hydratight®

Mechanical Connectors

Who We Are

One Company, Total Support, Complete Solutions

Over many years, Hydratight has provided world-class bolted joint solutions and continues to set international standards in joint integrity for its customers on a global scale.

Hydratight works in partnership with the world's leading OEMs using the latest computer technology and market leading development facilities. We continue to push back the boundaries of technology to provide fast, accurate and reliable solutions to critical assembly problems.

Our people are the key to our success: qualified, competent and innovative people, working closely with our customers ensuring a total understanding of their requirements.

One Company - Meets Standards

Totally committed to safety and quality, all Hydratight products and services are designed, manufactured and carried out within a management system in accordance with ISO 9001: 2008 (Quality Management), ISO 14001: 2004 (Environmental Management) and OHSAS 18001:2007 (Occupational Health and Safety).

Our extensive bolting and machining services include:

- Torque and tension bolting equipment
- Portable machining equipment
- Product sales, rental and technical support
- Product service and training
- Special designs and alternative sizes are available upon request

Hydratight's Mechanical Connectors

Our range of Mechanical Connectors provides high integrity connections for all types of metal pipe work, onshore, offshore and subsea. Used to replace the need for welding, they are based upon a unique pipe gripping and sealing system which allows the connectors to withstand high internal pressure and external load conditions.

For additional specifications on our products for sale or rental, videos of our products in action, or information about our on-site services, please visit us on the web at hydratight.com.

Engineering Driven Safety Focused Solutions

LRQ 0912064 LRQ 4000352 LRQ 4003099 659747 INVESTOR IN PEOPLE

Hydratight Mechanical Connectors

Hydratight Mechanical Connectors are equal in strength and performance to that of a welded connection. They are suitable for any application where a weld would be a traditional solution, providing the same safety, strength and reliability. Hydratight's Mechanical Connectors have a 100% leak-free in-service record.

Mechanical Connector Installation

Mechanical Connectors from Hydratight are available in a variety of formats, including standard flange termination and the unique pipe-to-pipe direct coupling connector. All formats suit specific applications, whether for use on carbon steel, stainless steel or duplex pipes. The following illustrates the steps to follow for a pipe-to-pipe installation.

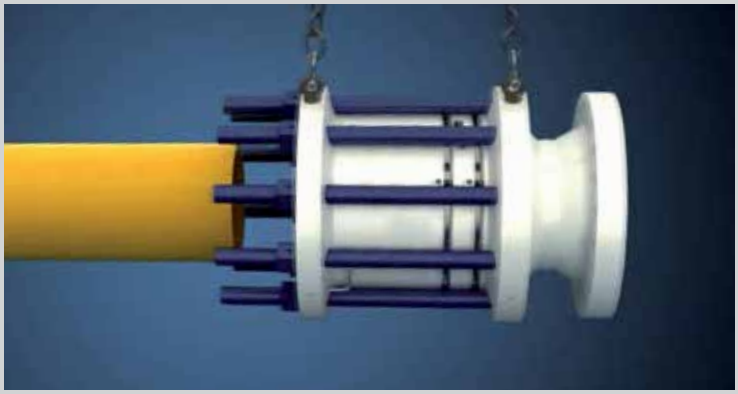
Scan to view demo video.

Step 1

Leak located and isolated, damaged section of pipeline is cut and removed.

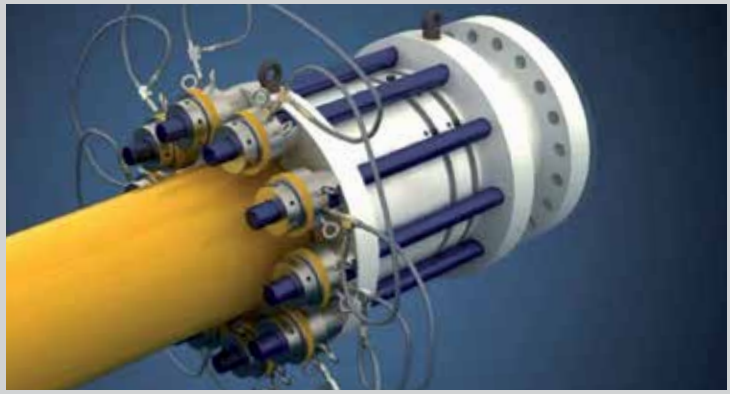
Step 2

Connectors deployed and stabbed onto pipeline(s).



