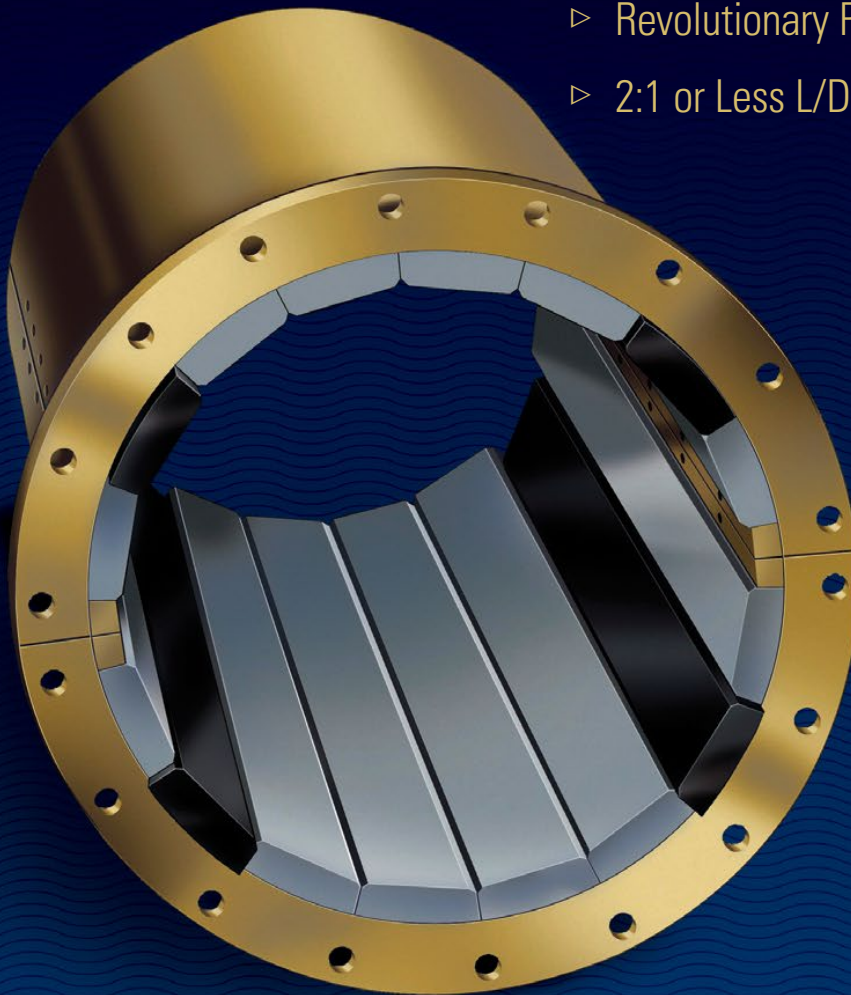


**DURAMAX<sup>®</sup>**

# DMX<sup>®</sup> Locking Stave System

- ▷ Revolutionary Polymer Alloy
- ▷ 2:1 or Less L/D Configuration



PRODUCT INFORMATION AND SELECTION GUIDE

Duramax Marine<sup>®</sup> is an ISO 9001:2015 Certified Company

**DURAMAX MARINE<sup>®</sup>**



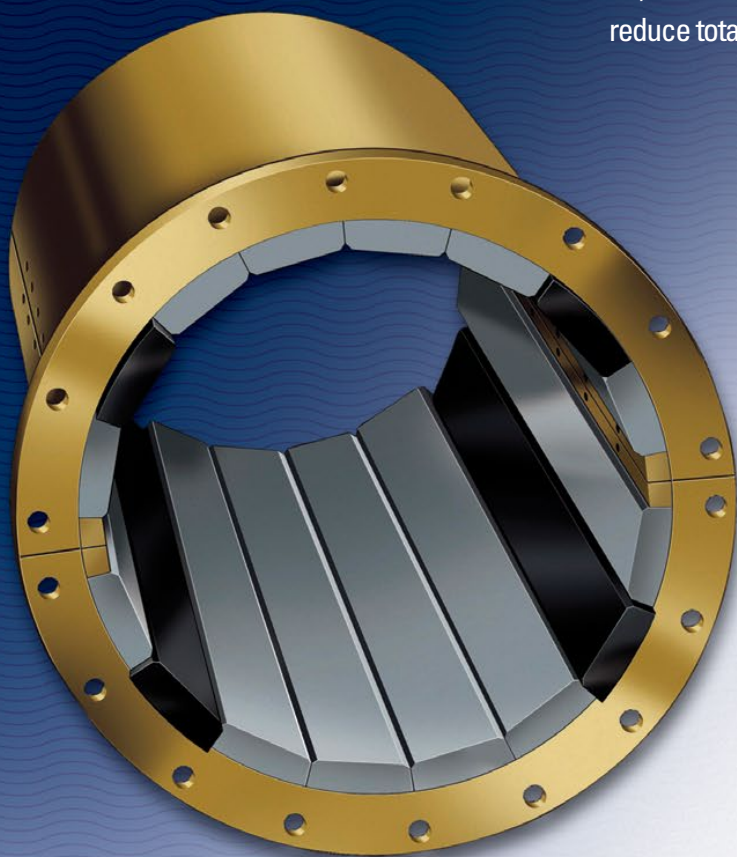


# DMX<sup>®</sup>. The Ultimate Bearing Material in Abrasive

When you need a tough, durable, water-lubricated propulsion bearing that can easily handle the rigors of harsh, abrasive-laden environments and result in near-zero shaft and sleeve wear, use DMX<sup>®</sup> - the revolutionary polymer alloy in a locking stave configuration.

