Low maintenance, long life

Vesconite

rudder bearings

- No swell
- High load capacity
- Outlasts bronze

www.vesconite.com

Vesconite
Rudder Bearings

Vesconite is an internally lubricated bearing material - designed for low wear with minimal maintenance. Ideal for rudder bearings worldwide.

Vesconite is dimensionally stable with a negligible water swell and a low thermal expansion rate - clearances can be reduced giving a longer bearing life and more stable rudders with reduced vibration.

Vesconite carries high loads and can safely be designed to 30 MPa (30 N/mm^2). This is much higher than the 10 MPa limit used by many ship classification societies for rudder bearings. The strength of Vesconite is not reduced by water absorption - no softening.

Vesconite is internally lubricated giving a low friction even without grease. Complex lubrication systems can be reduced or even removed. Maintenance service intervals are lengthened and environmental harm reduced.

Vesconite gives both a long bearing life and reduced wear to expensive shafts - a significant cost reduction.

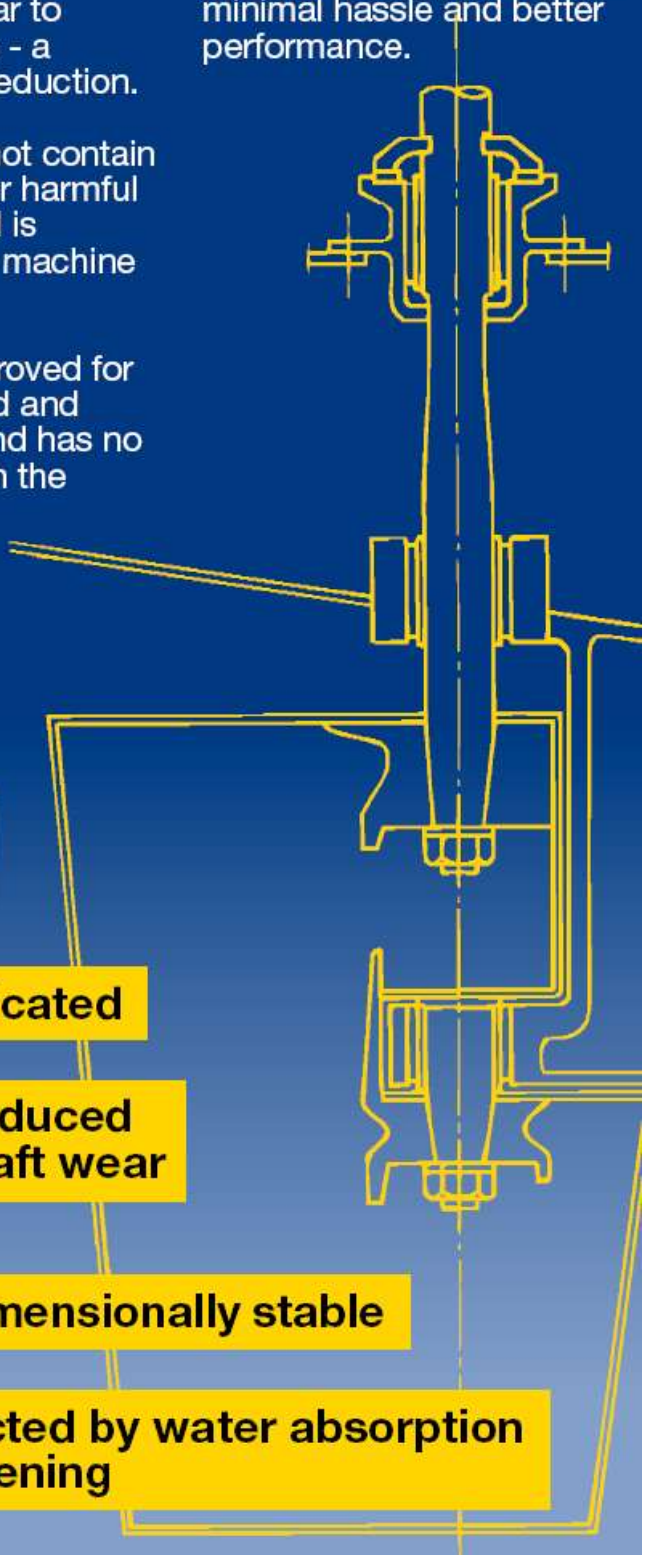
Vesconite does not contain asbestos or other harmful components and is therefore safe to machine and use.

