

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Stern Tube Seal**

with type designation(s)

Prime type Standard and Secure, PRIMAIR Standard and Secure

Issued to

Aegir Marine B.V.**Wijk bij Duurstede, Utrecht, Netherlands**

is found to comply with

DNV GL rules for classification – Ships**DNV GL rules for classification – High speed and light craft****Application :**

The sterntube seals are approved for oil lubricated shafts. The sealing boxes meet the requirements to sealing boxes for TMON (Tailshaft Monitoring Survey Arrangement). The design of PRIMAIR sealing system satisfies the requirements for Clean Design.

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

Issued at **Høvik** on **2018-12-14**This Certificate is valid until **2023-12-13**.for **DNV GL**DNV GL local station: **Rotterdam**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: **262.1-000223-5**
Certificate No: **TAM0000104**

Product description

Seal for oil lubricated propeller shaft.

Prime type Standard and Secure

Shaft diameter: 115 mm to 1250 mm.

PRIMAIR Standard and Secure

Shaft diameter: 450 mm to 1250 mm.

Application/Limitation

The Stern Tube seal is approved for mineral oils.

Environmentally Acceptable Lubricants (EALs) may only be applied according to manufacturer's list. Manufacturer's confirmation should be obtained separately.

The aft sterntube sealing boxes satisfies the requirements to sealing boxes for TMON (Tailshaft Monitoring Survey Arrangement).

The design of PRIMAIR sealing system satisfies the requirements for Clean Design.

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