

## DRILLING

Drilling and Syntactic Products



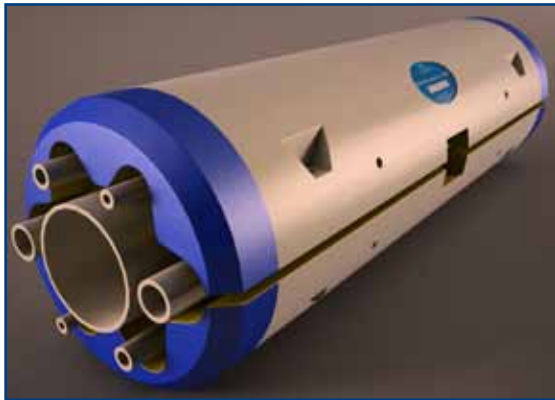
## Introduction

Trelleborg Offshore has a dedicated global platform that has grown dramatically because of our 40+ years of experience and expertise in solving our customers' problems. We have a proven track record of working on highly innovative and pioneering projects and delivering purpose built solutions time after time.

Our dedicated and highly skilled staff is always on hand to provide you with seamless process support from initial idea, through to delivery and beyond. With over 15 locations in Europe and the Americas we are able to supply *what you want, when you want, where you need™*.

## Products

In offshore drilling operations the drill riser provides a conduit for the drill string and drilling fluids from the ocean floor to the rig. This has significant weight which must be supported by its own structure and ultimately by the drilling vessel. Trelleborg Offshore produces Drill Riser Buoyancy Modules (DRBMs) to overcome these obstacles. The DRBMs are fitted along the length of the riser to reduce the weight of the drilling riser to a more manageable amount. We work with you at all stages in the development process to achieve extremely accurate buoyancy ratings.



### Drill Riser Buoyancy

Drill Riser Buoyancy is used offshore and operates in a hostile environment. From initial receipt to offshore installation, many operations can have a damaging effect on Drill Riser Buoyancy resulting in cracked or broken buoyancy elements. To overcome these dangers, Trelleborg Offshore developed the 'Ultra M.I.S.' (Module Integrity System) range of Drill Riser Buoyancy. The Ultra M.I.S. system provides a two-fold increase in mechanical strength, and buoyancy elements have the ability to accommodate nearly twice the deflection before sustaining damage when compared to a standard (non-M.I.S.) buoyancy element.



To provide you with a comprehensive level of support, we provide a range of riser accessories designed to complement our Drill Riser Buoyancy Systems.

### RiserGuard®

RiserGuard® is specifically designed to fit onto and protect bare joints and auxiliary lines from installation and handling damage. They are manufactured from polyethylene to the same configuration as the syntactic foam buoyancy elements so that the joints are protected from handling damage and can be stacked like buoyant joints.

### Riser Shims

Riser Shims exhibit extremely high impact and abrasion resistance properties, and are molded polyurethane to the same external geometry as the Drill Riser Buoyancy for each specific rig. Riser Shims enable bare joints to be stored in the same 'stack' as dressed risers. They also minimize the chance of operating damage during deployment and recovery.



## Stop Collars

Stop Collars are supplied as part of the main buoyancy contract or as replacement equipment and can be supplied to suit any design riser. They are used to firmly hold the buoyancy elements in position axially on the riser joint.

## Installation Hardware

Installation Hardware include spare/replacement straps and hardware that are available for all types of originally supplied buoyancy, riser guard and riser shims.



## Riser Grommets

Riser Grommets are manufactured from a custom molded composite material and are designed to provide improved containment and centralizing of lines.

They are typically used on drill risers and allow the buoyancy to provide added containment of auxiliary lines between existing line clamp bands.



## Polykap™

Polykap™ protectors prevent accidental damage during transportation and storage. They typically weigh less than 25kg and exhibit extremely high impact and abrasion resistance properties.

Polykap™ also retain a low weight in air which ensures easy handling.



## Let us help

The products described here are available as shown or can be modified to your exact requirements. We are sure that our proven track record, experience and expertise will maximize your return on investment and minimize your project risk.

If you need additional information on any of the products or materials detailed here please do not hesitate to contact us through the addresses and phone numbers on the back page. Additional information is also available on our website [www.trelleborg.com/offshore](http://www.trelleborg.com/offshore).

Contact us today!

We look forward to working with you.

## Center of Excellence

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