Vesconite is approved for contact with food and drinking water and has no adverse effect on the environment. Vesconite can be machined on standard equipment.

Vesconite does not change shape or size after machining.

Close clearances and tolerances can be maintained with confidence - no stress relief.

Vesconite rudder bearings perform - even under non-ideal situations. Vesconite bearings give a long life with minimal hassle and better performance.



High load capacity

Internally lubricated

Reduced shaft wear

No swell

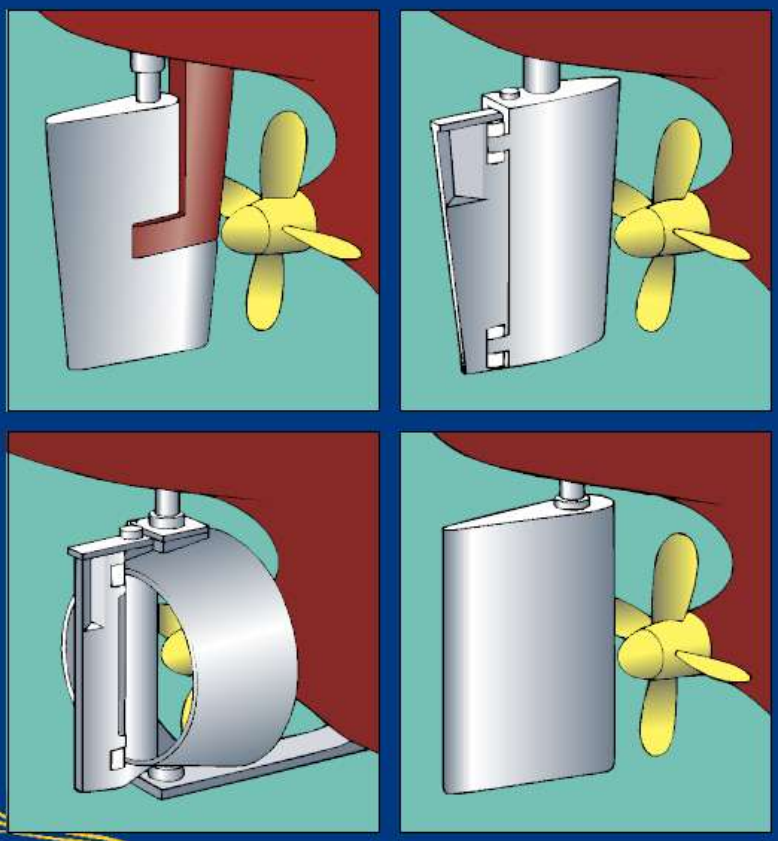
Dimensionally stable

Maintains clearances

Not affected by water absorption - no softening

Vesconite Rudder Applications

Vesconite offers advantages for a wide range of rudder types and configurations: Upper and lower pintle bushes, Steerable propellors, Flap rudders, Efficiency rudders, Spade rudders and others.



Vesconite is approved by major classification societies

ISO 9001 QUALITY ASSURANCE

SABS

The advantages of Vesconite compared to other materials:

Bronze

Bronze must be lubricated to operate. Even with grease, bronze has a higher friction than Vesconite.

Internally lubricated Vesconite has a lower friction than bronze with grease. Vesconite can even run dry.

Elastomers

Elastomers lack dimensional stability - they absorb water and have a high thermal expansion. Larger clearances must be used resulting in a more unstable shaft and a reduction of the allowable wear life.

Vesconite does not swell in water and has a higher load capacity than elastomers. No stress relief during machining.

