

## ICR - MARINE AT A GLANCE

### OVERVIEW

ICR develops advanced solutions for the repair, maintenance, and inspection of critical assets and infrastructure.

With roots dating back to 1992, ICR has built a strong track record supporting leading operators and EPCs with asset integrity challenges worldwide.

Headquartered in the United Kingdom, ICR has bases in the Americas, Australia, the Middle East, and Norway, in addition to a global and reliable delivery partner network, ensuring our customers' assets receive continued support wherever they are located.

### TECHNOWRAP™ COMPOSITE REPAIRS

Technowrap™ is a long-term alternative to steel replacement, providing cost-effective rehabilitation for damaged and corroded pipelines, vessels, subsea assets, and structures including decks, roofs, and tanks.

- **Temperature range:** -75°C to 230°C
- **Pressure rating:** Up to 250 bar
- **Design life:** Up to 20 years
- Suitable for internal, external, and through-wall defects
- No shutdown or hot work required
- ABS, Lloyd's Register, and DNV approved
- Repairs validated through **INSONO™ Composite Inspection**

Technowrap™ supports fleet maintenance across commercial vessels, offshore support vessels, ports, terminals, and naval fleets. It is also suitable for infrastructure repairs including bridges, rail, roads, tanks, tunnels, and buildings.

ICR technicians and partners deliver repairs globally, while customer personnel can also be trained to perform repairs on simple geometries.



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### INSONO™ COMPOSITE INSPECTION

INSONO™ is a non-destructive inspection system specifically developed for use with Technowrap™.

It uses acoustic inspection methods to detect delaminations within the laminate, as well as disbonds and bond-line defects. INSONO™ addresses two key challenges in the composite repair lifecycle:

- Validation of repairs throughout their design life
- Verification of design life extension beyond the original design life

### QUICKFLANGE™ WELDLESS CONNECTORS

Quickflange™ Weldless Connectors provide a 100% cold-work solution for flange-to-pipe connections, offering a fast and reliable alternative to welding – up to 80% faster to install.

Using a modified flange with patented internal grooves, the flange is positioned over the pipe before a hydraulic tool creates a permanent, gas-tight mechanical seal.

- **Size range:** ¾" to 14"
- **Schedule range:** Sch10–160
- **Materials:** Carbon Steel, Stainless Steel 316, Duplex, Super Duplex, 6Mo, Copper-Nickel, Nickel Alloys
- **Pressure range:** 150# to 2500#
- ABS, Lloyd's Register, and DNV approved

### QUICKFLANGE™ SWIVEL

Quickflange™ Swivel is designed for limited-access and congested piping systems where spool alignment and pipe rotation issues can occur.

Its two-component design allows the backing flange to rotate freely after installation, enabling independent bolt-hole alignment and simplifying installation in confined marine environments.

