



COSCO vessel equipped with Thordon's zero-pollution propeller shaft bearing solution

COSCO CONFIRMS THORDON SEAWATER LUBRICATION FOR **EIGHT NEWBUILD** GENERAL CARGO SHIPS

COSCO Shipping Specialized Carriers, a subsidiary of China Ocean Shipping Group (COSCO), COSCO Shipping Lines, has confirmed that the eight newbuild multipurpose cargo vessels entrusted to COSCO Shipping Heavy Industry (Dalian) Co. Ltd. will each feature a COMPAC seawater lubricated shaftline arrangement from Thordon Bearings.

CY Engineering, Thordon's authorized distributor in China will supply and oversee the installation of a COMPAC open seawater lubricated propeller shaft system designed for shaft diameters of 553mm (21.7in).

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The scope of supply, to be rolled out in two four-ship batches scheduled for August 2021 and December 2022, includes COMPAC propeller shaft bearings, shaft liners, ThorShield shaft coating, and Thordon's Water Quality Package.

Since 2007, when COSCO first used water lubricated bearings on a pair of 5000-unit pure car/truck carriers (PCTC), CY Engineering has supplied Thordon's award-winning system to more than 90 COSCO ships, including tankers, bulk carriers, semi-submersible, ro-ros and multi-purpose cargo ships.

"I think the success of this long-term cooperation is due to the high-quality products/systems and excellent after sales services provided. COSCO feels very satisfied with the COMPAC system and is leading the way in environmentally sustainable operations," said Alex Li, CY Engineering's Managing Director.

In 2015, CY Engineering captured its largest COSCO contract to date. The order for 22 oil-free COMPAC shaftline systems also marked Thordon's largest single order for a merchant vessel owner.

Sam Williams, Thordon's Regional Manager for Asia, said: "This new order is indicative not only in the more environmentally focused seascape but also the shipowner's commitment to sustainable operations."

"Chinese shipbuilders, like the COSCO Dalian Shipyard, are leading the way in 'greening global trade' by specifying competitively priced seawater lubricated shaftline arrangements. China is now increasingly specifying quality products from European and North American OEMs. This is reflected in the quality of a new generation of Chinese-built ships."

The award-winning COMPAC system is a high-performance seawater-lubricated bearing system primarily for "blue water" operating environments.

Specially formulated to reduce start up friction and eliminate stick-slip, an open seawater lubricated propeller shaft system offers considerable advantages to ship owners, not only in bearing wear life predictability and reliability, but they are also more economical to maintain, easier to install and are future compliant.

The COMPAC system, which typically includes bearings, shaft liners, Water Quality Package, ThorShield shaft coating and a forward seal, is guaranteed to meet Classification Society propeller shaft bearing wear specifications for 25 years. 

THORDON'S **DREDGER** **REFERENCES GROW** WITH NEW ORDERS FROM SUEZ CANAL AUTHORITY



The Thordon Composite bearing being freeze fit into the cutterhead shaft.

The Suez Canal Authority (SCA) has replaced the rubber cutterhead bearings on the 102m (335ft) dredger *Mahmoud Younis* with a water-lubricated Composite bearing from Thordon Bearings.

The retrofit, which took place at the Port Said Shipyard's floating drydock, follows the success of a similar installation aboard *CSD Mashhour*, the largest dredger in the SCA fleet. Its rubber cutterhead bearings were replaced last year, providing the first Thordon installation with the Authority.

Mahmoud Younis, named after the SCA's former Chairman, and capable of dredging down to depths of 25.3m (83ft), was fitted with a 600mm (23.6in) outside diameter Thordon Composite bearing in August.

The bearing was machined and finished by Alexandria-based Nefertiti Marine, Thordon Bearings' authorized distributor in Egypt, prior to being freeze-fitted to the vessel's cutterhead during a scheduled drydocking.

Karim Abd El Karim, Engineering Manager, Nefertiti Marine, said: "We are delighted these first projects with the SCA, a new customer for Thordon Bearings, have been a success. The performance of the Composite installations aboard *Mashhour* and the Bucket Wheel Excavator Cutter Suction Dredger *Barakat* led to this new order."