Laminated & composites

Laminated materials tend to absorb water with the potential to swell and delaminate. Laminated materials can result in high shaft wear and a noisy operation.

Vesconite is a homogenous material with no water swell and no chance of delamination. Vesconite bearings are quiet with no shaft wear.

Rubber

Rubber bearings have high friction and exhibit stick-slip. This results in high shaft wear and shaft vibration.

Rubber must be lubricated and swells in water.

Vesconite bearings carry a higher load than rubber and the low friction gives a low shaft wear and no stick-slip.

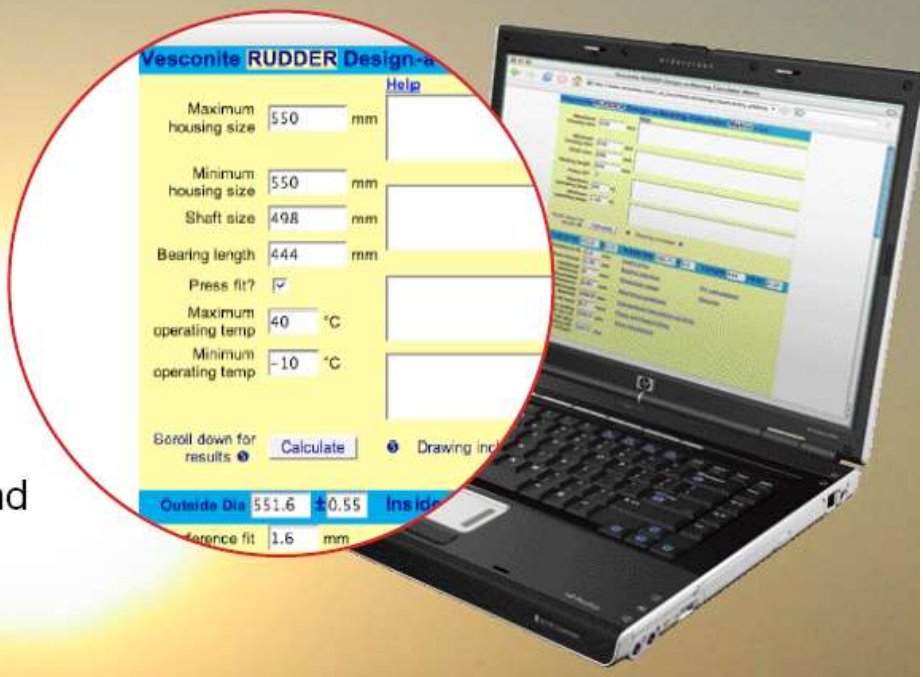
Vesconite is easily machined to accommodate for variable shaft and housing sizes.

Typical properties of Vesconite and Vesconite Hilube

	Metric	Imperial
Compressive yield strength	89 MPa	12,750 psi
Design load	30 MPa	4,250 psi
Water absorption	0.07%	0.07%

Vesconite bearing design is simple, fast and correct using ***Design-a-Bearing*** calculators on **www.vesconite.com**

Enter bearing specifications and one click gets you to correct fits, clearances and machining tolerances.



Please complete this form and fax back to +27 11 616 22 22

Please send me

☐ Marine Design Manual

☐ Sample of Vesconite

Please quote on Vesconite bearing/s

Outside diameter _____ Length _____

Inside diameter _____ Quantity _____

Company: _____

Contact: _____ Phone _____

Postal Address: _____

_____ Postal code _____

E-mail: _____

Vesconite- stocked worldwide.

	Telephone	Fax
International	+27 11 616 11 11	+27 11 616 22 22
USA	1 866 635 75 96	(212) 937 31 84
Canada	1 866 682 34 84	(416) 352 15 27
UK	0800 731 97 45	0207 681 34 44
UAE	800 027 01 03	
South Africa	(011) 616 11 11	(011) 616 22 22
Australia	(03) 97 96 40 98	(03) 86 48 56 71

www.vesconite.com
marine@vesconite.com