

# ROMOR® I

Class III Dove-Tailed, Plastic-Backed Stave Bearings



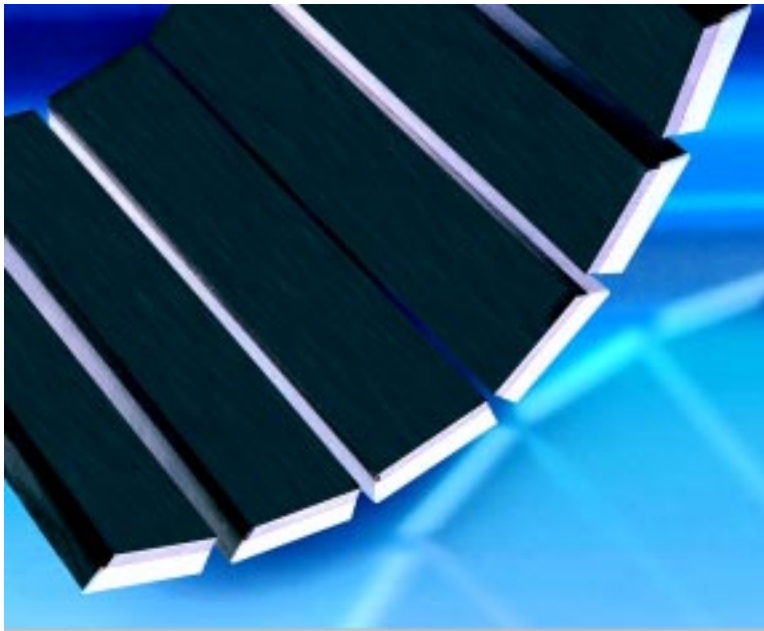
## Engineering the product you want.

### Proven Performance Record

ROMOR stave bearings have been used in US Navy and industrial applications for over 20 years with exceptional results. ROMOR I continuously meets or exceeds the stringent operational expectations of both military and civilian customers. The landed rubber bearing design has been in service for approximately 80 years. While there have been significant improvements to materials and design, the basic principle lives on.

### Unique Elastomeric Properties

The elastic characteristic unique to rubber enables the bearing surface to deform and create a natural pocket encouraging the generation of a hydrodynamic lubricating water film. Since the rubber is elastic, it creates a seal on both the leading and trailing edges, as well as, the ends of the bearing land areas. It is this action that provides the superior hydrodynamic grit rejection performance that we see in landed rubber bearings.



ROMOR I is used in particle contaminated water with excellent results. These attributes are only a few of the reasons why rubber provides superior performance versus hard surfaced, non-elastic bearings. ROMOR I stave bearings routinely last for 8-9 years in rugged US Navy applications.

### Excellent Friction Performance

The extremely smooth surface finish on ROMOR I stave bearings, 15-20 micro inches, exhibits excellent friction performance at both very low shaft revolutions and extremely high shaft revolutions. This smooth surface also accelerates the break-in or run-in period that all bearings must go through in order to operate at the highest efficiency.

### Manufactured to US Navy Specifications or Custom Sizes

Duramax Marine LLC manufactures ROMOR I bearings to US Department of the Navy, Naval Ship Systems Command specification drawing 803-1385664. This specification identifies 10 standard stave widths that are machined with 10° side angles. Individual stave thickness is generally finished in standard 1/16 and 1/8 inch oversized increments to accommodate shaft or journal wear. However, if your application requires a non-standard thickness and /or side angles, our flexibility allows us to meet your needs. This makes retrofitting applications, such as lignum vitae bearing systems, possible.

### Continuous Research & Development

Duramax Marine LLC is dedicated to continuing research and development to introduce new products and to improve existing products. We work closely with the US Navy and other Navies to meet their constantly evolving requirements. The scope of this work includes joint design and laboratory testing of new concepts and ideas.

