



MARINE DIVISION

Certificate number: 19081/B0 BV

File number: MAT 13894-2007

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

FORGES SPA

Cividale del Friuli (UD) - ITALY

for the type of product

STEEL FORGINGS

Carbon-manganese and alloy steel forgings of maximum weight 40 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 will expire on: 11 Apr 2018

For BUREAU VERITAS,

At BV VENEZIA, on 11 Apr 2013,

Sandro BRUSEGAN



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 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 :

Carbon-manganese and alloy steel forgings of maximum weight 40 tons.

Typical grades are C45, 42CrMoS4, 20Mn5, S355J2G3, P355 QH and WstE 460.

Forgings are made by open-die forging.
Heat treatment as applicable.

2. DOCUMENTS AND DRAWINGS :

- "Forging approval for naval application" issued by Forges s.r.l.
- "Forges S.p.A facilities and equipment list" issued by Forges S.p.A and dated 25 July 2012.

3. TEST REPORTS :

Typical tested grades are:

- 20Mn5 according to EN 10250-2
- S355J2G3 according to EN 10250-2
- P355 QH according to EN 10222-4
- WstE 460 according to BN/20/026 rev 03 - EN 10228-1

- "Forging approval for naval application" issued by Forges s.r.l.
- "Forging plans" issued by Forges S.p.A and dated 25 March 2013.
- "Certificates N° 110615, N° 110532, N° 101881, N° 110602 and N° 101521" issued by Forges S.p.A and dated 18 January 2013.

4. APPLICATION / LIMITATION :

As per Bureau Veritas Rules for Classification

5. PRODUCTION SURVEY REQUIREMENTS :

The forgings are to be supplied by Forges S.p.A 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 cancels and replaces approvals number 19081/A0 dated 2 February 2007 and 19081/A1 dated 20 December 2007.

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