Khaled Youssef, Fleet Manager, Suez Canal Authority, said: "*Mashhour* has been operating flawlessly for 12 months with the Thordon Composite bearing. In that short period of time, we have experienced reduced vessel operating costs and less downtime compared to the previous installation. The Composite bearing is more environmentally friendly since it does not require any lubricating grease."

Nefertiti Marine and Thordon are now working with the SCA to replace propeller and rudder bearings on other vessels in the organization's fleet with Thordon's long-wearing water lubricated elastomeric polymer tech.

The dredging department of the Suez Canal Authority is responsible for maintaining the canal to ensure all types of vessels can transit safely. Its fleet includes five cutter suction dredgers, three self-propelled hopper suction dredgers and several barges, tugs, pilot boats and floating cranes.

SCA vessels are also deployed to work on external dredging projects at ports around Egypt and the Middle East.

George Morrison, Thordon's Regional Manager – EMEA & ANZ, said: "That the Suez Canal Authority has returned to Thordon so soon after its first ever application is a clear sign that the Composite bearing is the best solution for dredging applications. Thordon has been supplying Composite bearings to the dredging sector for 35-years. This is due to the enviable wear rates of the bearing's black homogeneous material, GM2401, which is fused to a stiff, high strength (yellow) polymer sleeve to provide unprecedented performance and environmental safety." 

LINER SHIPPING MOVES TO WATER LUBRICATION, GATHERS PACE WITH X-PRESS DELIVERY



Thordon's COMPAC propeller shaft bearing installed with the Bearing Condition Monitoring System

The Super Eco 2700 containership China's Zhoushan Changhong Shipyard built for Singapore-headquartered X-Press Feeders launched with a complete water lubricated propeller shaft arrangement supplied by Thordon Bearings.

CY Engineering, Thordon's distributor in China, completed the installation and commissioning of the Thordon scope of supply aboard X-Press Mekong (Hull Number CHB085).

The MARIC-designed, DNV-classed vessel features Thordon's award-winning COMPAC propeller shaft bearings, bronze shaft liners, a Water Quality Package, ThorShield shaft protection coating and the company's proprietary bearing condition monitoring system (BCM).

This new X-Press vessel, that was ordered in 2018 with options for an additional two plus two, was delivered at the end of 2020.

Sam Williams, Thordon Bearings' Regional Manager for Asia and Greece said that X-Press Feeders, the world's largest independent common carrier with a fleet of more than 110 Panamax vessels, specified the Thordon system after operating a COMPAC-installed vessel acquired two years ago under a Sale & Purchase agreement.

"Based on their experience with the system installed aboard the 2018-built X-Press Kabru [formerly Washington Trader], which is based on the same Super Eco 2700 design, the owner specifically wanted the open water lubricated shaftline arrangement for its newbuilds. This is a testament not only to the success of the MARIC design, but also to the environmental performance and cost-saving benefits of a water lubricated system," said Williams.

Indeed, a key factor in the shipowner's decision to specify the arrangement was to further enhance a design already optimised for "clean shipping".

Commenting on the vessel's green credentials, Williams said: "With a hull form designed for maximum fuel-efficiency and reduced emissions, the move away from an oil-lubricated shaft to a more environmentally acceptable solution was a significant motivation. The experience the owner had with X-Press Kabru proved the COMPAC system's operational and environmental performance but also showed that long-term operational savings can be achieved with water lubricated tailshaft bearings. A very cost-effective alternative."

X-Press Mekong was the 4th ship to be built based on the Super Eco 2700 design to use Thordon's proven water lubricated system.

All the vessels in this series have been designed to meet DNV's stringent tailshaft monitoring notation TMON, which means a water-lubricated shaft has the same extended shaft withdrawal inspection periods as an oil-lubricated system.

Anna Galoni, CEO, Thordon Bearings, said: "X-Press Feeders has a clearly defined set of environmental sustainability standards, so we are delighted it has incorporated COMPAC into the design and build of this super eco-friendly newbuild. The first COMPAC newbuild in the X-Press fleet is a further indication of the container shipping segment's commitment to improving the ocean environment."