DMX is a unique, proprietary bearing material brought to you by Duramax Marine,<sup>®</sup> the leader in water-lubricated bearing technology for over 40 years.

So, trust DMX to work best in abrasive waters and to greatly reduce total bearing system wear. It's the ultimate bearing material.



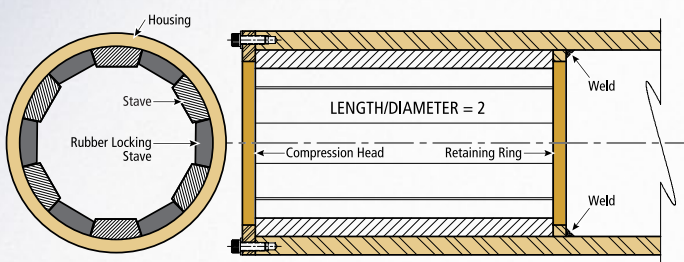
## Independent Laboratory Testing Confirms:

### DMX Performs Extremely Well in Abrasive Conditions.

After extensive testing in abrasive-laden waters by BMT Defence Services Ltd. for the United Kingdom Ministry of Defence, the following conclusions about DMX were reached.

### Can be used in a 2:1 or less L/D configuration.

This means less material, a smaller housing and less weight. Duramax was tested successfully at 40 to 240 npsi.



### DMX operates with near-zero shaft/sleeve wear.

There was negligible shaft journal and bearing wear. In fact, the shaft surface finish in general improved on the vessel itself.

### Grit has minimal effect on DMX.

No matter where you operate - from inland waters to the open sea - DMX has been proven to effectively handle abrasive materials. It's ideal for workboats, tugs, dredgers as well as ocean-going vessels.



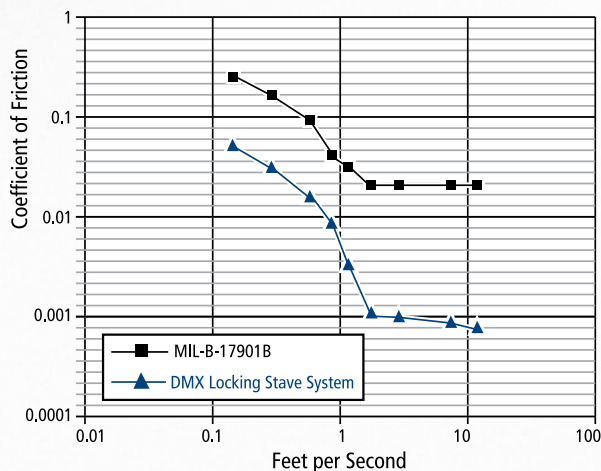


# Laden Environments.

## Tests confirm DMX performs far better than U.S. military specification, MIL-B-17901 B (SH) requirements.

Results confirm DMX Polymer Alloy :

- has a low coefficient of friction at both breakaway and throughout the full operating range of shaft speeds.
- Runs extremely well at low shaft speeds without noise, vibration or stick-slip.
- Performs exceptionally well through multiple shaft reversals with very little noise.
- Allows engine to operate more efficiently and conserve fuel.



## DMX is Ideal for Dredging Operations.



Because DMX performs extremely well in harsh, abrasive-laden environments, it is perfect for dredgers. It works great for propeller shafts and withstands the rigors associated with cuttinghead shafts - making it the ultimate dredger bearing material.

**Near zero shaft journal and bearing wear.**

**Runs extremely well at low shaft speeds - without noise or vibration.**

**Slip-stick entirely absent.**

**Low coefficient of friction improves fuel efficiency.**

**2:1 or less L/D Ratio Configuration.**

For more information, or to order DMX, contact your nearest Duramax Marine® representative at 440-834-5400. Or visit our website: [www.DuramaxMarine.com](http://www.DuramaxMarine.com).

## Other Benefits of Using DMX Polymer Alloy Bearings.

**Can be retrofitted into existing bearing systems.**

**Environmentally-friendly.**

Water-lubricated DMX can replace oil-lubricated babbitt bearings in many applications.

**Dry Run capable in event of water shut down.**

DMX performs well under operating conditions with little to no lubrication. Contact Duramax Marine for dry run applications.

