

CERTIFICATE NUMBER 20-1985676-PDA-DUP

23-Jun-2021 EFFECTIVE DATE **EXPIRATION DATE** 12-May-2025

ABS TECHNICAL OFFICE Yokohama Engineering Services

CERTIFICATE OF

Product Design Assessment

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

EAGLE INDUSTRY CO., LTD. MARINE DIVISION

located at

KURE CITY

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 Seals, Shaft Seals

Model **EVKZ**

This Product Design Assessment (PDA) Certificate remains valid until 12 May 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.

American Bureau of Shipping

Takahiro Shibuya

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

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EAGLEINDUSTRYCO., LTD. MARINE DIVISION

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Email: dl-tsg-qa@kemel.com

Web: www.kemel.com

Tier: 2 - PDA Issued

Product: Seals, Shaft Seals

Model: EVKZ

Endorsements:

Intended Service:

Water lubricated stern tube seal

Description:

Water lubricated stern tube seal

Rating:

Nominal shaft diameter of 110 mm through 370 mm

Service Restriction:

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.

Notes/Drawing/Documentation:

Drawing No. EVKZ-001, Rev. 03, "EVKZ WATER SEAL"

Terms of Validity:

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STANDARDS

ABS Rules:

2020 Marine Vessel Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-3-2/1.5.1 2020 High-Speed Craft Rules 1-1-4/11.9, 1-1-A2, 1-1-A3

National:

NA

International:

NA

Government:

NA

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EUMED:

NA

OTHERS:

NA