

Firewater Tank Floor Reinforcement

Overview

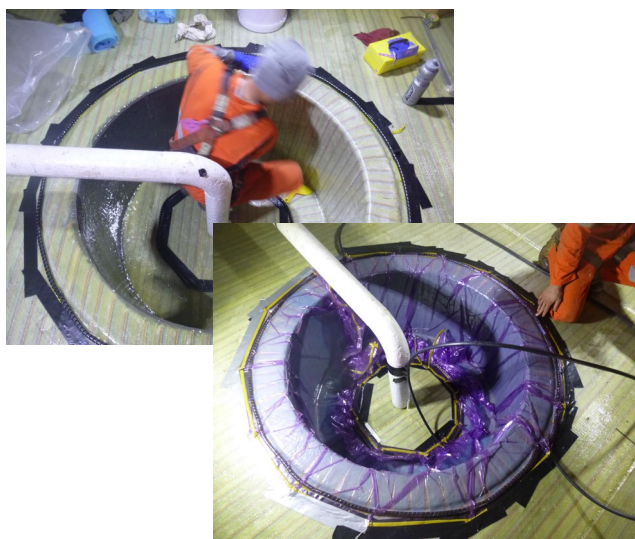
Rapid reinstatement of a firewater tank floor for corrosion protection and localized structural damage. API, ISO and ASME code requirements were met for structural and coating locations.

The repair covered all obstructions on the floor and in the lower wall section. The inspection regime for the Technowrap™ is the same as the steel tank requirements.

Scope

The tank and repair had the following specifications:

Structure	Carbon Steel Tank
Surface Preparation	Sa 2.5
Design Pressure	2 bar
Design Temperature	60°C
Application Temperature	10°C - 20°C
Design Life	20 years
Surface Area	180sqm
Tank Diameter	13.7m
Geometry	Tank floor, walls and nozzles/manways
Corrosion Type	Internal



Vacuum consolidation of complex geometries



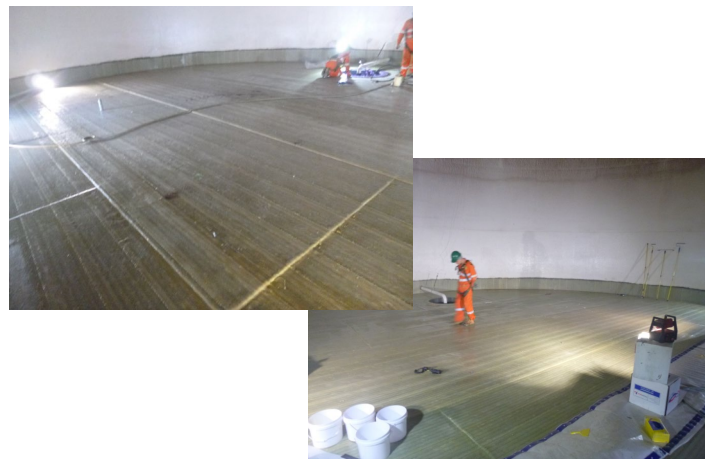
Surface Preparation and Priming

Solution

- 2 layers of Technowrap™ applied to the tank floor, extending 500mm up the tank walls.
- An integrated team comprising ICR.IAS JV technicians and client personnel delivered the work. Surface preparation and confined space recovery provided by the client, with ICR.IAS JV team applying Technowrap™

Benefits

- 20 year asset life extension
- Structural reinforcement and corrosion prevention in one application.
- No volatile organic compounds, no heavy/sharp steel sections, no hot work.
- A crew of 4 applied the repair over 10 days
- The repair and underlying steel can be inspected by readily available NDT techniques



Tank floor near completion