

Type Approval Certificate

This is to certify that the undernoted products have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

PRODUCER Katradis Marine Ropes Industry S.A

11 Psaron and Anapafseos Str,

18648 Piraeus

Greece

PLACE OF 69th KM National Road

PRODUCTION Athens Lamia

Greece

DESCRIPTION Ultra Mixed NikaSteel® ropes (Polyolefin and Polyester yarn)

TYPE Ultra Mixed NikaSteel ® 8 strand (4x2);

Ultra Mixed NikaSteel® 12 strand (12x1); Ultra Mixed NikUSteel® 24 strand (12x2);

APPLICATION Marine and offshore mooring ropes.

SPECIFIED STANDARDS EN ISO 10572:2009 – Mixed Polyolefin fibre ropes

EN IS 10566:2010 - Fibre ropes of polyester/polyolefin dual fibre

ISO 9554:2010 - Fibre ropes - General

EN ISO 2307:2011 - Fibre ropes - Determination of certain physical

and mechanical properties

Certificate No. 14/00095

Issue Date 19 November 2014

Expiry Date 18 November 2019

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Lloyd's Register EMEA Southampton Boldrewood Innovation Campus, Burgess Road, Southampton, SO16 7QF M. Jogia Global Technology Centre Lloyd's Register EMEA

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RATINGS Rope diameter Minimum Breaking Load

 (mm):
 (kN):

 8 Strand ropes
 24 to 96
 137.3 to 1765.8

 12/24 Strand ropes
 24 to 96
 147.2 to 1795.2

Refer to Katradis Marine Ropes Industry SA technical documentation for actual minimum breaking load for specific rope diameters and types.

OTHER CONDITIONS

- 1. LR Type Approval does not eliminate any requirement for a test certificate, or inspection, where required for contractual or statutory requirements;
- 2. Quoted breaking strengths are minimum values, therefore no tested value may be below the stated minimum.

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The Design Appraisal Document No. 14/00095 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 14/00095

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