



**CERTIFICATE OF APPROVAL OF MANUFACTURERS OF
MATERIALS**
No. FAB030014XW

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>	Steel forgings
<i>Type</i>	Steel Forgings for machinery - Max weight 50 tons
<i>Applicant</i>	SCANA STEEL BJORNEBORG AB KRISTINEHAMNSVÄGEN 2 S-680 71 BJORNEBORG SWEDEN
<i>Manufacturer</i>	SCANA STEEL BJORNEBORG AB
<i>Place of manufacture</i>	KRISTINEHAMNSVÄGEN 2 S-680 71 BJORNEBORG SWEDEN
<i>Reference standards</i>	RINA Rules for the approval of manufacturers of materials

Issued in **STOCKHOLM** on **October 29, 2014**. This Certificate is valid until **August 30, 2019**



Cees Pallin
RINA Services S.p.A.  **RINA**
C. Pallin

This certificate consists of this page and 1 enclosure

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Steel Forgings for machinery - Max weight 50 tons

APPROVAL CONDITIONS

Applications:	Propeller-, Intermediate and Rudder shafts.
Steel types:	Forgings in carbon, carbon-manganese and alloy steels
Steelmaking process:	Arc furnaces, Ladle furnaces and Vacuum degassing.
Forging process:	Open die forging
Delivery condition:	Rough or finish machined. Normalized and stress relieved.

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.

STOCKHOLM October 29, 2014