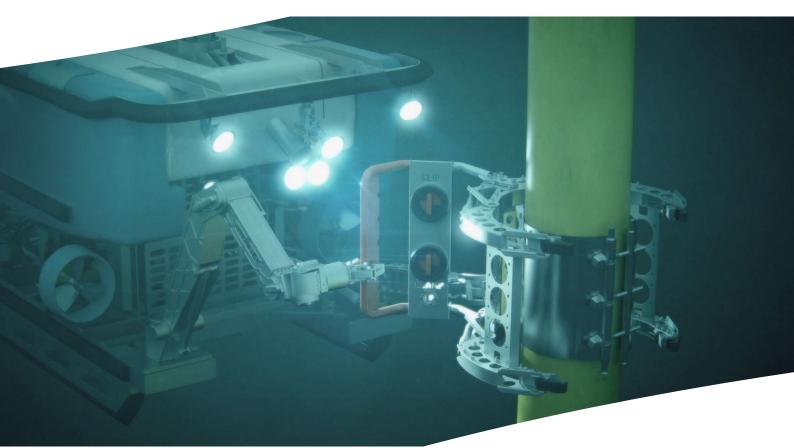


EPIC[™] Riser Repair Clamp

Avoid costly riser replacement and production downtime



4Subsea offers long-term repair solutions to reduce risk of pipe failure and ensure maintained production. The EPIC[™] series provides safe and cost effective outer sheath repair solutions for flexible risers and flowlines. The repair can be performed with no riser downtime and low installation time.

4Subsea offers products, services, and software related to flexible pipes, umbilicals, and ancillaries used for subsea operations, including **Integrity Management on 4insight®**, **Annulus Vent Gas Monitoring (AMOS™)**, **Portable Annulus Tester (PAT™)**, **Repair Clamps (EPIC™)**, **ValveTrack**, and **FlexShare™**. We also specialise in **Advanced Engineering** and **Research** for flexible pipes.

KEY BENEFITS

- Extends life of flexible pipes
- Prevents costly riser replacements
- Enables cost efficient operations, avoiding riser downtime
- Repair requires low installation time
- Provides permanent repair of damaged outer sheath
- Gives access to the 4Subsea experts' extensive experience and knowledge base
- Fit-for-service assessment may be included as part of clamp delivery, documenting the remaining design life of the flexible pipe









Riser Repair Operations with EPIC™

A riser repair may be required based on findings from annulus testing, ROV inspection, or visual inspections. The most common findings are a damaged outer sheath or blocked vent ports. 4Subsea provides repair solutions that can be installed without any loss of production time. We may also undertake overall project responsibility for such projects and perform a fit-for-service assessment of the flexible riser, taking into account the characteristics of the damage, the amount of incurred corrosion and pipe dynamics to document the remaining design life of the flexible pipe.

The EPIC[™] clamping solutions are currently in use on several installations on the Norwegian and British continental shelf, the Dutch sector, and in Africa.

Click here to watch demonstration video of underwater repair clamp.

The EPIC™ Series

- ROV installation for subsea applications.
- Diver installation for subsea applications.
- Manual installation for topside applications.
- Custom applications upon request, e.g. repair clamp for leakage in riser end-fitting, re-establishment of annulus vent, or montoring clamp for equipping sensors or other requipment.
- ROV operated tool for subsea drilling of vent hole in riser outer sheath, available as part of EPIC ROV clamp delivery in cooperation with subcontractor.

Features

- Made of stainless steel with rubber sealing for repair of outer sheath breach.
- Clamps can be delivered with vent port(s) for re-establishment of annulus ventilation.
- Customized to riser outer diameter and size of damage.
- Produced in Super Duplex, 6 Mo, or 316SS material.
- Light weight and slim design that do no influence the global dynamic behaviour of a flexible pipe.
- EPIC[™] ROV clamp is designed for ROV installation, and the operation is performed with a standard work class ROV.
- EPIC[™] clamps are designed for long lifetime in harsh offshore environments and designed in accordance with Eurocode and NORSOK requirements to ensure long lifetime.
- Clamps may be installed both as temporary and permanent solutions.
- Each clamp may be delivered with an extensive documentation package, depending on clamp application and client requirements.

4Subsea is a leading provider of technology and services that help operators optimise energy production from subsea oil & gas fields and offshore wind farms. We combine domain expertise with data analytics and digital services to maximise lifetime of assets, reduce operational cost and optimise future projects through data-driven design.

The company was established in 2007 and clients include the major energy operators as well as the large suppliers of subsea equipment. 4Subsea is headquartered in Asker, Norway with additional offices in Bergen, Kristiansand, Stavanger, Rio de Janeiro, and Aberdeen. 4Subsea is a company in the Subsea 7 Group. More info at www.4subsea.com.

4Subsea - Share ideas, move forward

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