Step 3

Connectors activated.



Step 4

New spool piece positioned.

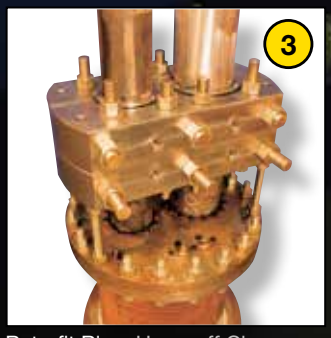
Step 5

Spool piece connected to Mechanical Connectors.

Construction

Topside Flange Adaptor

Topside Flange Adaptor



Retrofit Riser Hang-off Clamp

Topside Flange Adaptor

Hydratight's Mechanical Connectors

Hydratight has gained an enviable track record having been used by the majority of major energy companies for both pipeline tie-ins and emergency repairs for thousands of critical topside and subsea applications.

Hydratight's range of Mechanical Connectors offer versatile solutions to the problem of bare pipe connections. Their design is adapted to suit applications ranging from high temperature, high pressure hydrocarbon service lines fitted on the topside of offshore platforms, through to the supply of connectors capable of being remotely installed in over 3,280ft of water.

The system provides a connection that is equal in strength to a weld and has DNV and Lloyds Type approvals, stating that the Couplings may be used as a permanent or temporary substitute for welded connections.

Capability

The continued development of Mechanical Connector technology has enabled Hydratight to expand its product range to include Riser Hang-off Systems, Remote Bolting Systems and Repair Sleeve Clamps.