**Eliminates the need for a bearing shell.**

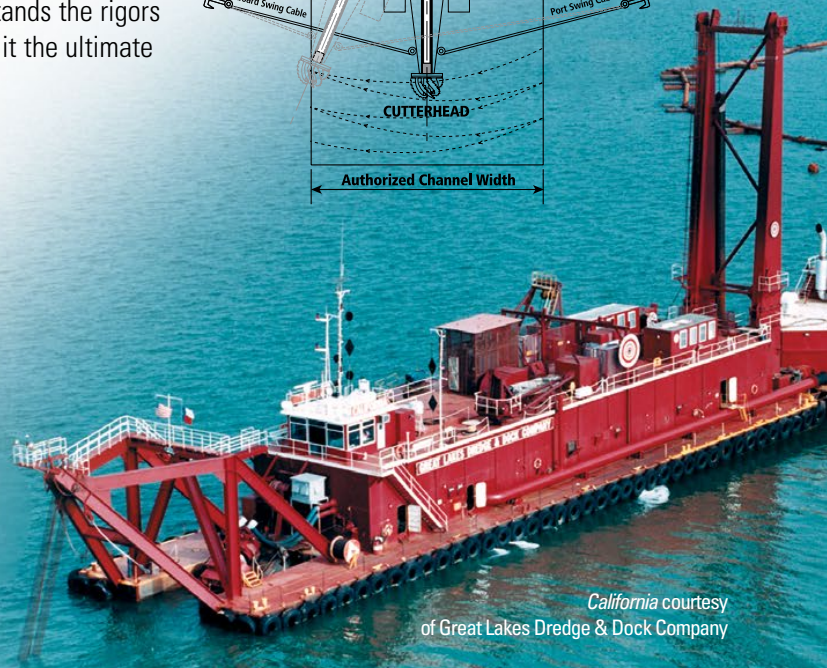
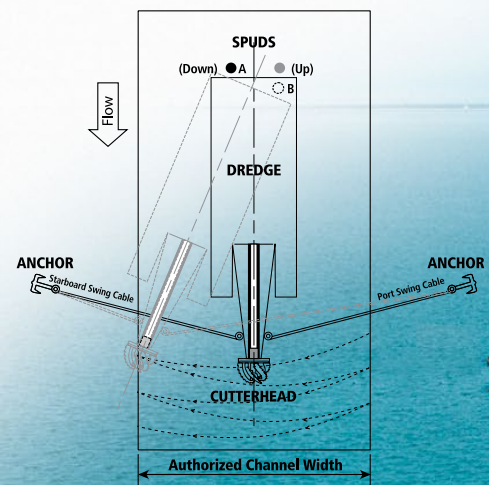
This mounting stave system is mounted directly inside of stern tube or strut.

**Reduces installation time - and costs.**

Staves can be removed and replaced without removing the shaft.

**Negligible swell in seawater.**

Operation of Cutterhead Dredge (viewed from above)



California courtesy of Great Lakes Dredge & Dock Company



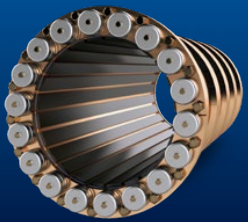
INNOVATION.  
EXPERIENCE.  
RESULTS.

Duramax Marine® is committed to providing excellence in every product we manufacture. Our Johnson Cutless® marine and industrial bearings, heat exchangers, impact protection systems and sealing systems are known worldwide for their engineered quality and dependable performance. Please contact the factory for information on any of the following Duramax Marine® products:



## JOHNSON CUTLESS® WATER-LUBRICATED BEARING SYSTEMS

Johnson Cutless® Sleeve and Flanged Bearings



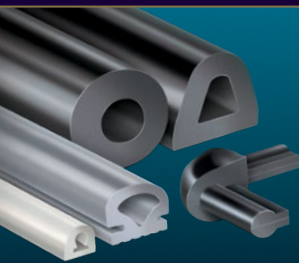
## DURAMAX® ADVANCED WATER-LUBRICATED BEARING SYSTEMS

Johnson® Demountable Stave Bearings  
ROMOR® I Stave Bearings and Segmental Housings  
ROMOR® C- Partial Arc Bearings  
DMX® Polymer Alloy Bearings  
DuraBlue® Bearings, Rudder & Pintle Bushings, Thrust Washers, and Wear Pads  
Industrial Pump Bearing Systems



## DURAMAX® HEAT EXCHANGE SYSTEMS

DuraCooler® Keel Coolers  
Duramax® Demountable Keel Coolers  
Duramax® BoxCoolers



## DURAMAX® IMPACT PROTECTION SYSTEMS

Johnson® Commercial Dock Bumpers, Fenders & Tow Knees  
LINERITE® Composite Batterboard Systems



## DURAMAX® SHAFT SEALING SYSTEMS

DryMax® Shaft Seal  
Duramax® Mechanical Shaft Seal  
Johnson® Heavy-Duty Air Seal Stuffing Boxes  
Duramax® Ultra-X® High Performance Compression Packing

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