It does appear that liner shipping companies, in particular, are avoiding oil-lubricated propeller shaft bearings in favour of a seawater-lubricated system.

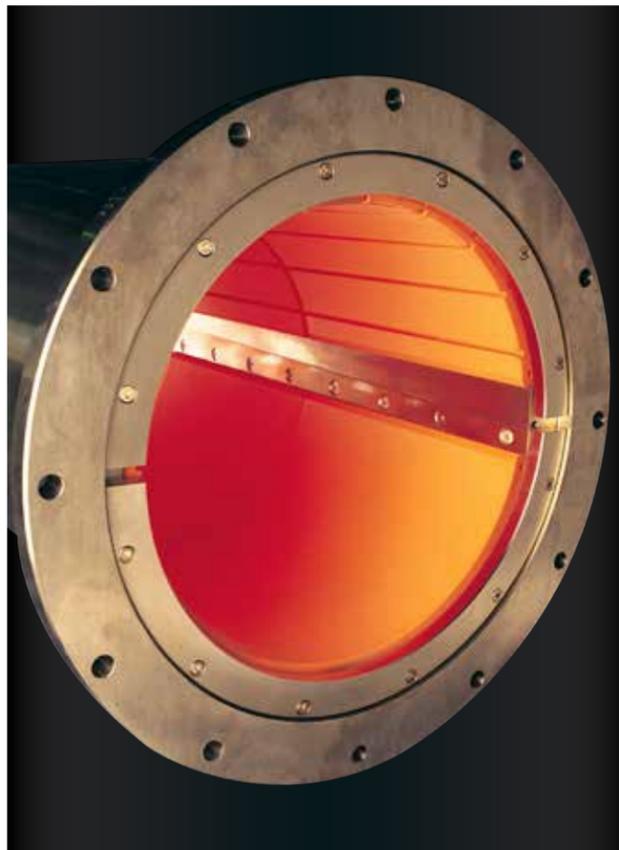
In 2015, Thordon inked a milestone agreement to supply the seawater lubricated bearing system to two 3600 TEU Jones Act boxships. And in 2019 the COMPAC-operating Log-In Polaris was delivered to a Brazilian shipowner. That same year China's Guangzhou Wencong Shipyard delivered the final vessel in a series of two newbuild containerships to a Greek owner. All three of these vessels are based on the Super Eco 2700 design incorporating a COMPAC shaft line.

Commenting on the bearing systems' popularity amongst Chinese shipbuilders, Alex Li, Managing Director, CY Engineering, said: "The Zhoushan Changhong Shipyard is well equipped to install water-lubricated systems. The Thordon system is one of a number of environmentally sustainable solutions now widely adopted across Chinese yards to meet environmental sustainability goals. About 40 shipyards are experienced with the arrangement and are enthusiastic about the COMPAC system." 



Thordon's ThorShield shaft protection coating applied to the propeller shaft

THORDON PROPELLER SHAFT BEARING WEAR RESULTS MEAN 30 YEARS OF MAINTENANCE- FREE CRUISING



Thordon's COMPAC bearing with single key design.

A recent inspection of the twenty-year-old water-lubricated propeller shaft bearings installed on a twin-screw cruise ship were found to be within classification society parameters and suitable for continued use for a further ten years of operation.

At the shipowner's request, Thordon Bearings – the market leader in water lubricated bearing technologies – attended the docking in Brest, France, to assess the propeller shaft liners and outboard bearings of a 2500 passenger-capacity cruise ship. The award-winning COMPAC bearings were installed in 1999.

Thordon's Business Development Manager – Marine, Jeffrey Butt, said: "After more than twenty years of service and 6100 annual operating hours, bearing clearances were significantly below Lloyd's Register's 10.5mm (0.41 in) maximum allowable clearance. The maximum clearance recorded was 7.34 mm (0.29in) on a starboard shaft bearing. The vessel could potentially operate these same bearings for another ten years."

The condition of the 83,000gt vessel's shaft liners – themselves indicative of successful bearing performance – was equally impressive.

