

# BELZONA 1523/1593 HELP COMBAT CORROSION WITHIN AN AMMONIA ACID GAS KOD

ID: 5566

Industry: Oil & Gas  
Application: TCC-Tanks and Chemical Containment Areas  
Substrate: Carbon Steel  
Products: \* Belzona 1523 ,  
\* Belzona 1593 ,  
\* Belzona 9111 (Cleaner Degreaser) ,

Customer Location: USA  
Application Date: January 2014

## Problem

Knock-out drums are susceptible to corrosion due to the aggressive chemicals and high operating temperatures.



## Photograph Descriptions

- \* The surface was prepared by blasting to SSPC SP-10 Near White Metal ,
- \* Stripe coating of welds and sharp angles with Belzona 1593 ,
- \* Application of the 2nd coat of Belzona 1523 in light grey ,
- \* Complete application ,

## Application Situation

Ammonia acid gas knock-out drum (KOD) operating at 250°F and suffering from corrosion due to exposure to a mixture of hydrocarbons consisting of C1-C5, nitrogen, ammonia, water, and wet carbon dioxide.

## Application Method

The application was carried out in accordance with Belzona Know-How System Leaflet TCC-5. After grit blasting to SSPC-SP 10, the surface was Bresle tested for salt soluble contaminants, cleaned, and degreased with Belzona 9111. Due to high levels of relative humidity, a dehumidifier unit was utilized to prevent flash rusting of the prepared surface, thus avoiding any risk of corrosion prior to coating. Following this, Belzona 1593 hand applied lining was used for stripe coating and nozzle lining. The crew continued with the application of Belzona 1523 using a plural component Graco airless spray system. The coating was applied as a two-coat system

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FS 695214  
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with contrasting colors. The application was reported to be a success and the material was found to "spray beautifully". Coating was allowed to cure for inspection. High voltage test was conducted and spotted pinholes were repaired accordingly using Belzona 1593.

## Belzona Facts

With simplified application techniques, the client was able to avoid expensive equipment replacement costs as well as the high expenses that can be incurred when employing contractors for large periods of time.

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