BELZONA SPHERE LINING ROLLED OUT
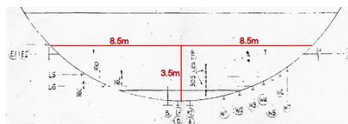
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Industry: *Oil & Gas*
Application: *VPF-Valves, Pipes and Fittings*
Substrate: *Carbon steel*
Products: ** Belzona 1111 (Super Metal) ,*
* Belzona 4311 (Magma CR1) ,

Customer Location: *Oil & Gas Production, UK*
Application Date: *2010 - 2018*

Problem

Belzona was first approached in 2009 for a lining that would be resistant to the unstabilised crude oil and sulphur reducing bacteria. The affected area was in the tank belly, up to a height of 3.5m. These areas included many manways and narrow nozzles, which also needed protection. With limited application time, a lining was needed that could also be sprayed over the 290m2 for each vessel.

Photograph Descriptions

* Storage spheres from the air. ,
* Plan of coating height. ,
* Lowest section filled with Belzona 1111. ,
* Lowest section completed with Belzona 4311. ,

Application Situation

Internal corrosion in belly of these 24m diameter spheres was becoming a serious concern and was being accelerated by microbial attack.

Application Method

Prequalification trials proved the Belzona 4311 could be sprayed using plural feed equipment and the first sphere was coated in 2010, in accordance with a modified version of Belzona Know-How System Leaflet TCC-5. Small bore nozzle inserts were installed using a modified version of Belzona Know-How System Leaflet TCC-16a.

Belzona Facts

The application was a complete success, and in the following years the solution was rolled out to the other spheres on the site. The final sphere was coated with the new generation Belzona 4311 in 2018, which made the application much easier. In addition,

repairs to flanges for 6 of the nozzles were also needed. Flange face forming repairs were completed using method VPF-17. The client was impressed with the speed and simplicity and they are now looking to repeat the repair on further nozzles across the site.