

# WATER LUBRICATED BEARINGS

**THORDON**  
THORDON BEARINGS INC.

ZERO POLLUTION | HIGH PERFORMANCE | BEARING & SEAL SYSTEMS

# WORLD LEADER IN WATER LUBRICATED BEARING SOLUTIONS

## Pollution Free Bearings for Renewable Energy

The world's oceans, seas and rivers are a vast global resource of non-polluting, endlessly renewable energy and with the ever increasing demand for electrical power, harnessing this force has become a major priority.

Many companies and countries have invested heavily in developing systems that will generate power and yet still withstand the harsh underwater environment.

## Experts in Manufacturing Water Lubricated Bearings

Thordon Bearings is the world's leading manufacturer of high performance, long lasting bearing systems that require no oil or grease. Our polymers offer the best combination of strength/stiffness with flexibility/elasticity, along with high abrasion resistance.

We also have global technical support and experienced application engineers who can work with you to deliver innovative bearing solutions and provide CAD design and engineering services.

For more than 35 years, Thordon Bearings have been supplying environmentally friendly bearing solutions for thousands of hydro turbine and marine applications across the globe. Our customers include Hydro Power Generating Plants as well as Navy and Coast Guard vessels, offshore vessels, cruise ships, tankers, ferries, dredgers and many other types of commercial ships.

## Reliable. Durable. Environmentally Responsible.

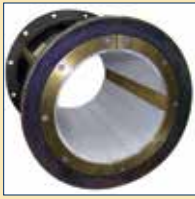
Harnessing renewable ocean energy demands bearings that are reliable, durable and environmentally responsible.

Thordon's non-polluting and maintenance free bearings are available worldwide through our factory trained distributor network that spans more than 100 countries.

## Thordon Bearings - High Performance Solutions

Thordon offers a choice of water lubricated bearings, each delivering specific advantages in unique water environments and operating conditions. Bearing diameters available in sizes over 2m (6.5') and bearing with multiple pad segments over 15m (50').





### Thordon SXL

- ◆ Working pressure to 10 MPa (1450 psi)
- ◆ Friction coefficient typically 0.10-0.20 dynamic
- ◆ Wet or dry operation
- ◆ High resistance to abrasion, shock loading and vibration



### Thordon ThorPlas-Blue

- ◆ Engineered thermoplastic for high pressure applications up to 45 MPa (6500 psi) dynamic or 60 MPa (8700 psi) static
- ◆ Full-form tubular configuration
- ◆ Very low wear in non-abrasive environments



### Thordon HPSXL TRAXL

- ◆ For high pressure applications up to 55 MPa (8000 psi) dynamic or 70 MPa (10,000 psi) static peak
- ◆ Friction coefficient typically 0.06-0.12 dynamic
- ◆ High resistance to shock loading and vibration



### Thordon Composite

- ◆ Made specifically for use in very abrasive water environments
- ◆ Stiffer and at least twice the abrasion resistance of rubber
- ◆ Lower friction coefficient than rubber



### Thordon COMPAC

- ◆ Groove configuration induces early hydrodynamic film between shaft and bearing
- ◆ Long bearing wear life in clean water applications
- ◆ Withstands high shock loads and edge loading
- ◆ Friction coefficient typically 0.10-0.20 dynamic

#### Thordon SXL Main Guide Bearings Reduce Maintenance and Downtime

*"Thordon has lasted twice as long as the previous phenolic bearing. And the longer lifespan has kept labor and material costs down while expanding uptime."*

Claude Mailloux, Planner/Supervisor  
Inco Hydro Generating Plant,  
Spanish River, Northern Ontario, Canada

#### Zero Risk to the Environment with COMPAC

*"We chose Thordon COMPAC for these vessels because these bearings are environmentally friendly, seawater lubricated and come with zero risk of pollution."*

Captain Simon Merritt, Technical Manager  
Carisbrooke Shipping Ltd.,  
United Kingdom

# CUSTOMER FOCUSED TO QUICKLY MEET YOUR NEEDS

## Quick and Responsive Service

It takes quality products to be globally successful in the water lubricated 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 solutions. Thordon bearings arrive quickly, fit right and last!

## Extensive Distribution Network

Thordon Bearings has an extensive distribution network of more than 85 distributors 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. 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 founded in 1911 that operates a state-of-the-art polymer processing plant, machine shop and new product development facilities in Burlington, Ontario, Canada.

In addition, we own a leading edge machining and polymer production plant in Slupsk, Poland.

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

## High Performance Bearings; Industry-Leading Service

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

Representative of the company "THORDON" in Azerbaijan:



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