# BELZONA STRENGTHENS NOZZLES OF HIGH-PRESSURE FLARE SCRUBBER ON OFFSHORE PLATFORM

#### **CUSTOMER**

China

### **APPLICATION DATE**

2017

#### APPLICATION SITUATION

Nozzles of high-pressure flare scrubbers on offshore platform suffering from corrosion and significant thickness loss. The design pressure is 1.035MPa, the design temperature is -48  $^{\circ}C$  ~ 100  $^{\circ}C.$ 

#### **PROBLEM**

Due to the damage of the original insulation layer, the nozzle of the high-pressure flare scrubber was corroded under the insulation layer (CUI). The thickness of the nozzle was seriously reduced.

#### **PRODUCTS**

Belzona 1511 (Super HT- Metal) Belzona 1983 (Belzona SuperWrap II Resin) Belzona 9381 Belzona 9382 Belzona 9111.

## **SUBSTRATE**

Carbon Steel

## APPLICATION METHOD

The repairs were designed in accordance with ISO24817 standard. The application was completed by Belzona trained and validated installers in accordance with Belzona Know-How System Leaflet VPF-11. Belzona supervisor and the on-site representative supervised the whole process. The whole application included 2 one and half-inch nozzles, 10 two-inch nozzles, 4 three-inch nozzles and 1 four-inch nozzle.

#### **BELZONA FACTS**

For conventional welding, the whole high-pressure flare scrubber need to be shut down and isolated, with thorough cleaning and water injection, which costs at least 15 days of downtime and affects the production. Welding in confined space may also cause hazards. Therefore, the customer has been looking for the solutions with no hot work required but also accepted by classification society. Meeting the standard of ISO24817and ASME PCC-2, Belzona SuperWrap II can repair the nozzles of pressure vessels on-site, with no downtime or hot work required. The application is still in good condition after 3 years.

# **PICTURES**

- 1. Nozzles with serious corrosion problems
- 2. Surface preparation with water blasting
- 3. Complete application of Belzona SuperWrap II





2.



3.

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