# Newswo RKS

### ENVIRONMENTALLY FRIENDLY BEARING SOLUTIONS

## NEW PROPELLER SHAFT COATING COMPLEMENTS WATER LUBRICATED BEARINGS

Thordon Bearings Inc., a world leader in grease and oil-free bearing solutions has announced the introduction of Thor-Coat, a new proprietary shaft coating specially formulated to address the recognized risk of traditional coating failures on water lubricated propeller shafts.

Thor-Coat was specifically developed to complement Thordon's COMPAC water lubricated propeller shaft bearing system with the objective of providing corrosion protection for a minimum ten-year period in service. Thor-Coat addresses the issue of current shaft coating systems not being sufficiently reliable to allow extension of shaft withdrawal periods beyond five years. Thordon is also working closely with the Classification Societies to develop approval for other techniques, such as borescoping, that facilitate inspection of the bearings and coating without withdrawing the shaft.

A toughened, 2-part epoxy coating, Thor-Coat is up to nine times more flexible than existing products currently approved for use as propeller shaft coatings. ThorCoat was subjected to the full-scale  $180^{\circ}$  bend test and did not crack whereas all other products tested showed initial cracking at a much lower bend angle. In a propeller shaft application, or in other similar applications where a coating must be durable, yet flexible, Thor-Coat's enhanced elasticity and toughness will provide corrosion protection over longer service periods. Easily applied on a rotating lathe to a thickness of 2mm (0.08"), application is straightforward, as Thor-Coat is a one-coat product.

Should Thor-Coat suffer impact damage, it tends to fail locally resulting in some of the coating remaining on the shaft continuing to offer corrosion protection. If the coating is damaged to the point where corrosion does occur, the corrosion is limited to the damaged area only and will not migrate along the shaft under the coating to unexposed areas. Localized damage can be easily repaired if necessary.

Thor-Coat currently has provisional approval from Lloyd's Register, ABS and



Bureau Veritas while being noted by DNV. Other Classification Society approvals are pending and expected shortly.



Easily applying one coat Thor-Coat using a doctor blade mounted on a lathe

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