



CERTIFICATE NUMBER
EFFECTIVE DATE
EXPIRY DATE
ABS TECHNICAL OFFICE

24-2522364-PDA
05-Apr-2024
04-Apr-2029
Houston ESD - Ship Equipment

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

DURAMAX MARINE LLC

located at

17990 Great Lakes Parkway, , Hiram, OH, United States, 44234

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: Bearing, Water Lubricated Bearings
Model: Water Lubricated Demountable Rubber Stave Bearings
Endorsements:
Tier: 3 - Type Approved, unit certification not required

This Product Design Assessment (PDA) Certificate remains valid until 04/Apr/2029 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Mohamed C Boukamcha

Mohamed C Boukamcha,Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

DURAMAX MARINE LLC

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Hiram OH

United States 44234

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Web: www.duramaxmarine.com

Tier: 3 - Type Approved, unit certification not required

Product: Bearing, Water Lubricated Bearings
Model: Water Lubricated Demountable Rubber Stave Bearings
Endorsements:

Intended Service:
Marine Applications - Main Propulsion Shafting: Support of Propeller and Propeller Shaft.

Description:
Keystone-sided staves of molded rubber fitted in a housing to form a cylindrical bearing. A compression head split in two 180 deg segments to be bolted to the bearing housing compresses the staves producing a tight frictional bond with the housing.

Rating:
O.D. Shaft or Sleeve Journal Sizes: 2½" to 35¾";
Temperature Range: -29°C to +93°C

Service Restriction:
Unit Certification is not required for this product.

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
2. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
3. For Bearing's dimensions, material, quality inspection, tolerances, installation procedure, bearing and journal wear see Demountable Stave Bearing Catalog.
4. The length of bearing, next to and supporting the propeller, is to be not less than four times the required tail-shaft diameter as per 4-3-2/5.15.1 of the Rules.

Notes/Drawing/Documentation:
Demountable Stave Brochure;
Dwg. No. 806815905C, Rev. -, Demountable Stave Set for 6-1/4" shaft, 1 sht.;
Dwg. No. 806827909C, Rev. -, Demountable Stave Set for 11" shaft, 1 sht.;
Dwg. No. 806840002C, Rev. -, Demountable Stave Set for 15-3/4" shaft, 1 sht.

Terms of Validity:
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STANDARDS

ABS Rules:
The Rules for Conditions of Classification, Part 1 2024, 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

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2024 Rules for Building and Classing Marine Vessels 4-3-2/5.15.1

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA