



**CERTIFICATE OF APPROVAL OF MANUFACTURERS OF  
MATERIALS**

**No. FAB004117XW**

**This is to certify** that the manufacture of the product identified below is in compliance with the applicable requirements of the RINA Rules for the Approval of Manufacturers of Materials.

<i>Description</i>	<b>Stud link anchor chain cables and accessories</b>
<i>Type</i>	<b>Offshore Mooring Chain</b>
<i>Applicant</i>	<b>RAMNAS BRUK AB P.O. BOX 14 SE-730 60 Ramnas SWEDEN</b>
<i>Manufacturer</i>	<b>RAMNAS BRUK AB</b>
<i>Place of manufacture</i>	<b>P.O. BOX 14 SE-730 60 Ramnas SWEDEN</b>
<i>Reference standards</i>	<b>RINA Rules for the approval of manufacturers of materials</b>

Issued in **STOCKHOLM** on **March 20, 2017**. This Certificate is valid until **March 20, 2022**



Christopher Alixius  
  
RINA Services S.p.A.  
Christopher Alixius

This certificate consists of this page and 1 enclosure



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Offshore Mooring Chain

### APPROVAL CONDITIONS

Chain Type	Grade	Delivery Conditions	Diameter mm	Steel bars supplier
Stud link and Stud less	R4S	Quenched and Tempered	143	OVAKO
Stud link and Stud less	R5	Quenched and Tempered	143	OVAKO
Stud link and Stud less	R4	Quenched and Tempered	143	OVAKO

#### General conditions for the approval

- The approval is granted on condition that the RINA Rules for the approval, manufacture, testing and certification of materials are complied with in all respects.
- RINA is to be notified of any change of materials, manufacturing process, quality control routines that may affect the validity of this certificate.
- As the relevant international rules have not yet been published, for the grades R4, R4S and R5, the approval is to be considered according the manufacturer specification.
- All chain cables and accessories to be used on ships classed with RINA shall meet the requirements of the RINA Rules and other applicable reference standards and shall be tested accordingly.

**STOCKHOLM March 20, 2017**





**LABORATORY RECOGNITION STATEMENT**  
**No. REC004117XW**

This is to certify that:

<i>Description</i>	<b>Laboratory Recognition</b>
<i>Type</i>	<b>Certificate of Laboratory approval</b>
<i>Applicant</i>	<b>RAMNAS BRUK AB</b>
	<b>P.O. BOX 14</b>
	<b>SE-730 60 Ramnas</b>
	<b>SWEDEN</b>
<i>Manufacturer</i>	<b>RAMNAS BRUK AB</b>
<i>Place of manufacture</i>	<b>P.O. BOX 14</b>
	<b>SE-730 60 Ramnas</b>
	<b>SWEDEN</b>
<i>Reference standards</i>	<b>RINA Rules for the Recognition of Testing Laboratories</b>

has been found in compliance with the requirements of the RINA "RULES FOR THE ASSESSMENT OF TESTING LABORATORIES" for the performance of the tests listed in the attachment to this certificate

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**RINA Services S.p.A.**  
**Christopher Alixius**

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