



CERTIFICATE NUMBER 19-LD1817402-PDA
EFFECTIVE DATE 31-JAN-2019
EXPIRATION DATE 30-JAN-2024
ABS TECHNICAL OFFICE London Engineering Dept

CERTIFICATE OF Product Design Assessment

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

LAGERSMIT

located at

P.O. BOX 176, ALBLASSERDAM, Netherlands, 2950 AD

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 Stern Tube Seals

Model SUPREME SAA, SUPREME SGA, SUPREME STA, SUPREME SVA, SUPREME SG, SUPREME SGV, SUPREME STF, SUPREME LDA, SUPREME LDF, SUPREME TS3, SUPREME TS4, SUPREME TS4-2, SUPREME TSV3, SUPREME TSV4, SUPREME TA-FWD-OT, SUPREME TA-SUP-OPT

This Product Design Assessment (PDA) Certificate remains valid until 30/JAN/2024 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


Steve Brincat, Managing Principal Engineer

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)

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Tier: 2 - PDA Issued

Product: Stern Tube Seals

Model: SUPREME SAA, SUPREME SGA, SUPREME STA, SUPREME SVA, SUPREME SG, SUPREME SGV, SUPREME STF, SUPREME LDA, SUPREME LDF, SUPREME TS3, SUPREME TS4, SUPREME TS4-2, SUPREME TSV3, SUPREME TSV4, SUPREME TA-FWD-OT, SUPREME TA-SUP-OPT

Intended Service:

Shaft Seals for Oil or Grease Lubricated Propeller Shafts in Stern Tube and Thrusters on all types of Vessels and Mobile Offshore Drilling Units.

Description:

SUPREME SAA, SUPREME SGA, SUPREME STA, SUPREME SVA, SUPREME SG, and SUPREME SGV, are intended for Sterntube Aft Seal applications.

SUPREME STF is intended for Sterntube Forward Seal applications.

SUPREME LDA and LDF are intended for Low Duty Aft and Forward Stern Tube Applications respectively, and SUPREME TS3, SUPREME TS4, SUPREME TSV3 and SUPREME TSV4 are intended for Thruster Propeller Shaft Seals applications.

Rating:

Seal sizes from 155 mm through to 900 mm for shaft diameters from 110 mm to 840 mm.

Service Restriction:

- 1) Unit Certification is not required for this product.
- 2) Stern tube shaft sealing arrangement should be installed according with the manufacturers' recommended procedures
- 3) Acceptance on Vessels or Mobile Offshore Drilling Units with IACS Polar Ice Class is to be carried out on a case to case basis.
- 4) Acceptance on Vessels or Mobile Offshore Drilling Units with the optional Notation TCM (Tailshaft Condition Monitoring) is to be carried out on a case to case basis.

Comments:

- 1) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product
- 2) With regard to USCG requirements, in accordance with 46 CFR 58-05-1(a), if the design and installation of the subject equipment complies with the ABS Rules, the same will be satisfactory to the US Coast Guard.
- 3) Unless specially directed by Administration, this approval is not to be construed as a substitute for a flag Administration's (USCG) requirements.

Notes/Drawing/Documentation:

See Attachment

Terms of Validity:

This Product Design Assessment (PDA) Certificate 19-LD1817402-PDA, dated 31/Jan/2019 remains valid until 30/Jan/2024 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the

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STANDARDS

ABS Rules:

The Rules for Conditions of Classification, Part 1 of Marine Vessels and Structures - 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

Rules for Building and Classing Marine Vessels - (2019 Edition) 4-3-2/5.13, 4-3-3/9.5.

Rules for Building and Classing Steel Vessels for Service on Rivers and Intracoastal Waterways - (2019 Edition) 4-2-1/9.1

The Rules for Conditions of Classification, Part 1 of Offshore Units and Structures - 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

Rules for Building and Classing Mobile Offshore Units - (2019 Edition - Refer to Marine Vessel Rules) 4-1-2/9, 4-2-2/13.

National:

NA

International:

NA

Government:

Standards: USCG 46 CFR 58.05-1(a)

EUMED:

NA

OTHERS:

NA