

Belzona Coatings Restore Seven Chillers at Global HQ of Oil and Gas Company

ID: 10099

Industry: Commercial Facilities
Application: HEX-Heat Exchangers
Substrate: Carbon steel
Products: Belzona 1121 (Super XL-Metal), Belzona 1331

Customer Location: Houston, TX
Application Date: November 2025

Problem

The building this work was done at is the global HQ for a large company in Houston. The central plant chillers are used to help provide AC for the multiple buildings across the campus. The assets are costly and critical for the business, especially with the weather in Houston. For a customer with seven corroding chillers, full replacement means high costs and disruptions; Belzona's epoxy coatings rebuild damage, add a tough barrier against further corrosion, extend lifespan, cut maintenance, and maintain operations with little interruption.



Condition of the asset before Belzona was applied.



After the abrasive blasting was completed, SSPC-SP10.



After Belzona 1121 was used to pit fill the tube sheet.



After the final coating of Belzona 1331 was applied.

Application Situation

The Belzona coating saves money and time by decreasing the chance of downtime, cutting maintenance costs and increases the life of the asset. A chiller of this size are over a million dollars to replace, takes coordination from multiple parties, and are usually installed in the cooler months of TX which is a small window. Also, the lead time for a new chiller is over a year from planning to install in service.

Application Method

1. The asset was opened, drained and dried using fans.
2. A containment was built by screwing together a wood frame and taping sheets of poly around it, to make an air tight enclosure.
3. Corks were used to plug the tubes.
4. Abrasive blasting was completed to achieve a minimum 3mil profile, SSPC-SP10.
5. Belzona 1121 was used to pit fill as needed.
6. Belzona 1331 was applied in a two coat system over the entire application area.

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

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FS 695214
ISO 14001:2015
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Belzona products are
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9000 Registered Quality
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The application was performed on 7 chillers, including both ends of each chiller, the tube sheets, water box, and end covers. The work was done one chiller at a time. We used a dehumidifier and heater to help control conditions inside the containment and for the cure process.

Belzona Facts

Communication, onsite service, Belzona case histories, in house trained applicators with ability to turn key the job, and the total cost being put in the budget the year before, were the reason the customer chose Belzona over alternatives.

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