



Confirmation of Product Type Approval

Company Name: COLUMBIA INDUSTRIAL PRODUCTS

Address: 29538 AIRPORT ROAD UNIT A OR 97408 United States

Product: Bearing, Stern Tube

Model(s): CIP Marine

Endorsements:

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	20-HS1953512-PDA	18-MAR-2020	17-MAR-2025
Manufacturing Assessment (MA)	20-4314547	09-JUN-2020	08-JUN-2025
Product Quality Assurance (PQA)	NA	NA	NA

Tier

3 - Type Approved, unit certification not required

Intended Service

Marine Applications - Support of propeller and propeller shaft.

Description

Stern Tube Bearings. Multi groove, Full Diameter, Water and Self-Lubricated Fiber Reinforced Composite Bearing Material installed in Strut Barrel or Stern Tube.

Ratings

CIP Marine Cylindrical Bearings are supplied for Shaft/Liner Diameters of 1" (25 mm) to 65" (1650 mm).

Maximum Nominal Bearing Pressure 1450 psi (10 N/mm²).

Service Restrictions

Unit Certification is not required for this product. 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.

Comments

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

- 1) The water flow rate should be a minimum of 1 to 1.5 gallons per minute per inch of shaft diameter.
- 2) For bearing dimensions, clearance, machining, operating temperature, machining temperature, calculations, and installation procedure see manufacturer marine engineering manual.

3) The length of the synthetic bearing, next to and supporting the propeller, is to be not less than four times the required tail-shaft diameter. The length may be less than four times, but not less than two times the required tail-shaft diameter, provided the bearing design is substantiated by experimental tests to the satisfaction of the Bureau. See 4-3-2/5.15.1 of the Marine Vessels Rules.

Notes, Drawings and Documentation

Document No. 50002, CIP Marine Material Spec Sheet, Revision: 00, Pages: 1

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 17/Mar/2025 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.

ABS Rules

Rules for Conditions of Classification, Part 1 - 2020, 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2020 Marine Vessel Rules: 4-3-2/5.15.1;

2020 Yacht Rules 4-1-1/3.3, 4-3-1/13.1.2;

2020 Steel Vessels for Service on Rives and Intracoastal Waterways Rules: 4-2-1/11.1;

Rules for Conditions of Classification - High-Speed Craft, Part 1 - 2020, 1-1-4/11.9, 1-1-A2, 1-1-A3, which cover the following:

2020 High-Speed Craft Rules: 4-3-1/13.1.2

International Standards

NA

EU-MED Standards

NA

National Standards

NA

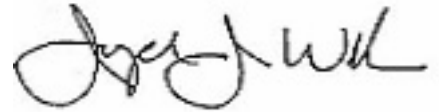
Government Standards

NA

Other Standards

Manufacturer standard





Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 30-Nov-2021 3:47

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

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 prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.