

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.

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.

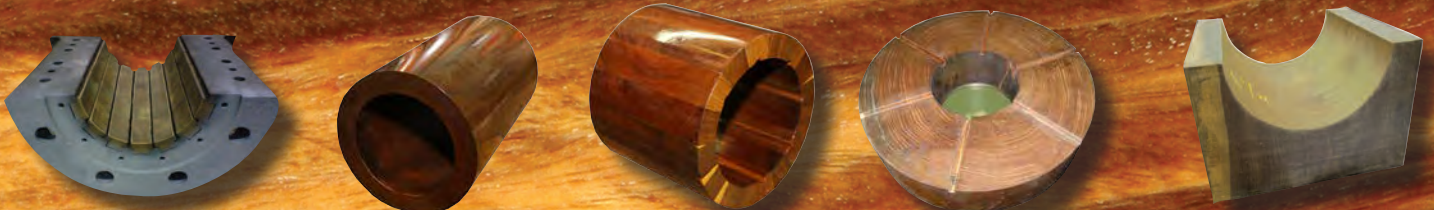


**Benefits of the Material as a Stern Tube Bearing**

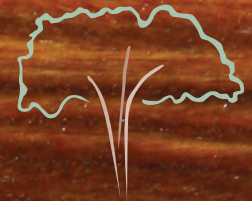
- 100% bearing material
- Low friction
- Easy installation
- Non conducting
- High edge load
- Run of the river or salt water applications
- Low maintenance
- Easy to machine
- High shock load
- Self lubricating
- Custom made



**Custom Marine Bearings**



# Marine Stern Tube Bearings



Lignum-Vitae North America

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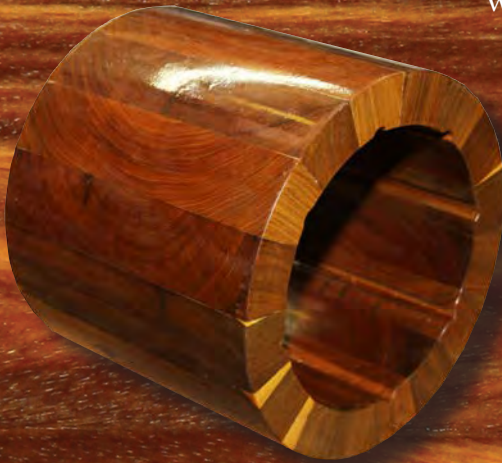
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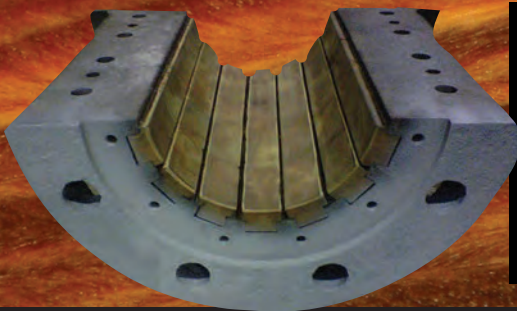
## Shell Bearings



## 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.