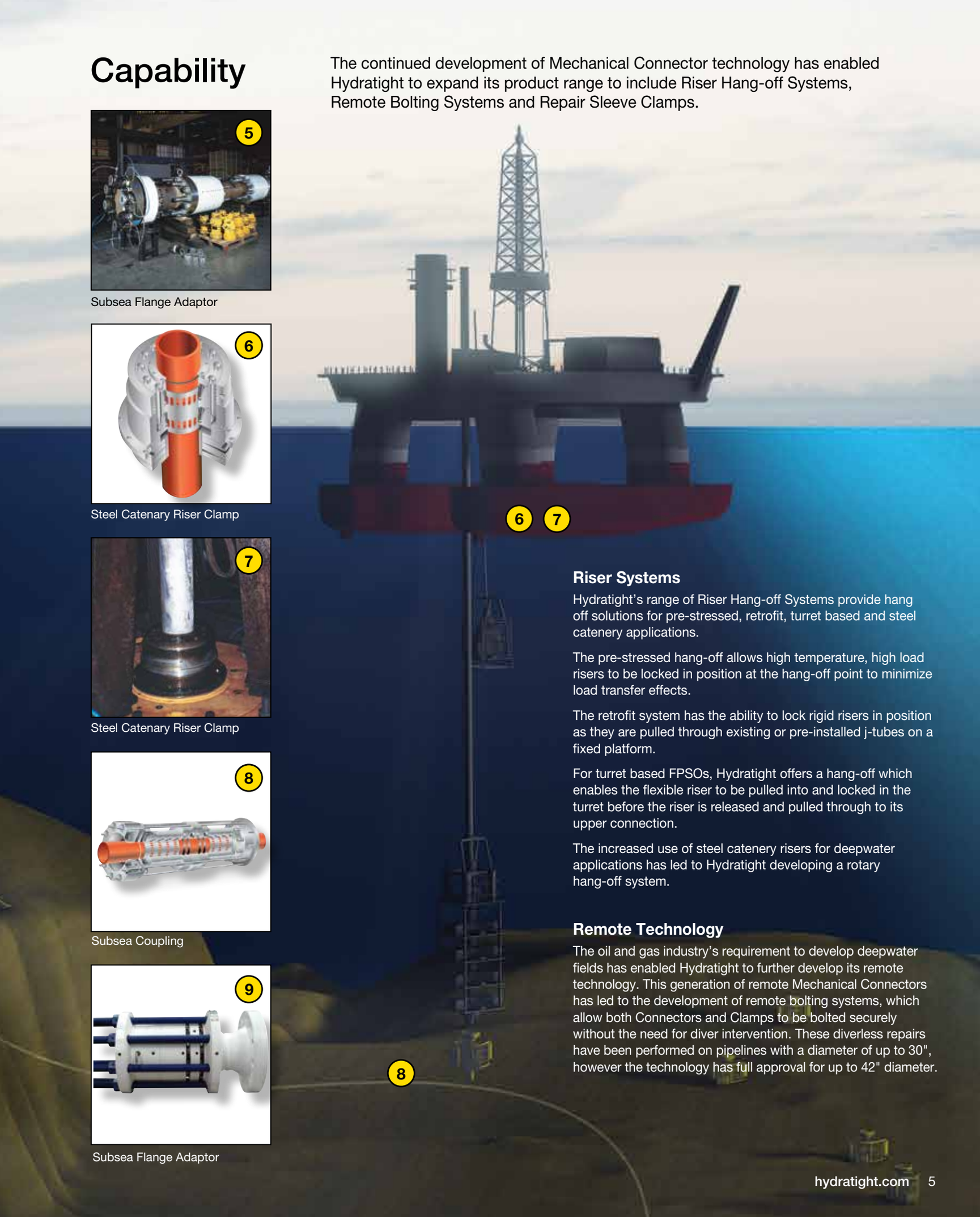
Subsea Flange Adaptor

Steel Catenary Riser Clamp

Steel Catenary Riser Clamp

Subsea Coupling

Subsea Flange Adaptor



Riser Systems

Hydratight's range of Riser Hang-off Systems provide hang off solutions for pre-stressed, retrofit, turret based and steel catenery applications.

The pre-stressed hang-off allows high temperature, high load risers to be locked in position at the hang-off point to minimize load transfer effects.

The retrofit system has the ability to lock rigid risers in position as they are pulled through existing or pre-installed j-tubes on a fixed platform.

For turret based FPSOs, Hydratight offers a hang-off which enables the flexible riser to be pulled into and locked in the turret before the riser is released and pulled through to its upper connection.

The increased use of steel catenery risers for deepwater applications has led to Hydratight developing a rotary hang-off system.

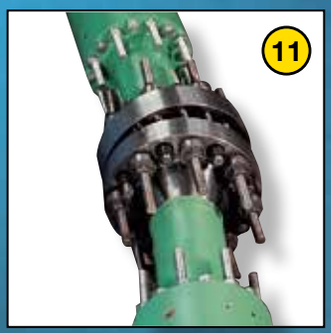
Remote Technology

The oil and gas industry's requirement to develop deepwater fields has enabled Hydratight to further develop its remote technology. This generation of remote Mechanical Connectors has led to the development of remote bolting systems, which allow both Connectors and Clamps to be bolted securely without the need for diver intervention. These diverless repairs have been performed on pipelines with a diameter of up to 30", however the technology has full approval for up to 42" diameter.

Repair

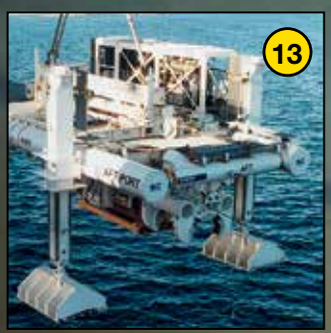
Hydratight's innovative designs have produced a pipe connection which is equivalent in strength and sealing performance to that of a welded joint. This can be reliably achieved without hot work and far more safely, simply and quickly than a welded joint.

Turret based Riser Hang-off Clamp



Misalignment flange

Riser Pull-in Head



Remove Connector Installation Frame

Repairs

Although Hydratight's Mechanical Connectors are used extensively on new construction projects, the connector was initially developed for, and is still widely used, for pipeline repairs.

The versatility of the Mechanical Connector design enables it to be used in many different scenarios, whether making a bare pipe repair or inserting flanged spools.

As well as providing Mechanical Connectors for permanent pipeline repairs, Hydratight has also supplied temporary repair clamps, capable of sealing minor pipeline leaks or restoring the structural integrity of damaged or corroded pipes.