The company is fully equipped with an in-house test facility and has multiple test beds that are operated on

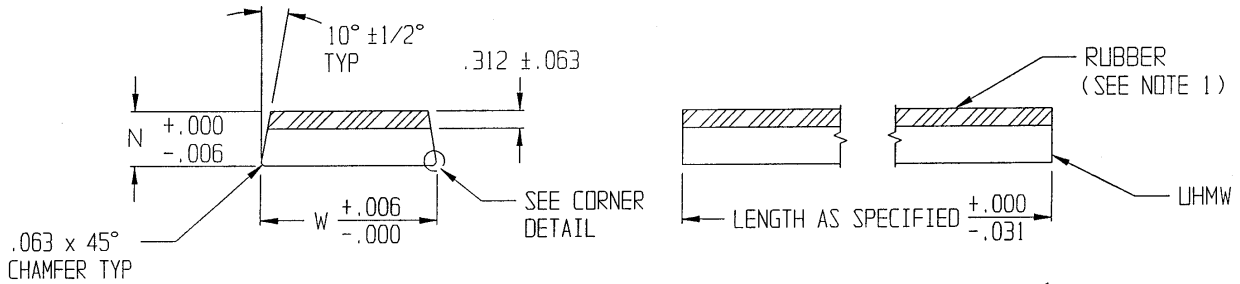
a full time basis. We perform both screening and advanced testing in both clean and abrasive water conditions. The focus is on "system wear" which takes into account both bearing and journal wear. Measuring system wear provides a complete picture of performance. Even if a bearing lasted forever, if it wears the journal at an accelerated rate, the effects of long bearing life are negated.

## Providing the service you deserve.

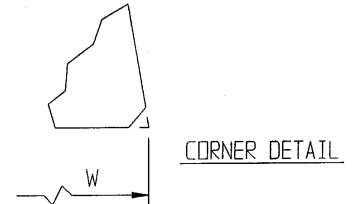
# ROMOR® I

Class III Dove-Tailed, Plastic-Backed Stave Bearings

## Standard US Navy Stave Sizes



STAVE SIZE NO.	STAVE WIDTH W	N = STAVE THICKNESS			
		STD.	1/16 OVER SIZE	1/8 OVER SIZE	3/16 OVER SIZE
1	1.680	.670	.733	.795	.857
2	1.805	.670	.733	.795	.857
3	1.930	.733	.796	.858	.920
4	2.055	.733	.796	.858	.920
5	2.180	.733	.796	.858	.920
6	2.305	.733	.796	.858	.920
7	2.743	.857	.920	.980	1.044
8	2.930	.857	.920	.980	1.044
9	3.055	.981	1.044	1.106	1.169
10	3.180	.981	1.044	1.106	1.169



NOTES:

1. RUBBER THICKNESS SHALL BE NO LESS THAN .250 AT ANY LOCATION
2. REF NAVSHIPS DWG. 1385664 REV H

## Features/Benefits

- **Lightweight & Corrosion Resistant.** ROMOR Staves are manufactured using high quality rubber and UHMW-PE plastic.
- **Provides Maximum Lubricant Flow** The design of a landed rubber bearing flushes contaminants away from bearing.
- **Provides Dampening Effect** when the propeller shaft center of rotation does not equal the geometric center of the shaft or when the shaft center of rotation changes due to shaft damage.
- **Long Bearing Life** ROMOR staves routinely last for 8-9 years of use.
- **Meet the Stringent Performance Requirements of MIL-B-17901B Class III** which goes beyond the requirements of many classification societies.
- **ROMOR Stave Bearings Are Used On Most Classes of US Navy Surface Ships & Submarines.** You can have confidence in knowing that ROMOR staves are a trusted product and have a history of excellent performance.
- **Quality Control** Each ROMOR I stave order goes through a quality control process and the results are certified by our laboratory. Test results can be shipped with each order.
- **Your Lead Time Needs Are Important.** Duramax® Marine LLC will work with you to provide the stave bearings to you when you want them, not simply provide you with a standard lead time.

17990 Great Lakes Parkway  
 Hiram, Ohio 44234 USA  
 PHONE 440.834.5400  
 FAX 800.497.9283 USA & Canada  
 or 440.834.4950  
 E-MAIL info@duramaxmarine.com  
 WEB www.duramax-marine.com

**DURAMAX® MARINE** LLC