

# BlueWater Seal SEALING EFFICIENCY FOR WATER LUBRICATED PROPELLER SHAFTS

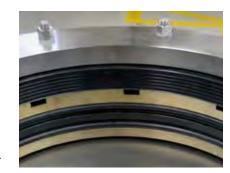




## A RELIABLE SAFE RETURN TO PORT SHAFT SEALING SOLUTION

The Thordon BlueWater Seal is a water lubricated forward seal with a Safe Return to Port (SRTP) emergency seal for 300mm (11.811") to 1000mm (39.370") propeller shafts. The BlueWater Seal is manufactured to the same exacting standards as Thordon's TG100 and SeaThigor seals incorporating an economical solution with reliable performance.

The sealing faces of the BlueWater Seal consist of a high strength, abrasive resistant main sealing ring mated with a stainless steel face. The unique design features on the sealing face promote a hydrodynamic lubricating film while keeping water leakage to a minimum.



During operation, the water film remains consistent between sealing faces eliminating dry-running conditions. The BlueWater Seal at first glance looks much like other axial lip face seals that have been on the market for several years. There is a fundamental difference however. The RENFORM main sealing ring employs a unique design feature which permits the face to operate with less friction and without the friction spikes as we discovered when evaluating competitive seals on our full scale test rig. In practical terms, this means that the Thordon BlueWater Seal with its proprietary RENFORM sealing ring is better suited to variable draft and deeper draft vessel conditions. The other BlueWater Seal components will last the life of the vessel. Due to the simplicity of the seal design, seal maintenance is minimal.

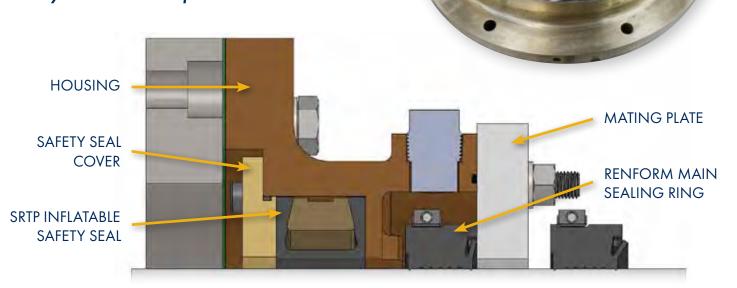
'Safe Return to Port' emergency seal

 Face contact pressure promotes a more effective hydrodynamic lubrication which in turn increases the seal longevity

Has no limitation on axial shaft movement

Spare sealing ring on the shaft

• Easy to install and operate



### THORDON HIGH PERFORMANCE SEALS

Ship owners and managers know Thordon products are the proven choice for performance and value. BlueWater Seals are manufactured to last and are designed for use in newbuild construction and retrofits.

#### Safe Return to Port (SRTP) Emergency Seal

The SRTP emergency seal allows you to return safely to the nearest port if your primary seal is ever damaged. When the emergency seal is engaged, the propeller shaft can be rotated and the vessel can proceed to a repair facility on its own power, at reduced speeds. The SRTP emergency seal is made from a Thordon proprietary polymer and never needs to be replaced.

#### The Open Seawater Lubricated Shaftline Solution

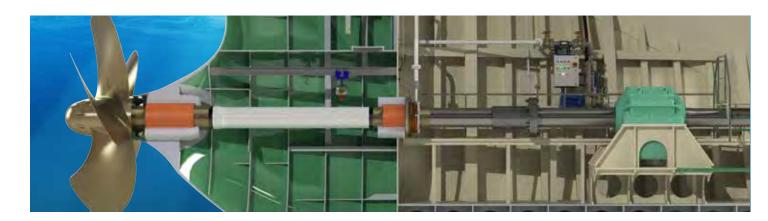
The BlueWater Seal is part of the complete COMPAC open seawater lubricated Propeller Shaft Bearing system that also includes COMPAC bearings, shaft liners, anticorrosion shaft coating, a Thordon Water Quality Package and a Thordon Bearing Condition Monitoring System. An open seawater lubricated system is much less complex to install and operate than an oil lubricated system with a compressed air seal.



### SEAWATER LUBRICATED COMPAC PROPELLER SHAFT BEARING SYSTEM

The BlueWater Seal is an important part of Thordon's Propeller Shaft Bearing System which includes:

- Thordon's Award-Winning COMPAC Propeller Shaft Bearings
- BlueWater Seal
- Thordon Water Quality Package
- ThorShield Shaft Coating Protection
- Thordon Bearing Condition Monitoring (BCM) System



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#### CUSTOMER FOCUSED TO QUICKLY MEET YOUR NEEDS

#### **Quick and Responsive Service**

It takes quality products to be globally successful in the bearing and shaft seal industry. It also takes great service to keep customers coming back.

Thordon Bearings Inc. is geared to respond quickly to supply high performance bearing and seal solutions. Our products arrive quickly, fit right and last!

#### **Extensive Distribution Network**

Thordon Bearings has an extensive distribution network of more than 75 distributors in 100 countries to supply and service our global customer base. Non-standard requests are met with responsive design, quick machining and speedy delivery.

#### **Application Engineering**

Thordon engineers work closely with customers to provide innovative bearing and shaft seal system designs and solutions.

The Global Service and Support team can install, commission, service and maintain the full range of Thordon Bearings' environmentally-safe products.

#### **Manufacturing Quality**

Thordon Bearings Inc. is a family-owned company with manufacturing and new product development facilities in Burlington, Ontario, Canada. In addition, we operate a new leading edge manufacturing plant in Slupsk, Poland. We manufacture to ISO 9001 Quality System requirements. Contact us for our installation references.

#### High Performance Bearings and Seals; Industry-Leading Service

Thordon Bearings is an industry leader in the design, manufacture, supply and installation of high performance, pollution-free, shaft bearing and seal systems.

Your Authorized Thordon Distributor



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