

Lignum-Vitae

Water Lubricated Bearings

Making history for 165 years in the fastest, most powerful ships and submarines in maritime history while eliminating current EPA compliance issues.

Recent EPA rulings for accidental oil spills is leading conversions back to water lubricated solutions. Lignum-Vitae is the only water lubricated technology that can operate at a zero clearance to replace all oiled and composite bearing types. Converting to Lignum-Vitae will eliminate all potential EPA or DEQ lawsuits and fines for accidental spills along with lower insurance rates from reduced liability. We can engineer existing oiled equipment back to a water lubricated system and avoid all future threat of oil spills.



Custom Marine Bearings



Lignum-Vitae Water Lubricated bearings commonly replace composite, plastic, bronze, babbitt and oil filmed bearings. Lignum-Vitae is the first water lubricated technology with unmatched longevity in water applications. It has tremendous load bearing and unique shock absorbing qualities that no other material can match. Lignum-Vitae is the only material with over 130 years of proven success.

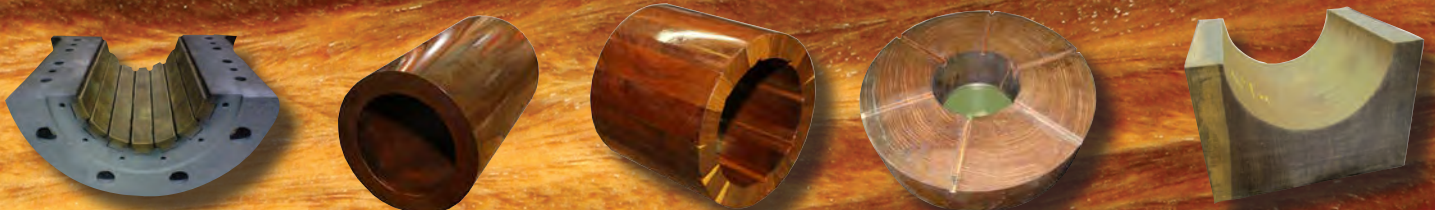
Benefits of the Material as a Stern Tube Bearing

- 100% bearing material
- Low friction
- Easy installation
- Non conducting
- High edge load
- Run of the river or salt water applications
- Low maintenance
- Easy to machine
- High shock load
- Self lubricating
- Custom made

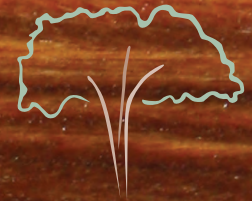


Lignum-Vitae has been the Gold standard in Hydro water lubricated bearings for over 130 years. There is no other bearing that has been in existence longer or with more real world experience. We can help guide design decisions that will add longevity, reliability, remove all threat of oil and grease.

A Brief History from: United States Naval Institute proceedings, Volume 45 P. 1929
Lignum-vitae, The Vital Wood.—The propeller shaft of every battleship, every destroyer, every transport, in fact, every large steamship, revolves in a wooden bearing at the stern end. Of all the thousands of woods in the world, true lignum-vitae, is the only one that has been found equal to this exacting service.



Marine Stern Tube Bearings



Lignum-Vitae North America

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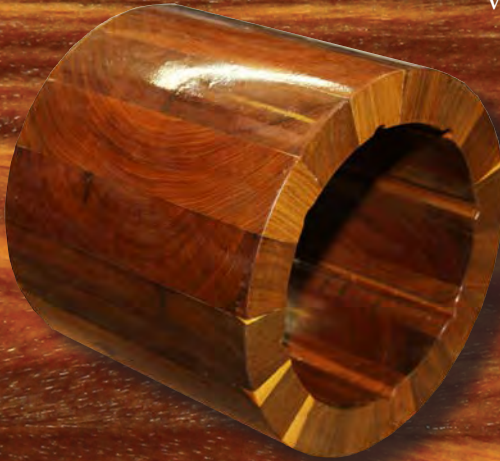
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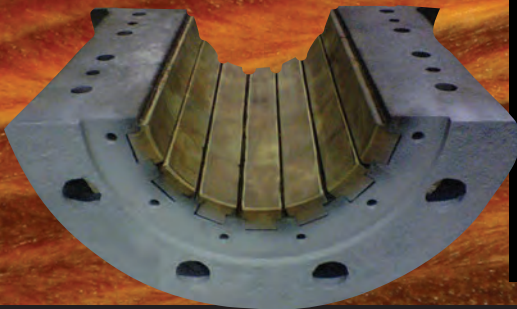
Shell Bearings



Stern Tube Bearings



Stave Bearings



Stacked Block



Horizontal Bearings



The following are notable "first" bragging rights enjoyed by Lignum Vitae

- First successful stern tube bearing for rotating shafts patented in 1852.
- First bearing to make transatlantic voyage in 1856.
- First transatlantic cable laid 1856 by the SS. Great Eastern (Western)
- First used in largest non-nuclear Icebreakers Polar Star and Polar Sea.
- First nuclear submarine USS Nautilus used lignum vitae in shaft strut bearings.
- Fastest transatlantic voyage in 1952 by SS United States averaging 39.71 MPH that stands today.