

## 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:

<b>PRODUCER</b>	Katradis Marine Ropes Industry S.A 11 Psaron and Anapafseos Str, 18648 Piraeus Greece
<b>PLACE OF PRODUCTION</b>	69 <sup>th</sup> KM National Road Athens Lamia Greece
<b>DESCRIPTION</b>	Polyamide (Nylon) ropes
<b>TYPE</b>	Polyamide (Nylon) Ropes 8 strand (4x2), 12 strand (12x1) and 24 strand (12x2)
<b>APPLICATION</b>	Marine and offshore mooring ropes.
<b>SPECIFIED STANDARDS</b>	DIN EN ISO 1140:2012 , Polyamide fibre ropes EN ISO9554:2010: General fibre ropes specification EN ISO 2307:2011: Fibre ropes – Determination of certain physical and mechanical properties

<b>Certificate No.</b>	15/00082
<b>Issue Date</b>	5 August 2015
<b>Expiry Date</b>	4 August 2020
<b>Sheet</b>	1 of 2



M.Jogia  
Marine Technology & Engineering Services, Southampton  
Lloyd's Register EMEA

*Lloyd's Register EMEA  
Southampton Boldrewood Innovation Campus, Burgess Road, Southampton, SO16 7QF*

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**RATINGS**

	<b>Rope diameter (mm):</b>	<b>Minimum Breaking Load (kN):</b>
<b>8 Strand ropes</b>	24 to 96	157 to 2090
<b>12/24 Strand ropes (non-buoyant in sea water)</b>	24 to 96	162 to 2094

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."*

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