



## Refinery Heat Exchanger Corrosion & Oxidation Minimized with Devcon® Brushable Ceramic Blue Coating

### Problem

A large crude oil refinery uses a direct heat exchanger to regulate the temperature of its cooling waters used throughout the refinery process. The interaction of the heat exchanger with the water and refinery processes, resulted in its exposure to a variety of chemicals.

As a result, the heat exchanger showed premature corrosion and oxidation throughout the system even though it was coated with a competitor coating.

### Solution

Given the competitive protective material did not provide the required protection, the refinery selected [Devcon® Brushable Ceramic Blue Coating](#).

The Heat Exchanger was sandblasted to remove the failed protective coating and all oxidation & corrosion to expose the surface to a white metal state. Devcon Brushable Ceramic Blue Coating was applied to the internal and external sections of the system.

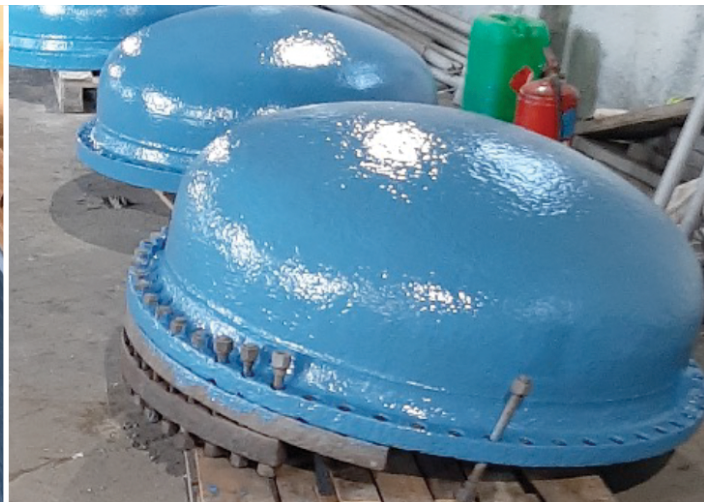
The unit was quickly returned to service and is still withstanding the corrosive nature of the process, thereby meeting customer expectations.



Original Oxidized Heat Exchanger



Coated pieces





## Project Outcome

The Refinery Heat Exchange System was repaired and returned to service with Devcon Brushable Ceramic Blue Coating:

### Highly Durable Coating

- Devcon Brushable Ceramic Blue Coating withstands the corrosive nature of oil refining processes providing a durable solution.
- Utilizing Devcon Brushable Ceramic Blue coating protects the equipment from additional oxidation & corrosion which allows the equipment to stay in service for longer periods of time.

### Easy & Safe to Apply

- Devcon Brushable Ceramic Blue Coating is easy to apply and brushed onto equipment without special equipment such as sprayers.
- Application of Devcon Brushable Ceramic Blue Coating requires only gloves & safety glasses, no additional PPE needed.
- Devcon Brushable Ceramic Blue Coating is 100% solids making it a safe coating with minimal HSE concerns.



Area where the work was performed

**Devcon Brushable Ceramic Blue Coating** provides long-lasting corrosion protection in harsh environments withstanding numerous years of continual use. Protect your equipment, extend the life, and minimize future hazardous maintenance cycles with Devcon coatings.



Original tube surface



Prepped tube surface



Finished internal tube surface