

Belzona 1321 Provides New Life to Heat Exchanger Tube Sheet

ID: 9892

Industry: Buildings & Structures
Application: HEX-Heat Exchangers
Substrate: Carbon steel
Products: Belzona 1111 (Super Metal), Belzona 1321 (Ceramic S-Metal)

Customer Location: Birmingham, AL
Application Date: March 2025

Problem

This 20 year old tube sheet was facing significant wear and corrosion following many years in service. Our customer was looking to restore the existing tube sheet to protect it and keep it running in the future.



Before / Unrestored



In Repair Process: Following Sandblasting, corks are placed and Belzona 1111 is used to rebuild low areas.



After (2) coats of Belzona 1321, the corks are then drilled out and the tubes are touched up.



Final product, Belzona 1321 applied and good to go.

Application Situation

Our customer had a tube sheet done 15+ years ago and currently, when they pull the cap off to clean annually, it looks just as good as it did the day it applied. They had this heat exchanger that was giving them issues and they wanted to provide the same solution to get many more years out of it.

Application Method

We sponge blasted the steel sheet and end cap to achieve the required white metal profile. We proceeded to place corks in the tubes. Belzona 1111 was applied to the low areas on the sheet to recreate the surface needed for coatings. Two coats of Belzona 1321 were applied to the tube sheet and end cap. Air was used to blow out the corks on the other side.

Belzona Facts

Belzona offered a longer life cycle and a chance to restore the existing heat exchanger. It was also a quick repair, the exchanger was down for a day in a half.

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

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