



Marine & Offshore  
Division

Certificate number: 18831/C0 BV

File number: MAT 12085 - 2006

Product code: 8153I

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

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## APPROVAL CERTIFICATE for MATERIALS

*This certificate is issued to*

**Scana Steel Björneborg AB**  
Björneborg - SWEDEN

*for the type of product*

**STEEL FORGINGS**

Low alloy steel forgings of maximum weight 54 tons.

**Requirements:**

Bureau Veritas Rules on Materials and Welding for the Classification of Marine Units

*This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

*This certificate is a renewal of certificate N° 18831/B0 BV expiring on 08/08/2016*

**This certificate will expire on: 08 Aug 2021**

**For BUREAU VERITAS,**

At BV GOTHENBURG, on 18 May 2016,

Magne MOLLER



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

## **THE SCHEDULE OF APPROVAL**

### **1. PRODUCT DESCRIPTION :**

Low alloy steel forgings of maximum weight 54 tons.

Steelmaking by electric arc and ladle furnace and vacuum degassing. Open die forgings as forged, rough machined or finished machined.

### **2. DOCUMENTS AND DRAWINGS :**

"Heavy open die forge - Manufacturing process" and manufacturing procedure Rev.01 dated 28/01/2013 issued by Scana Steel Bjerneborg AB.

### **3. TEST REPORTS :**

Inspection certificates No 06,0021, 06,0022 and 06,0023 issued by Scana Steel Bjerneborg AB and dated 10 January 2006.

### **4. APPLICATION / LIMITATION :**

As per Bureau Veritas Rules for Classification. Chemical composition, tensile properties and Charpy V-notch test requirements are to be as per Bureau Veritas Rules NR216 and/or alternative specification mentioned on reviewed drawings, as applicable.

### **5. PRODUCTION SURVEY REQUIREMENTS :**

The steel forgings are to be supplied by Scana Steel Bjerneborg AB in compliance with the type and the requirements described in this certificate. This type of product is within the category IBV of Bureau Veritas Rule Note NR320. BV product certificate is required.

### **6. MARKING OF PRODUCT :**

As per Bureau Veritas Rules for Classification.

### **7. OTHERS :**

This certificate replaces approvals No.18831/A0 BV and No.18831/B0 BV.

\*\*\* END OF CERTIFICATE \*\*\*