Gus Juarez, Thordon Bearings' technician from the Global Service & Support team involved in the inspection, said: "There were some minor circumferential marks on the shaft liners, but they looked well-polished. There was no indication of circumferential grooving or damage. All liners were determined to be in satisfactory shape."

Copies of all the inspection videos were provided to the Lloyd's Register surveyor and shipowner representatives following the October drydocking.

According to Butt, the reliability and near-obsolete maintenance requirement of a seawater lubricated shaftline is one of the main reasons why the cruise sector increasingly favours a conventional propeller shaft arrangement over a podded propulsion system.

"We have accumulated data over the past eight years revealing more than 25 incidents where the pod failures resulted in cancelled or changes to cruise itineraries. I know one vessel that has been in and out of drydock five times in the past eight years, resulting in 55 itinerary changes, two cancelled sailings, several shortened port stays, and thousands of dollars in compensation. You don't seem to have this kind of bother with a shafted ship.

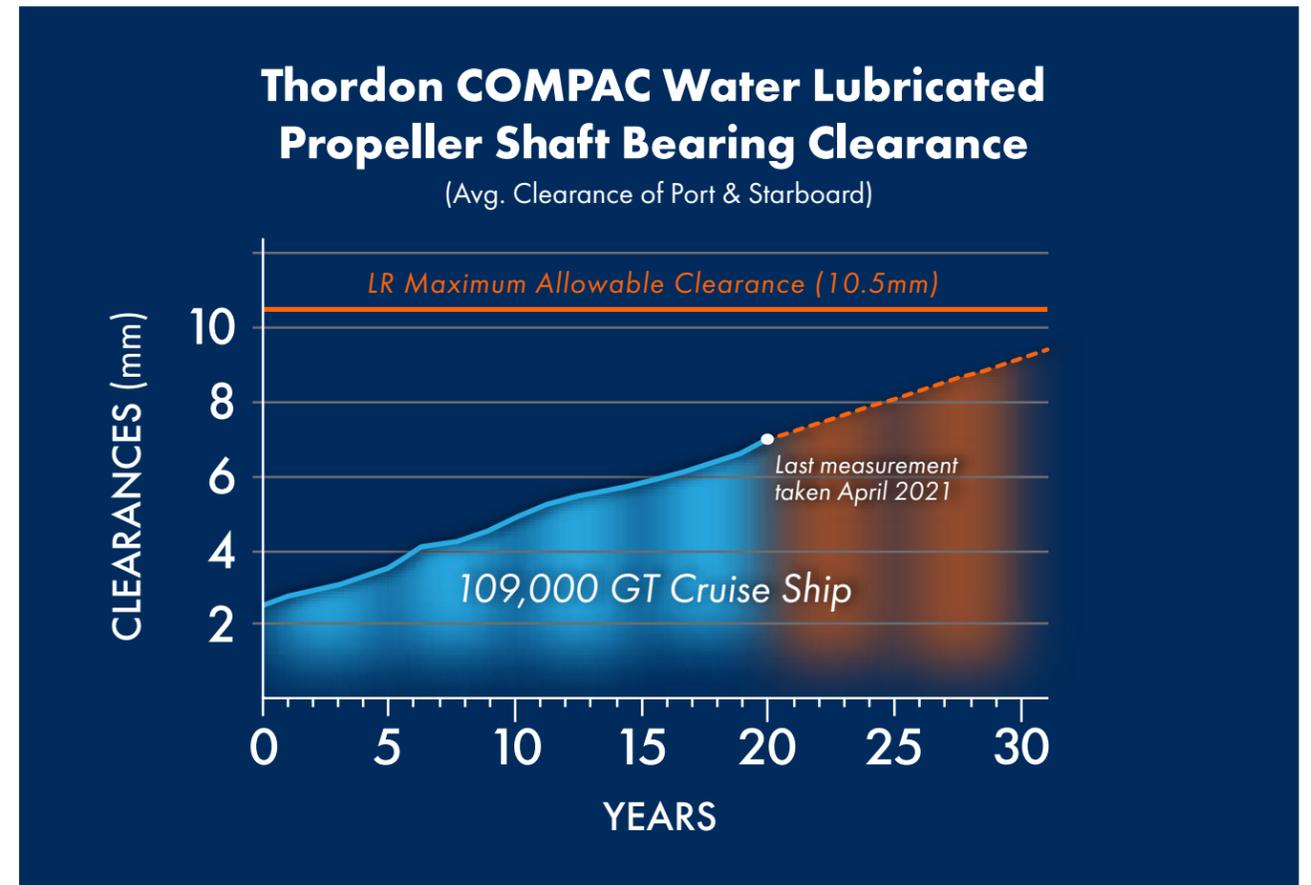
"Compared to pods, a ship fitted with COMPAC has an enviable track record. Performance, reliability and environmental sustainability is unmatched."

