Subsea Solutions
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

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.
Raising standards in subsea environments
In the ebb and flow of an ever-changing subsea world, new challenges and new opportunities are arising all the time, but one thing that remains constant is the need for solutions that will adapt to both on-going client demands and the demands of the environment.

Hydratight is at the forefront of industry thinking in all its areas of operation. We are an engineering solutions and service provider with the vision, the products, the people and the technical expertise to not just meet but exceed future expectations.

Deepwater experience you can depend on
With subsea exploration venturing ever deeper, Hydratight’s unrivalled experience in subsea connectors and tensioners, and industry-leading pipeline repair systems ensures we are perfectly placed to support our clients’ initiatives in deepwater fields across the globe.

With safety always front of mind, one thing you can be sure of is that every new product and every service solution we initiate will be resolutely fit for purpose.

But above all else, Hydratight is not just reactive but unrelentingly proactive. In the future, we will be there when you need us, with repairs and machining solutions which meet the most exacting standards. Our total focus on contingency planning and Emergency Pipeline Repair System (EPRS) coverage will fully prepare your company for every challenge in the complex and changing world of subsea.
Superior Engineered Systems

As oil and gas production ventures into deeper waters, new challenges are emerging. Hydratight has been a pioneer in this field, meeting the growing requirement for remote activation of bolted applications, by introducing increasingly innovative solutions to the oil and gas industry.

Mechanical Connectors

Hydratight has gained an unrivalled reputation in both pipeline tie-ins and emergency repairs. Our Mechanical Connectors (formerly known as Morgrip™) are equal in strength and performance to a welded connection, eliminating the need for hot work and providing total safety for any application where a weld would be a traditional solution.

This global experience has proved invaluable in thousands of critical topside and subsea applications, forging our reputation for providing high integrity DNV, ABS, API and Lloyds approved connections of the very highest standard.

The design of our Mechanical Connectors is based upon a unique pipe gripping and sealing system which allows them to withstand high internal pressure and external load conditions. As a result, they have a 100% leak-free in-service record, providing the ultimate in-service assurance for all types of metal pipe work, onshore, offshore and subsea.

Diverless Repairs

Hydratight has also taken remote technology to a new level, by developing 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 deepwater pipelines up to 30" diameter, and the technology has full approval up to 42" diameter.

Our expertise in the field has also enabled Hydratight to expand its product range to include Riser Hang-off Systems, Remote Bolting Systems and Split Sleeve Repair Clamps.
Repair Clamps
Our repair clamps are capable of sealing minor pipeline leaks and restoring the integrity of damaged or corroded pipes and are the essential choice wherever and whenever there is a need for a rapid solution with no margin for error.

All Hydratight clamps incorporate an external pressure test facility that determines the joint integrity prior to commissioning. They are available in a wide variety of sizes, ratings and arrangements and can be supplied independently or as an add-on to larger repair systems.

Quick Release Nuts
As the requirement for remote activation in bolted applications has increased, so has the need for highly effective remote disconnection devices. In response to this need, Hydratight developed the Quick Release Nut, offering a fast, highly reliable method of remote disconnection operated via ROV hot stab.

Hydraulics are used to allow remote, rapid removal from a tightened stud bolt. Across almost thirty projects worldwide, we have achieved a significant increase in offshore operational time savings and an equally impressive reduction in costs. Typical disconnection times range from a matter of seconds to a maximum of just 30 seconds per stud, as opposed to two hours when using ROV and torque tools.
Multi-Stud Tensioner

Capable of tensioning every single stud in a joint simultaneously, the Multi-Stud Tensioner (MST) provides increased time savings by offering the fastest and most technically efficient method of tightening any connection. Because the MST is designed as a segmented annular ring with integrally machined, internally connected hydraulic chambers, the operator is able to quickly connect an individual segment to the joint and link these together to provide simultaneous operation.

The use of lightweight materials facilitates easy operation by a single operator, with simple tool fitting as per a single tensioner. In addition, an innovative asymmetric ram solution is available in space-restricted environments.

Subsea Tensioning

Remote tensioning systems can be provided as stand alone units or fully integrated in Hydratight’s subsea Mechanical Connectors and Clamps. These units can also be designed to operate with other custom equipment to ensure the complete bolted joint integrity.
In the oil and gas industry, being prepared for any eventuality is all important. As forward-thinking providers of premium subsea solutions, Hydratight has been a leading provider of Emergency Pipeline Repair System (EPRS) coverage since the late 1980s.

Contingency Planning

EPRS is an invaluable form of insurance to the asset owner. However meticulous the manufacture and operation of the asset may be, accidents or damage can occur. Although the perceived risk of damage to pipelines may be low, the resultant costs and exposure can be significant.

