

## Technowrap™ Engineered Composite Repairs DRS Pipe Deck Repair

**Date**

December 2019

**Client**

Major Operator

**Location**

North Sea

**Scope**

Two large laydown areas onboard an operator's asset offshore in the North Sea were suffering from external corrosion and multiple through wall defects resulting in water ingress. As the roof was classified as a laydown areas and subjected to personnel traffic there was a requirement that the load capacity of the roof was factored into the design. This unique design ensured that the laminate could withstand the applied loads and impacts associated of +5kN/m<sup>2</sup>.

**Solution**

ICR provided an engineered design using four layers of Technowrap™ DRS. Combining the properties of the Technowrap™ SRS (Structural Rehabilitation System) carbon fibre and DRS a rubber toughened epoxy resin system. Our integrated approach, providing engineering, materials, technician training and installation, all in-house, has enabled ICR to become an industry specialist. Third party training for the contractor on application and QA/QC procedures was provided and the contractor was subsequently supervised by a ICR technician.

**Results & Benefits**

- There were multiple areas with through wall defects and more were to be expected following mechanical surface cleaning preparations
- As a result it was decided that ICR would prefabricate composite plates to cover any through wall defects before the surface preparation commenced
- Following the successful installation of Technowrap™ DRS, the integrity of the roofs was restored for a 10-year defined lifetime

