

# THORPLAS-BLUE BEARINGS FOR DECK MACHINERY

**THOR** DON

ZERO POLLUTION | HIGH PERFORMANCE | BEARING & SEAL SYSTEMS

# ELIMINATE GREASE. SAVE MONEY. IMPROVE CREW SAFETY.

Ensuring smooth reliable operation of all equipment installed above the waterline is a tough issue for any ship's crew. Deck machinery and steering gear bearings require frequent maintenance and grease lubrication. If routine maintenance is delayed or greasing is overlooked, it has a high cost consequence for the ship owner - seized bearings can cause expensive rope replacement, safety issues as a result of manual greasing, and vibration causing damage to piston and cylinders.

ThorPlas-Blue was developed as a maintenance-free solution to replace greased bronze bearings, eliminating a source of pollution. The proprietary engineered thermoplastic bearing is capable of design pressures up to 45 MPa (6527 psi); higher pressures may be possible with Thordon Engineering review. ThorPlas-Blue can easily be back fit into virtually all applications where greased bronze is currently installed. A stainless steel or non-corrosive mating surface should be used.

## **ThorPlas-Blue delivers superior performance in all deck machinery applications:**

- Does not require grease (or greasing systems) to ensure smooth operation
- Life-time lubricated – lubricants in the homogeneous polymer ensure a low, stable coefficient of friction, even as the bearing wears
- Long bearing wear life with no maintenance
- Eliminates safety issues when manually greasing bearings in hard to reach locations
- Easily and safely machined
- Installation is quick and easy
- Available globally from Thordon's extensive Distribution network in over 100 countries



Thordon Bearings has been the leading manufacturer of seawater lubricated propeller shaft bearings, grease-free rudder and deck equipment bearings, and other shaftline products for the global marine market for over 35 years.

Legislation relating to the prevention and reduction of oil and grease pollution from ships is continuing to grow within the international maritime community. Use of ThorPlas-Blue bearings is a positive step towards being eco-compliant.



### Fairlead bearings and washers

Due to their exposed locations, seized fairlead rollers can have a huge impact on mooring lines that wear quickly. With ThorPlas-Blue, greasing maintenance is not required to ensure smooth turning fairleads.



### Lifeboat/tender davit and sheave bearings

ThorPlas-Blue bearings fitted to lifeboat and tender davit systems eliminate unsightly grease and improve safety as crew no longer have to grease those hard to reach locations.



### Tiller arm and jockey bar bearings

Used to replace highly loaded greased bearings, ThorPlas-Blue offers grease-free operation, saving time and money.



### Hydraulic steering gear self-aligning bearings

ThorPlas-Blue Self Aligning Bearings (SAB) solve the problems of less than desirable alignment tolerances in the hydraulic steering system design. It can also improve vibration and corrosion issues with zero pollution.



### Pivot point bushings on embarkation and loading platforms

ThorPlas-Blue removes grease and the pollution source offering a long wear life and reduced labour costs.



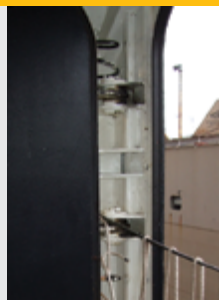
### Cranes, hoists and deck loading bearings

ThorPlas-Blue bearings will improve operation, reduce operating costs and eliminate a source of pollution.



### Winches

ThorPlas-Blue bearings can replace greased bronze bearings in towing, crane, anchor and mooring winches. Replacement is easy and straightforward.



### Watertight doors and hatches

Replacing hinge point bearings with ThorPlas-Blue reduces friction and wear ensuring smooth operation with no maintenance.



*"Recently we are using Thordon materials in more and more applications where in the past we have had costly failures and difficult maintenance. Thordon bearings for previously seized davit, fairlead and other deck machinery bearings have reduced wire and mooring rope wear and have significantly reduced replacement costs. These materials are not only saving us money but are significantly reducing management concerns over pollution."*

**Chris Joly, Principal Manager - Marine Engineering Corporate Shipbuilding, Carnival Corporation & PLC**

# CUSTOMER FOCUSED TO QUICKLY MEET YOUR NEEDS

## **Quick and Responsive Service**

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

Thordon Bearings Inc. is geared to respond quickly to new shipbuilding, repair and conversion projects. Our bearings arrive quickly, fit right and last!

## **Extensive Distribution Network**

Thordon Bearings has an extensive distribution network to supply our global customers. More than 70 distributors in 100 countries carry extensive inventories of Thordon's common bearing sizes which are backed by large regional and head office inventories. 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 system designs and solutions. We offer in-house design, CAD and the proprietary Thordon Bearing Sizing Calculation Program to help correctly size our bearings.

Our decades of experience mean that we offer the right technical support during design, machining, installation and operation.

## **Manufacturing Quality**

Thordon Bearings Inc. is a family-owned company that operates a state-of-the-art polymer processing plant and new product development facilities in Burlington, Ontario, Canada.

We manufacture to ISO 9001:2008 Quality System requirements. Contact us for references of our installations.

## **High Performance Bearings and Shaftline Products; Industry-Leading Service**

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

**Your Authorized Thordon Distributor**

# THORDON

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