

# COMPOSITE REPAIR BURIED PIPELINE REPAIR

## Workscope

Stork was contracted to deliver a composite repair solution for a buried pipeline at a North Sea terminal.

The project involved the installation of replacement pipework into an existing fire water main line.

The purpose of the composite repair was to provide corrosion protection in conjunction with a Cathodic Protection (CP) system.

## Solution

After reviewing a competitor system, the client chose Stork's composite repair technology because it eliminated corrosion under insulation (CUI) and was easy to apply.

Stork's team used a unique blend of liquid epoxy polymer and aliphatic polyamine curing agents, which has the ability to displace water in order to make a permanent bond. It was chosen for its anticorrosive properties, excellent abrasion resistance and effective cathodic disbondment properties.

The project was divided into two phases. The first, involved the coating of pipework in a workshop setting, before transporting it to the site, where it was coated at the flanged fittings and 10" back onto the fire water main line.

## Results

Phase 1 of the project was completed on time and on budget.

The project presented a number of challenges, including access restrictions (confined space), for which the correct permits had to be put in place. Despite these challenges, the project was completed without incident.

As the resin can be applied under water, there was no requirement for habitat onsite. This proved both time saving and cost-effective.

Phase 2 of the project will involve the composite repair of the existing fire water main line.

## Project Information:

- **When:**  
December 2014
- **Location:**  
North Sea Terminal
- **Workscope:**  
Providing corrosion protection for a new section of pipework on a buried fire main pipeline
- **Installation:**  
Anti-corrosive coating
- **Materials:**  
Unique blend of liquid epoxy polymer and aliphatic polyamine curing agents
- **Safety:**  
Project delivered without an LTI