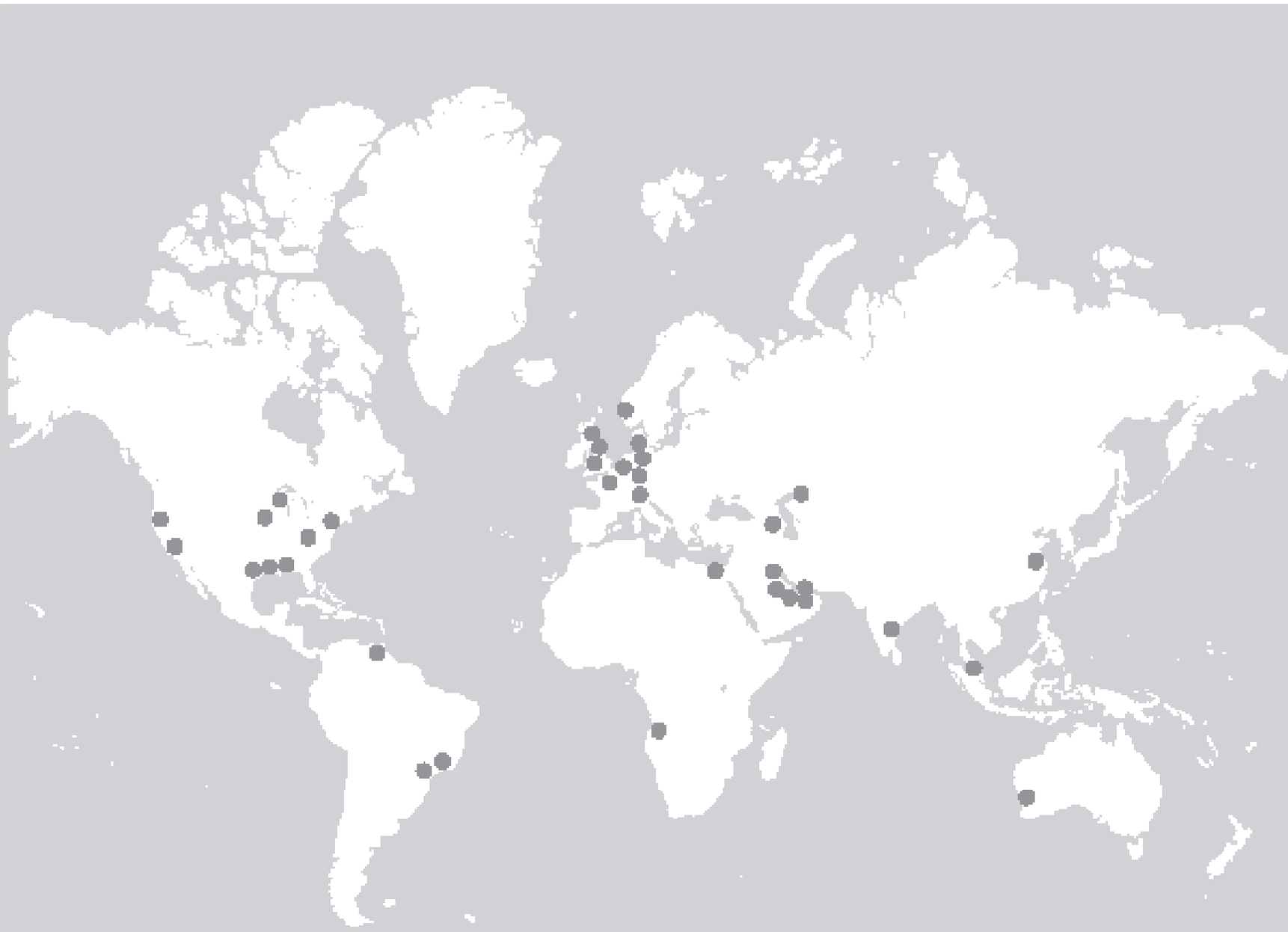
Hydratight is now the accepted and preferred repair system for many oil & gas operators world-wide. The industry's confidence in Hydratight's products and capability has led to the organization establishing an Emergency Pipeline Repair System (EPRS) Club initially for the North Sea, but now covering other key oil and gas locations around the world.

hydratight®

GLOBAL STANDARDS LOCAL DELIVERY

Our global network means you can rely on the right people, products and services wherever you are in the world.

Email us at: **solutions@hydratight.com**
Or find your local representative at:
hydratight.com/contact



AN Actuant COMPANY

Material sourced from fully sustainable, managed forests using Elemental Chlorine Free fibre.

HT/MC/US/02-13