

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Synthetic Fibre Ropes

with type designation(s)

**Polyester / polyolefin dual 8-strand braided Mooring Tails,
Polyester / polyolefin dual 12-strand braided Mooring Tails**

issued to

**Yancheng Shenli Rope-Making Co., Ltd.
Yancheng, China**

is found to comply with

**DNV class programme DNV-CP-0100 – Type approval – Synthetic fibre ropes for towing, mooring and anchoring
OCIMF Mooring Equipment Guidelines (MEG4), Fourth Edition 2018 [test requirements]**

Application:

Mooring and Towing of Ships and HSLCs.

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

Issued at **Hamburg** on **2024-04-18**

This Certificate is valid until **2029-04-17**.

for **DNV**

DNV local unit: **Nantong**

Approval Engineer: **Gisle Hersvik**

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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 AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") 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.



Product description

Polyester / polyolefin dual 8-strand braided Mooring Tails Polyester / polyolefin dual 12-strand braided Mooring Tails

- Fibre material: Polyester/polyolefin dual fibre
- Specific gravity: 0.98 (floats in seawater)

Compliance with OCIMF Mooring Equipment Guidelines (MEG4)

Mooring Tail Base Design Certificate – For Polyester / polyolefin dual 8-strand 48 mm and 120 mm

Certificate No.: BDC-Tail-03 Rev.0

[Issue date: 2024-03-20]

Mooring Tail Certificate will be issued with reference to Mooring Tail Base Design Certificate.

Mooring Tail Base Design Certificate – For Polyester / polyolefin dual 12-strand 48 mm and 120 mm

Certificate No.: BDC-Tail-04 Rev.0

[Issue date: 2024-03-20]

Mooring Tail Certificate will be issued with reference to Mooring Tail Base Design Certificate.

Yancheng Shenli Rope-Making Co., Ltd. has performed the full test scenario as per OCIMF MEG4.

Rope Characteristics

The Rope characteristics are tabulated on the next page observing the following:

Fibre ropes are to be delivered with a linear mass $\pm 5\%$ of the nominal linear mass given in the table.

All TDBF (Tail Design Break Force) values are given for the spliced ropes.

Polyester / polyolefin dual 8-strand braided Mooring Tails

Ref. Number / Diameter [mm]	Linear Density -rope [ktex]	TDBF [kN]
48	1270	364
52	1500	424
56	1730	489
60	1990	558
64	2270	631
68	2560	707
72	2870	789
80	3540	963
88	4280	1160
96	5100	1370
104	6000	1590
112	6900	1840
120	7960	2100

Polyester / polyolefin dual 12-strand braided Mooring Tails

Ref. Number / Diameter [mm]	Linear Density -rope [ktex]	TDBF [kN]
48	1270	364
52	1500	424
56	1730	489
60	1990	558
64	2270	631
68	2560	707
72	2870	789
80	3540	963
88	4280	1160
96	5100	1370
104	6000	1590
112	6900	1840
120	7960	2100

Application/Limitation

The OCIMF MEG4 approval range covers ropes with diameter from 48 mm to and including 120 mm.

Type Approval documentation

Tests carried out

Type Testing carried out in accordance with **Type Approval documentation**, and according to:

- OCIMF's Mooring Equipment Guidelines (MEG4) [requirements to testing], including:
 - CI1500A-2015, Test Methods for Fiber Rope – Physical Properties
 - CI1500B-2015, Test Methods for Fiber Rope – Performance Properties
 - Guidelines for the Purchasing and Testing of SPM Hawsers (OCIMF, 2000).
- DNV-CP-0100.

The fibre ropes are manufactured in accordance with:

- Product Specification (Polyester-Polyolefin Rope).

Marking of product

Product shall be marked with *manufacturer's name*: **Yancheng Shenli Rope-Making Co., Ltd., China**, *type designation* and *diameter*.

The marking is to be carried out in such a way that it is visible, legible and indelible. The marking of product is to enable traceability to the DNV Type Approval Certificate.

Periodical assessment

The scope of the Periodical Assessment is to verify that the conditions stipulated for the Type Approval is complied with and that no alterations are made to the product design or choice of materials.

Periodical assessments (for Certificate Retention / Certificate Renewal) shall be performed according to DNV-CP-0338.

This certificate is only valid if required Periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

END OF CERTIFICATE