The shaft inspection at the Brest yard is the second cruise ship to emerge from a drydocking with a Thordon bearing in near perfect condition after decades of operation.

In September 2015, during the inspection of a sister ship, surveyors recorded a bearing wear down of 7mm (0.28in). This was 17 years after the system was installed.

Craig Carter, Director of Marketing and Customer Service, Thordon Bearings, said: "Based on our cruise installations to date, a seawater-lubricated propeller shaft system typically has a wear-life of 25 years, saving millions in maintenance costs and emergency repairs. There are no lubricants to purchase, no service contracts to sign, reduced maintenance budgets and zero pollution risk."

Thordon has supplied water-lubricated bearing systems to cruise ships operated by, among others, Princess Cruises, Seabourn, Disney Cruises, Viking Cruises, MSC Cruises, P&O Cruises, Oceania, and Regent Seven Seas. 



FORSEA FERRIES OPENS THE DOOR FOR THORDON'S THORPLAS-BLUE BEARINGS



Thordon Bearings completed a retrofit its grease-free ThorPlas-Blue bearings to ForSea Ferries' *Tycho Brahe*, one of the world's most environmentally friendly ships, at its scheduled drydocking.

The decision followed the success of the bearing installation to the bow doors of *Aurora*, the first of two high-intensity battery-operated ferries converted by Sweden's Oresund DryDocks and delivered in 2016.

It was the first ever installation of a Thordon self-lubricating bearing to the bow doors of a ro-ro ferry.

Christian Andersson, Senior Chief Engineer, *Aurora*, said: "*Aurora* and her sister ship *Tycho Brahe* are the first ferries of this size running on 100% battery power. This is a huge sustainable benefit as we save about 23,000t of CO₂, 13t of NO_x and 5t of SO_x being emitted to the atmosphere each year. As a customer focused ferry operator striving for zero emissions, we are interested in any solution proven to reduce our environmental footprint."

Tommy Holmgren, Sales Director with Thordon's authorized distributor Duwel Sweden AB, introduced Andersson to the Thordon product portfolio when he was working as a shipyard project manager.

"Through Tommy, I gained a very positive experience with the Thordon products and took my learnings with me when I joined the ForSea family. ThorPlas-Blue bushings are now installed on the bow visor of *Aurora* and have been retrofitted to *Tycho Brahe*.

"We are very happy with the installation. We operate the 32t bow doors 48 times a day. But we found with frequent opening and closing the bronze-type

bushings seized and often cracked. We don't have this problem with ThorPlas-Blue. We have a much better operational experience. We are now looking at Thordon's water-lubricated and grease-free bearings for more applications in other vessels in the fleet."

Since sustainability is one of ForSea's most important values, a bearing that mitigated the risk of pollution was a key factor in the decision-making process, said Andersson.

"Environmental sustainability is a very important factor in meeting our commercial goals but from a technical perspective, we have found ThorPlas-Blue significantly extends the life of the bow visor's bearing, reducing maintenance requirement and associated costs. Since 2016, when Oresund DryDocks (ODD) installed the bearing, bow door reliability has improved and *Aurora* off-hire time has decreased."

Mats Holst, Production Manager, Oresund DryDocks, concurred. "As a repair yard we find the Thordon material much easier to handle, easier to machine, and causes less wear and tear on our machines and tools. The main difference we can see is that neither the shaft nor rotating parts show any wear when ThorPlas-Blue is installed, which saves the owner time and money during drydock repairs."

