

## Creating effective connections

HYDRATIGHT HAS BUILT expertise in the Norwegian Continental Shelf and offshore Brazil, which it has now transferred to West Africa. Its subsea connectors range includes remote connectors for deepwater applications. They offer the same strength, integrity and reliability as the rest of the mechanical connectors range but in a deepwater specific design which requires no diver intervention.

They are a mechanical alternative to hyperbaric welding and use a unique gripping and sealing system that does not affect the integrity of the pipe. They have been a core product of the Hydratight range since the 1980s and have been developed to meet the increasing challenges of the global offshore market. With an expected 60,000 nautical km of pipelines due to be laid worldwide by 2019, connector technology will continue to provide engineering solutions for pipeline repair. Older pipelines are understandably at a greater risk of failure as 40 per cent of malfunctions come from erosion or corrosion.



Hydratight's subsea connector.

However, crowded subsea oilfields are also at risk from any number of incidences, dropped objects, stuck pigs or dragged anchors. Repairing a buckled or damaged section of pipeline or riser in such harsh conditions takes hard-won expertise. Hydratight has honed this process over the last three decades and as well as testing and deploying the equipment in other global locations, it also has the manpower who have managed similar projects. A joint collaboration with Norwegian specialists, Connector Subsea Solutions, further extends capabilities to include all installation tooling and ancillaries. Hydratight's remote connectors have been successfully used in world-first applications of deepwater repairs and tie-ins, including 4", 12", 16" and 30" pipelines. They have a minimum 30 year design life and are DNV GL, Lloyds and American Bureau of Shipping (ABS) approved.

### Ready for the future

Diverless pipeline repair is only one of many technologies ready to penetrate the African market. Developed by Connector Subsea Solutions, the Riser Cleaning and Inspection Tool (RCIT) is now an integral component within the Hydratight offering. This service ensures the removal of excessive sea-growth, reducing the weight on the riser and pipeline systems, improving the system dynamics and ensuring continued field life. Inspection provides assurance of continued system integrity. Should damage be discovered, the size, depth, location and severity can be recorded. The technology is currently under contract to perform on hundreds of flexible risers offshore Brazil.

The African market requires more of these proven technologies to allow it to flourish to its full potential and meet its own and the world's steady demand for hydrocarbons.

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