enhance the durability of the equipment, minimize unplanned downtime, and ensure consistent and reliable operational performance.

Application Method

The application was carried out in accordance with Belzona Know-How System Leaflets HEX-1 and HEX-3, ensuring compliance with industry best practices for corrosion protection and extended equipment life. Surface preparation was done through grit blasting to SA 2.5 standard, followed by cleaning using Belzona 9111 (Cleaner Degreaser). Damaged areas were rebuilt with Belzona 1311 (Ceramic R-Metal), and the equipment was then coated with two layers of Belzona 1391 (Ceramic HT) for long-term protection.

Belzona Facts

The client expressed a high level of satisfaction with the performance and quality of the Belzona coatings. Consequently, they have entrusted all end covers and tube sheet bundles exclusively to Belzona applications, further reinforcing their confidence in both the product and our technical expertise.

During the inspection carried out in August 2024, the Belzona coating was observed to be in excellent condition, with no evidence

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

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

Belzona products are
manufactured under an ISO
9000 Registered Quality
Management System.

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Repair • Protect • Improve

of discoloration, degradation, or loss of protection

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