While Oresund DryDocks does not as yet specify Thordon products as standard, Holst said the yard does have a consignment of Thordon stock and is able to calculate and machine the bearing to the correct tolerances. "We are also in contact with Duwel Sweden which provides 24/7 support to the yard," he said.

Holmgren said: ForSea Ferries and Oresund DryDocks are long standing customers for Thordon and Duwel, so we are immensely proud to have been involved in the development of these groundbreaking vessels – a first for Thordon!

"We do find that once a customer installs its first Thordon bearing, they tend to find other applications for the technology. We do anticipate further orders as more owners follow ForSea's lead and convert vessels for greater environmental sustainability and zero pollution."

Built in 1991 and 1992 respectively, the 111m long sisters *Tycho Brahe* and *Aurora* operate fully on battery power on the route between Helsingborg, Sweden, and Helsingør, Denmark. The vessels plug into a battery recharging point at each port for five minutes to provide enough power for the twenty-minute crossing. 



ForSea Ferries has provided Thordon with its first reference for ThorPlas-Blue bushings to the bow doors of a ro-ro ferry



ForSea's Aurora, equipped with ThorPlas-Blue bushings

NMDC COMPLETES UMM AL ANBER REFURBISHMENT WITH THORDON COMPOSITE



Thordon's Composite bearings being prepared for installation

Umm Al Anber, a 72m (236ft) heavy duty cutter suction dredger operated by Abu Dhabi-based National Marine Dredging Company (NMDC) has completed the refurbishment of its cutterhead shaft bearings as part of an extensive refit at Dubai Maritime City.

Thordon Bearings' Dubai-based distributor for the Middle East, Ocean Power International LLC (OPI), replaced the cutterhead and intermediate line shaft bearings like-for-like with Thordon's water-lubricated Composite system. The turnkey project included shaft dismantlement, laser alignment, in-situ line boring, calibration, installation and commissioning.

Mohammed Fawzy Khalifa, Fleet Manager, NMDC, said: "We have been using Thordon's grease-free elastomeric polymer bearings since the 1990s. Compared to traditional rubber cutterhead bearings, we find that Thordon Composite reduces vessel operating costs substantially. The bearing requires no lubricating grease and extends bearing wear life fourfold, which is very impressive given the type of environments in which these dredgers operate."

The 1995-built *Umm Al Anber* has an 800mm (31.5in) diameter suction pipe and can dredge to depths of 16m (52.5ft).



Composite cutterhead bearing installed on the Umm Al Anber

Rafid Qureshi and Ayman Saad, Managing Partners, Ocean Power International LLC, said: "Together, OPI and Thordon Bearings have been optimising the performance of NMDC's cutterhead dredgers for more than two decades. Thordon Composite bearings are the preferred choice for NMDC dredgers."

NMDC has converted all of its dredgers except two to the Thordon system. However, Qureshi revealed OPI is in discussions to convert the rubber bearings aboard these final two vessels. "We are also in talks to convert the intermediate line shaft bearing to Thordon Composite. Replacing worn out rubber bearings with Thordon's long lasting material offers NMDC excellent wear rates, high performance in harsh, abrasive environments, and reduced OPEX," he said.

George Morrison, Thordon Bearings' Regional Manager – AMEA & ANZ, added: NMDC – one of the world's leading dredging companies with a fleet of more than 90 vessels – has established a strong reputation for delivering high quality projects and services. It is nice to think that Thordon's water lubricated Composite cutterhead shaft and intermediate bearings have played an important role in that success."

Late in 2019, OPI and Thordon replaced the rubber cutterhead shaft bearings on the cutter suction dredger *Al Khatem* and beaver dredgers *Embarka 2*, *Embarka 5* and *Embarka 6*. The projects followed the success of similar conversions to the *Al Sadr*, *Al Mirfa*, *Al Hamra*, *Umm Al Zemoul* and the beaver *Dredge 2*.

After 100,000 operating hours dredging up silt, sand, rocks and stones in some of the toughest marine environments the Thordon Composite bearing installed on the *Al Mirfa's* dredge cutterhead shaft "did not need replacing and was still in perfect working condition," said Morrison.

