DNV·GL

Certificate No:
TAS00000AR

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Roll Thimble

with type designation(s)
2013-0967 MBL 8415 kN

Issued to
GN Rope Fittings - Grofsmederij Nieuwkoop B.V.
NIEUWKOOP, Netherlands

is found to comply with
DNVGL-OS-E303 – Offshore fibre ropes, Edition July 2015

Application :

to be used for Temporary, Mobile and Long Term Mooring
as defined in Offshore Standard DNVGL-OS-E301 'Position Mooring' July 2015

This Certificate is valid until **2021-01-25**.

Issued at **Høvik** on **2016-01-26**

DNV GL local station: **Rotterdam** for **DNV GL**

Approval Engineer: **Pierre-Eric Moulia**

Inger-Helene Hals
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.

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This certificate TAS00000AR replaces S-7786 which is extended to long term mooring (> 5yrs).

Product description

MBL 8415 kN (equivalent to NV R5 84 mm chain) roll thimble for Offshore Mooring Fibre Rope to be installed in temporary, mobile and long term mooring lines with polyester rope.

Application/Limitation

The thimbles are to be used in connection with chains for temporary, mobile and long term mooring as defined in Offshore Standard DNVGL-OS-E301 'Position Mooring' July 2015.

The thimble shall be manufactured and tested in accordance with Offshore Standard DNVGL-OS-E303 'Offshore Fibre Rope' July 2015, except for the MBL test that can be waived thanks to this type approval.

The approval is conditional that thimble material manufacturer is holding an Approval of Manufacturer DNVGL Certificate.

Individual Product Certificate is to be issued for each delivery.

Type Approval documentation

Tests carried out

Break load prototype testing was carried out on Aug 12th 2013.
The material shall satisfy:
- Charpy V-notch energy of 50 J at -20ºC.
- Yield (Rp 0,2%) min 265 MPa and Tensile min 450 MPa

Marking of product

Thimble should be marked with a unique identifier traceable to its certificate.

Periodical assessment

For retention of the Type Approval, a DNVGL surveyor shall perform a survey every 2 ½ year and before the expiry date of this certificate, to verify that the type approval is complied with.