

Technowrap™ Splashzone – Subsea 12” Crude oil line

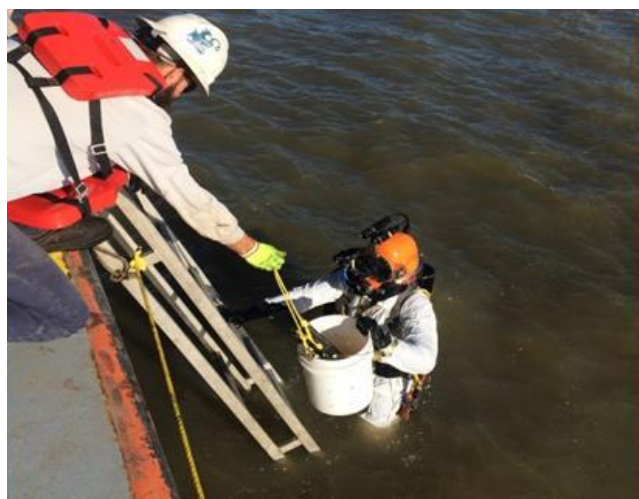
Overview

A 12” crude oil line that had suffered from external mechanical damage, was located 12ft below sea level in the Gulf of Mexico. An engineered design calculation was produced to evidence the number of layers required to reinstate the integrity of the 2 meter section of subsea pipeline.

Scope

The subsea repair had the following specifications:

Structure	12” Crude oil pipeline
Surface Preparation	St3
Design Pressure	75.8 Bar
Design Temperature	38°C
Application Temperature	10°C
Design Life	20 years
Wrap Length	5,000 mm
Pipe Diameter	323.8 mm
Geometry	Straight
Corrosion Type	N/A
Defect Details	Mechanical Damage



Technowrap is passed to divers



Solution

- Bristle blasters used to prepare the surface to St3 and the required surface profile
- Divers used to apply the Technowrap™ by hand
- Technowrap™ Structural Rehabilitation System (SRS), carbon fibre, was used in combination with Technowrap Splashzone™ resin to meet the design criteria.

Benefits

- Technowrap Splashzone™ resin can be used subsea
- Technowrap Splashzone™, an extremely effective subsea pipeline composite repair system, concludes 15 month research test programme into subsea composite repairs led by the Pipeline Research Council International (PCRI)
- No hot work required to complete the repair
- No shut-down required, pipeline flow was not interrupted
- Documented QA/QC procedures provide an excellent record of the repair materials and application process for future reference



Completed Repair