

## FLEXIBILITY MEETS DURABILITY WITH BELZONA

### CUSTOMER

Spain

### APPLICATION DATE

December 2018

### APPLICATION SITUATION

Condenser and vapor turbine seals in a chemical plant producing synthetic rubber compounds.

### PROBLEM

The bolted joint connections (3 joints in total) between the condenser and vapor turbine were experiencing vacuum loss around the bolts and joints. This occurred due to design change and alterations of the joints, resulting in efficiency loss and high cost. The client required flexible, yet tough system to encapsulate the joints and fully seal against the vacuum loss experienced on site, whilst providing excellent corrosion protection at the same time.

### PRODUCTS

Belzona 2911 (QD Conditioner)

Belzona 2121 (D & A Hi-Coat Elastomer)

Belzona 1212

Belzona 9341 (Reinforcement Sheet)

### SUBSTRATE

Steel

### APPLICATION METHOD

The application was carried out using a modified version of Belzona Know-How System Leaflet GSS-1. As it was not possible to disassemble, the Belzona materials were used to cover the seal area from the outside. The repair area was grit blasted and once the leaking points around the bolts have been identified, Belzona 1212 was used to seal. The repair area was then treated with Belzona 2911, followed by Belzona 2121, reinforced with Belzona 9341 Reinforcement Sheet to fully encapsulate the bolts and joints.

### BELZONA FACTS

Each joint was around 4 by 2 meters, and consisted of 368 bolts in total. The application required nearly 400 units of Belzona 2121 to seal and fully encapsulate 3 of the bolted joint connections. Belzona was chosen as it met the requirements for toughness and flexibility needed in this application.

### PICTURES

1. Joints before repair, leaking in some areas
2. Work area isolated for safe working
3. First layer of Belzona 2121 applied to seal joints
4. Completed application



1.



2.



3.



4.

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



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