"This is due to the bearing's black homogeneous material, GM2401, which is fused to a stiff, high strength (yellow) polymer sleeve to provide unprecedented performance and environmental safety. Thordon Composite bearings are available for a wide range of shaft diameters in both tube and stave configuration. 

EUROPEAN YARDS SPECIFY THORDON SYSTEM AS STANDARD FOR DECK MACHINERY

Thordon Bearings' ThorPlas-Blue has established itself as the bearing of choice for deck equipment, with European shipyards and owners frequently specifying the grease-free bearing system as standard for vessels' winches, fairleads, davits, capstans and windlasses.

Sweden's Falkvarv AB, Oresund Dry Docks, and the Oskarshamnsvarvet shipyard have been particularly strong proponents of the grease-free bearing, with these yards maintaining an inventory of ThorPlas-Blue stock with which to replace worn and costly bronze bearings and bushings when vessels drydock for repairs.

Tommy Holmgren, Sales Director, Duwel Group, Thordon's authorised distributor in Sweden, said: "The ThorPlas-Blue inventories these yards keep could be indicative of the number of vessels drydocking with bronze bearing problems since approximately 96% of the inventory is used to replace the greased bearings in mooring winches.

"Since Falkvarv first retrofitted ThorPlas-Blue bearings to the mooring winches aboard two coastal tankers the yard has always recommended that ship owners retrofit the non-metallic bearing to their vessels. It is the same with the Oresund and Oskarshamnsvarvet yards."

ThorPlas-Blue is a simple-to-machine-and-install self-lubricating bearing and does not require any lubricating grease. The economically and environmentally acceptable solution is especially pertinent to sensitive areas like the Baltic Sea.

Outside the Baltic area, Romania's Constanta Shipyard has just completed the retrofit installation of ThorPlas-Blue bearings to deck winches and windlasses aboard a 105,042dwt Aframax tanker operated by a Greece-based ship manager.

This project followed a similar retrofit in July 2018 to a sistership at a Piraeus drydock, where anchor and mooring winch bearings were replaced with the Thordon solution.

The 105,459dwt tanker reported pieces of metal on deck and excessive bearing clearances in bronze rope drum bearings. The biggest clearances were recorded in the port and starboard anchor winches and the forward starboard mooring winch. Five shafts were dismantled and inspected, with excessive wear and corrosion recorded on the shaft journals, reaching up to 4.50mm (0.18 in) in diameter.

All in all, twelve bronze bushings were replaced with the self-lubricating ThorPlas-Blue bearing, each of which was machined to achieve 0.3mm (0.01 in) final interference (running) and shrunk to fit housings using solid carbon dioxide (dry ice).

Commenting on the project, George Morrison, Thordon Bearings' Regional Manager – AMEA & ANZ, said: "We have been steadily replacing the bronze bushes in deck machinery across this ship manager's fleet over the past five years and now have the Thordon solution installed aboard in over 30 vessels.

"The bronze bushes created problems when they came in contact with seawater – a chemical reaction resulting in oxidization. They were becoming too costly to repair and maintain. The ship manager has had very good results with the Thordon system, with no wear or damage. They have also proven very easy to maintain."

Morrison intimated that the Thordon system could soon be specified for the vessels' steering gear. "We are currently carrying out load analysis of the steering gear on a number of vessels," he said.

Minerva Marine is another Greek owner to frequently specify the Thordon technology. Since 2016, when ThorPlas-Blue replaced the greased bronze mooring winch bearing aboard the crude oil tanker *Minerva Hellen*, the owner has eliminated the costs and maintenance associated with the constant application of grease and has now installed the bearing on other assets.

John Kostalas, Spare Parts Manager at Thordon's Greece distributor Technava, said: "Aside from the environmental advantages, yards and owners in the region are opting for ThorPlas-Blue as standard due to their distinct commercial advantages. Since they don't wear out, maintenance is negligible, leaving yard workers and crew to get on with other jobs. Retrofitting these bearings saves shipyard workers and ships' crew a considerable amount of time compared to repairing greased bronze bearings."

