

BRINE HEAT EXCHANGER WATER BOX REFURBISHMENT

ID: 9734



PROBLEM

The water box had suffered pitting corrosion and needed resurfacing. In addition, the client required a lining to prevent further attack to the tube face, water box and cover.

APPLICATION SITUATION

Brine Heat Exchanger operating up to 130°C.

APPLICATION METHOD

After removing the existing coating, soluble salts were removed from all surfaces prior to starting the Belzona application. Surfaces were then rebuilt using Belzona 1511, before applying the high temperature coating Belzona 1593.

The refurbishment also included the water box cover and the tube face on this heat exchanger.

Applications were carried out in accordance with Belzona Know-How System Leaflet HEX-1, HEX-2 and HEX-3.

BELZONA FACTS

Belzona 1511 is a high temperature resistant paste grade and was used to rebuild metal loss and resurface the pitted areas.

All parts of the heat exchanger were then protected with a simple brush application of Belzona 1593 which is capable of withstanding immersion conditions of 160°C.

The client was delighted with the refurbishment, which had been completed for a fraction of the cost of a replacement.

INDUSTRY

Chemical & Petrochemical

LOCATION

Teesside

APPLICATION DATE

September 2024

PRODUCTS

Belzona 1511 (Super HT-Metal)

Belzona 1593

Belzona 9111 (Cleaner Degreaser)

SUBSTRATE

Carbon steel

PHOTOS

1. Pitting damage of Water Box after grit blasting.
2. Belzona 1593 application first coat.
3. Belzona 1593 application completed.

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

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under an ISO 9001 Registered
Quality Management System.

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