

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Synthetic Fibre Ropes**

with type designation(s)

8-, 12- strand and double-braided Macromolecule Polyethylene Fibre Ropes

Issued to

**Yangzhou Xinglun Rope Cable Co., Ltd.
Yangzhou, China,**

is found to comply with

**DNV GL class programme DNVGL-CP-0100 – Type approval – Synthetic fibre ropes for towing,
mooring and anchoring****DNV GL rules for classification – Ships****DNV GL rules for classification – High speed and light craft****Application :****Mooring and towing of ships, boats and high speed light craft.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed
by DNV GL.**This Certificate is valid until **2021-01-13**.Issued at **Høvik** on **2016-08-17**for **DNV GL**DNV GL local station: **Nanjing**Approval Engineer: **Helene Bjerke**

**Martin Strande
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.

Product description

Macromolecule Polyethylene Fibre Ropes, 8-strand, 12-strand and double-braided

- Specific gravity: 0.97-0.99 (floats in seawater)

The following is specified by Yangzhou Xinglun Rope Cable Co., Ltd., ref. standard Q/321023WXL01-2015.

ROPE CHARACTERISTICS		
Diameter	Nominal linear mass	Minimum breaking force
mm	g/m	kN
6	24	29.1
8	39	41.7
10	62	70.5
12	89	102
14	121	137
16	158	178
18	201	214
20	246	258
24	368	370
28	490	492
32	621	624
36	767	812
40	868	924
44	955	1021
48	1137	1246
56	1547	1760
64	2021	2358
68	2309	2616
72	2598	2875
80	3195	3425
96	5700	5035

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

Application/Limitation

The Type Approval covers ropes with diameter from 6 mm to and including 96 mm. For **multi-strand/double-braided fibre ropes** from 20 mm to and including 68 mm.

The scope of assessment is limited to evaluation of net mass pr metre, type of lay and static strength.

Type Approval documentation

- 1.
- 2.
- 3.
- 4.

Tests carried out

Job Id: **262.1-023373-1**
Certificate No: **TAK00000EC**

Type Testing is carried out according to **Type Approval documentation**, and according to:

- ISO 2307:2010

Marking of product

Product shall be marked with *manufacturer's name*; **Yangzhou Xinglun Rope Cable Co., Ltd., China** and *type designation*.

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 GL 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 Assessment to be performed after 2.5 years (Certificate Retention) and at renewal after 5 years (Certificate Renewal).

The main elements of the Periodical Assessment are to:

- Ensure that **Type Approval documentation** is available.
- Review design, materials, production process, and performance with respect to possible changes, in order to ensure compliance with **Type Approval documentation** and/or referenced material specifications.
- Ensure traceability between manufacturer's product marking and the DNV GL Type Approval Certificate.

END OF CERTIFICATE