Morrison continued: "There is increasing global awareness of the impact oil and grease lubricated bearing systems can have on the surrounding marine environment, and while ThorPlas-Blue alleviates these concerns, the bearing facilitates a smoother, more reliable operation of deck machinery since seized bearings from inadequate greasing is no longer an issue."

The bearing can be machined and installed quickly into a variety of applications where greased bronze bearings are traditionally installed, including lifeboat and tender davit systems; fairleads, which can have a huge impact on mooring ropes that wear quickly; tiller arms and jockey bars; cranes and hoists; pivot point bushings; winches, capstans, water-tight doors and hatches. They can also be supplied as a Self-Aligning Bearing (SAB) for use in rudder and steering gear systems to counter the alignment problems typical of hydraulic steering systems. 



Thordon's ThorPlas-Blue retrofitted to winches aboard a tanker



ThorPlas-Blue can be machined and installed quickly into a variety of applications where greased bronze bearings are traditionally installed

THORDON WEBINAR SUCCESS OPENS DOOR TO MEXICO'S TUNA FISHING VESSEL MARKET



Thordon's SXL rudder bearing installed on the *María Luisa*

A series of well-attended webinar conferences broadcast during the first Covid lockdown in 2020 has resulted in Thordon Bearings securing a contract from a Mexican fishing vessel operator.

Thordon's SXL rudder bearings were installed on the 1174gt Grupomar-operated fishing vessel *María Luisa* at the Mexican Navy Dry Dock in Manzanillo, Mexico, marking the Canadian bearing manufacturer's entry into Mexico's expansive tuna fishing fleet.

After attending a series of online technical sessions on how water-lubricated stern tube bearings can reduce operational costs, Grupomar became interested in the Thordon technology but enquired if similar solutions were available for other parts of ship.

Grupomar, which currently operates a fleet of eight tuna fishing vessels was looking to replace its bronze rudder bearings with a more effective solution.

Arturo Selvas, Managing Director, TZ Industrias, Thordon Bearings' authorised distributor in the region, said that while the operational cost benefits of a grease-free system was an important consideration, "it was the low weight of the Thordon SXL rudder bearing that clinched the deal".

"Compared to the approximately 240kg (529lb) weight of a typical bronze rudder bearing of the size required, Thordon's polymer SXL rudder bearings are about 83% lighter, and much easier to install in machinery spaces where space is limited. Replacing the pintle bearing with a 40kg (88lb) SXL bearing solved the problem."

Bearing replacement work was carried out at the Manzanillo drydock, with service personnel from TZ Industrias providing the owner and yard with technical drawings and information about SXL's special features, machining and installation requirements.

Grupomar Fleet Manager Juan Nava said: "The installation was much easier than expected. Based on our first operational experience of the Thordon material, we believe rudder operation will now be significantly smoother than it was with a traditional bearing. We don't anticipate any technical issues and expect an extended rudder life due to the SXL bearing material's shock resistant properties. We can also contribute to a cleaner marine environment as these bearings eliminate the risk of pollution."

Commenting on the success of the webinars, Egnard Bernal, Thordon's Business Development Manager, Marine - LATAM, said: "A key aspect of the webinars was to showcase the developments we have made in grease-free polymer technology, so we are pleased it resonated with so many fishing vessel and workboat operators.

"Greased brass bushings have been used for rudders and rotating machinery for many years, but the technology is out of sync with today's requirement for a low-cost, lightweight, environmentally safe, crew-friendly bearing system.

Bernal, who presented the technical webinars in the Latin America region, furthered: "We are delighted that these webinars have been a success, resulting in a contract win with Grupomar, a new customer for Thordon Bearings. With Covid travel restrictions it can be difficult for companies to get their messages across, but this has shown the extensive reach that this type of online technical conference can have."

TZ Industrias and Grupomar are now discussing deck equipment upgrades with Thordon's grease-free ThorPlas-Blue bearings for when the fishing fleet enters drydock after the season ends in October.

The shipowner is also considering converting its oil-lubricated stern tube bearings to Thordon's seawater-lubricated propeller shaft bearings at future drydockings. 

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WHAT ARE YOU LEAVING IN YOUR WAKE?

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