

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Stern Tube Seal

with type designation(s)
4BL, MK2

Issued to

Japan Marine Tech Korea
Busan, Republic of Korea

is found to comply with

DNV GL rules for classification – Ships

DNV GL rules for classification – High speed and light craft

DNV GL class programme DNVGL-CP-0031 – Type approval – Stern tube sealing arrangement

Application :

The sterntube seals are approved for oil lubricated shafts.

Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.

Issued at **Høvik** on **2019-07-23**

This Certificate is valid until **2024-07-22**.

DNV GL local station: **Gimhae Station**

for **DNV GL**

Approval Engineer: **Nadine Grace Mosteiro**
Halvorsen

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Oddvar Deinboll
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Job Id: **262.1-028011-1**
Certificate No: **TAM000012V**

Product description

Sternguard sealing system for shafting arrangements with oil lubricated stern tube bearings.
Propeller shaft diameter 155 mm to 1250 mm.

Application/Limitation

Shaft survey interval as specified in the Rules Pt.7 Ch.1 Sec.1 [1.6.6].

The sealing boxes meets the requirements to sealing boxes for TMON (Tailshaft Monitoring Survey Arrangement).

Environmentally Acceptable Lubricants (EALs) may only be applied according to manufacturer's list. Manufacturer's confirmation should be obtained separately. Oil quality to be regulated as recommended by manufacturer, ref. doc.no JMT-EAL-INS rev 0.

Type Approval documentation

Tests carried out

Other conditions

Material test report for sealing rings to be presented to DNV GL per installation,
Ref. Pt.4 Ch.4 Sec.1 [3.1.1] Table 8 (applicable from January 2019).

Marking of product

The product to be marked with manufacturer 's name or trademark and type number identification.

Periodical assessment

For retention of the type approval, a DNV GL surveyor shall perform an assessment after 2 years and after 3.5 years, to verify that the conditions of the type approval are complied with. A renewal assessment will be performed at renewal of the certificate.

In cases where the type approved product is manufactured at other companies, the periodical assessment shall verify that the type approval applicant has a quality control system for consistent production at their licensees/subcontractors. Furthermore, periodical assessment shall be carried out randomly at these companies.

- END OF CERTIFICATE -