CASE STUDY

ICR.ias JOINT VENTURE

Technowrap™ Long-term repair to a buried oil supply line.

Overview

The client contacted ICR.IAS JV about significant internal corrosion defects on the underground oil supply line. The repair strategy and landing were also designed to include a previous non-Technowrap™ composite repair.
ICR.IAS JV applied a 14-layer Technowrap™ 2k Glass Fibre repair to numerous defect locations.

Scope

The line had the following specifications:

Structure	Oil Supply 8” Line
Surface Preparation	Sa 2.5
Class Approval	N/A
Substrate Material	Carbon Steel
Design Pressure	60 bar
Design Temperature	60^0C
Application Temperature	30^0C – 40^0C
Design Life	10 years
Wrap / Repair Length	3.8 meters
Geometry	Wrap over previous repair
Corrosion Type	Internal
Defect Details	Modelled as max 15 x 15mm hole

Previous composite repair - internal corrosion defects identified at either end of the repair.

Application of the Technowrap™ Repair

Solution

- Technowrap™ 2k Glass Fibre with HA Resin system was chosen due to the design temperatures and location requirements.
- Wrapping over the existing non-Technowrap™ repair was necessary due to the location of the defects.
- Challenging working environment with ambient temperatures exceeding 40^0C causing shorter working times with resin. This was mitigated with improved work setup to suit faster application.

Benefits

- Repairs completed online with no line shutdown necessary.
- Higher temperatures assisted with curing.
- Custom work area set up enabled Technicians to efficiently perform application.

Completed Technowrap™ Repair