EPRS is the process of deciding on an emergency repair procedure and retaining the necessary tooling, equipment and services to cope with unplanned repairs, minimising the resultant damage to the environment and field operation.

Preparation is key

Hydratight provides full consultation services from the outset of a project or contingency plan. Working alongside the operator and asset owners, we assess specific requirements and provide optimised EPRS solutions. The preferred option can then be quickly implemented into an emergency response procedure.

Following implementation, Hydratight then stores and maintains the relevant products, whilst retaining the required services necessary for an expedited delivery. These services include the ongoing training of personnel, dry run and response rehearsals, regular maintenance of the tools and equipment, secure storage and contract management.
Providing a high level of safety and a consistently high level of performance is of paramount importance in subsea environments and Hydratight tooling is made to withstand the most demanding underwater conditions. Not just our highly regarded range of world class bolting equipment, but also our machining equipment for pipe cutting, bevelling, flange re-facing and journal turning, all designed and engineered to the most stringent standards.

**Bolt Tensioners**
Along with ASME and API flange tensioning, Hydratight offers a full line of tensioners specifically developed to generate the very high loads required for SPO/Vector compact flanges. We also have a specialised line for topside assembly of flange and bolted joint applications for subsea operations.

**Torque Wrenches**
Hydratight’s torque wrenches provide a comprehensive range of interchangeable hexagon and square drive heads, ideal when working on a variety of nut sizes on one or more applications. Designed for minimum maintenance with only three moving parts, they are safe, durable, compact and lightweight. A fast, versatile and robust solution for any application.

**Pipe Cutting and Machining**
Hydratight is a leading specialist in tools for pipe and casing cutting, flange re-facing, gasket re-grooving and the cutting and bevelling of pipes. Tools can be custom-designed to suit the specific needs of each application and technical support is available 24/7, with experienced, trained and competent technicians for your service needs. With Hydratight, it’s all part of our global service.
**Nutsplitter**
The Hydratight Nutsplitter is a fast, sure and safe method to remove corroded or seized nuts without the need for hot cutting, chiselling or grinding. With a range of cylinders and interchangeable heads, the tool is designed to cover all ANSI flanges up to 36".

**Flange Spreader**
Hydratight’s acclaimed Flange Spreader utilises a high load compact hydraulic cylinder, together with a uniquely designed wedge and retaining mechanism to smoothly and evenly force open the flanged joint.

**Flange Puller**
The Hydratight Flange Puller is a compact, highly effective device used to align or pull together flanges prior to the application of bolts and gaskets.

**Power Consoles**
The high quality and reliability of the Hydratight range of bolt tensioning, torquing and machining products is complemented by the most advanced range of hydraulic, air and electric power consoles, hoses and accessories.
100% Equipped for Training

At Hydratight, safety isn’t just a word, but the very cornerstone of everything we do. As a designer and manufacturer of high quality joint integrity products, we regard the safe, professional operation of our equipment as absolutely mandatory.

This dedication to getting it right first time manifests itself in subsea equipment training courses which meet industry best practice standards at all times. With a culture totally devoted to safety, you can be sure that your personnel will be fully trained, assessed and equipped to meet all operational challenges.

Our City and Guilds accredited subsea training courses focus on reducing potential downtime and providing a safer working environment when using high pressure hydraulic joint integrity equipment.

Equipment training to the most exacting standards

Hydratight has a well established training academy with dedicated practical training rigs simulating activities for onsite machining and bolting services. All courses are delivered in a topside environment and provide underpinning knowledge in:

• Subsea theory, specific to the assembly and tightening of bolted connections
• Gasket identification, and its features and benefits, including failure mechanisms
• Subsea flanged bolted connection tightening tools
• The mechanics of tensioning – load loss explained and demonstrated
• Maintenance issues: subsea torque, tensioners, pumps, hoses and connections

Our fully qualified training instructors can deliver additional courses on the operation of Hydratight equipment or services on a global scale, as well as specially commissioned courses to suit your work systems and equipment. All courses are supported by fully documented Training Programmes and Competency Assessment Programmes.

For more information on our equipment training and product familiarisation courses visit hydratight.com or email training@hydratight.com.
By addressing the potential challenges and risks inherent in subsea operations, Hydratight provides a comprehensive consultation service. Their expertise is based on global experience, ensuring that their recommendations are tailored to the specific needs of each project. Hydratight's services range from initial consultation to ongoing support, covering every aspect of joint integrity management. Whether it's the training of personnel, the maintenance of tools and equipment, or the management of contracts, Hydratight ensures that every detail is taken care of, safeguarding the reliability and efficiency of operations.
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

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