DNV·GL

Certificate No:
TAM000017U

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Gastight Seal for Shaft

with type designation(s)
BW 180, BW 330, BW 330-2, BW 500, BW 500-2

Issued to
Shinko Ind. Ltd.
HIROSHIMA, Hiroshima Pref., Japan

is found to comply with
DNV GL rules for classification – Ships

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Høvik** on **2021-03-01**
This Certificate is valid until **2026-02-28**.
DNV GL local station: **Kobe**

for **DNV GL**

Approval Engineer: **Ole Henrik Kverndal Pedersen**

Dalibor Bukarica
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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Product description

The seals are intended for horizontally arranged shafts. The seals consist of two carbonized fibre packing rings in a housing filled with grease.

Place of production

NIPPO Co Ltd.
10-11 Mokuzaiko-kita, Hatsukaichi City,
Hiroshima

Application/Limitation

The seals can be used as gastight seals for drive shafts between pump room and engine room.

The bulkhead plate is at least to have the same thickness as the adjacent bulkhead. The fastening bolts between the bulkhead plate and the bulkhead are not to be carried through the bulkhead.
The gastight seal shall be fitted with temperature measuring devices at bearings.

Type Approval documentation

Marking of product

-Manufacturer’s name or trademark.
-Type number designation.

Periodical assessment

For retention of the Type Approval, a DNV GL Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNVGL-CP-0338.