



**CERTIFICATE OF APPROVAL OF MANUFACTURERS OF
MATERIALS**
No. FAB002409XW



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>	Stud link anchor chain cables and accessories- Stud less anchor chain cables and accessories Details are indicated in the attachment.
<i>Type</i>	Offshore mooring chain
<i>Manufacturer</i>	RAMNAS BRUK AB
<i>Place of manufacture</i>	P.O. Box 14 Se-730 60 Ramnas Sweden
<i>Reference standards</i>	RINA Rules for the approval of manufacturers of materials

Issued in **STOCKHOLM** on **March 7, 2009**. *This Certificate is valid until* **March 7, 2014**

RINA
Pino Spadafora

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 studless	R3	Quenched and Tempered	102	CORUS UK Ltd.
Stud link and studless	R3	Double Normalised	125	CORUS UK Ltd.
Stud link and studless	R3S	Quenched and Tempered	132	CORUS UK Ltd.
Stud link	R3 and R3S	Quenched and Tempered	114	CORUS UK Ltd
Stud link and studless	R4	Double Quenched and Tempered	157	CORUS UK Ltd.
Stud link and studless	R4	Quenched and Tempered	114	CORUS UK Ltd
Stud link and studless	R4	Quenched and Tempered / Double Quenched and Tempered	122	CORUS UK Ltd.
Stud link and studless	R4	Quenched and Tempered	125	CORUS UK Ltd
Stud link and studless	R4	Quenched and Tempered	157	CORUS UK Ltd.
Stud link and Studless	R4S	Quenched and Tempered	119	CORUS UK Ltd
Stud link	R5	Quenched and Tempered	84	CORUS UK Ltd.

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 R4S and R5, the approval is to be considered according to 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 2009/03/07