

Reinforcement for Y Pipe

A client at a petrochemical plant in the Czech Republic required reinforcement of a carbon steel 500mm diameter pipe, spanning 16m². The pipe was part of a refinery tower, transporting nitrogen, and was suffering from corrosion under insulation, which compromised the thickness and integrity of the substrate, in certain areas.

Having experienced the quality and integrity of work carried out by Corrotech on numerous projects in the past, the client turned to them once again, as a matter of urgency, to provide the most effective solution for the problem; declaring repair of the issue an emergency.

It took the team 4 days to complete the project in-situ. The first step was to clean the corrosion deposits, this was done via hand tools, before priming with LR600. Four layers of multiaxial fibreglass cloth were then applied to provide strength and reinforcement to the pipe.

The complicated shape/'Y' nature of the pipe, posed a challenge in terms of the wrapping of the lamination cloth, which the team effectively navigated. The team also had to carry out the work and take extra precautions with the wrapping aspect, as a result of the nitrogen continuing to run through the pipe, with a surface temperature of 70°C. Polyglass VE was applied by hand, and the work was then tested and assured as per the designed inspection and test plan.

