

Heat Exchanger Division Bar

ID: 9680

Industry: Power
Application: HEX-Heat Exchangers
Substrate: Carbon steel
Products: Belzona 1311 (Ceramic R-Metal), Belzona 1321 (Ceramic S-Metal)

Customer Location: Effingham, Illinois
Application Date: August 1994

Problem

This customer was experiencing severe erosion on their end covers and especially the division bars.



The attached image showcases a severely eroded division bar on a heat exchanger end cover. This type of damage compromises the component's performance and efficiency, highlighting the critical need for effective and durable repair solutions.

Bar stock serves as a precise former, while Belzona 1311 (Ceramic R-Metal) is expertly applied to restore and rebuild the damaged area to its original strength and integrity.

As shown in the attached image, the unit was restored and protected with two coats of Belzona 1321 (Ceramic S-Metal). This durable coating provides exceptional resistance to erosion and corrosion, ensuring the component's long-term performance.

Application Situation

This customer was looking for a quick turnaround. The repair was done in a day and put back in service on the second day.

Application Method

Substrate was blast cleaned to a SSPC-SP 10/NACE No. 2-2024, Near-White Metal Blast Cleaning. Belzona 1311 (Ceramic R-Metal) was generously applied to the damaged division bar. A key stock with Belzona 9411 (Release Agent) was then clamped in place. Excess Belzona 1311 oozed out and was removed. After the 1311 cured, two coats of Belzona 1321 (Ceramic S-Metal) was applied. Indirect heat was applied for a quicker cure.

Belzona Facts

This customer opted for a Belzona repair in lieu of replacement due to turnaround time and inability to secure a replacement end cover.

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

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