

MARINE DIVISION

67/71 Boulevard du Château
92200 Neuilly-sur-Seine - France

Tel. 33 1 55 24 70 00
Fax. 33 1 55 24 70 45
www.veristar.com



Certificate number: 20971/A0 BV

File number : MAT 3296 - 2008

Product code : 8153I

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

APPROVAL CERTIFICATE for MATERIALS

This certificate is issued to

FORGIATURA MORANDINI

Cividate Camuno (BS) - ITALY

for the product

STEEL FORGINGS

Carbon, carbon-manganese, low alloy, alloy and austenitic stainless steel forgings of maximum weight 80 tons.

Regulations and standards :

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 of the Regulations and standards mentioned above.

This certificate is valid until : 19 Dec 2013

At Neuilly, on : 19 Dec 2008

For BUREAU VERITAS,
By order of the Secretary

Approval office

Local office : BV GENOA
Surveyor : G. Pirovano

L. COURREGELONGUE



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. 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, carbon-manganese, low alloy, alloy and austenitic stainless steel forgings of maximum weight 80 tons.

Typical tested grades are : CK35 for carbon steels
 BS1503 for carbon-manganese steels
 42CrMo4 for low alloy steels
 304 for austenitic steels.

Forgings are heat treated as applicable.

2. DOCUMENTS AND DRAWINGS :

"Technical qualification of the factory" issued by Forgiatura Morandini and dated September 2005.

3. TEST REPORTS :

- "Material test report N°1147" issued by Forgiatura Morandini and dated 20 March 2008.
- "Material test report N°1148" issued by Forgiatura Morandini and dated 21 March 2008.
- "Material test report N°1149" issued by Forgiatura Morandini and dated 21 March 2008.
- "Material test report N°1330" issued by Forgiatura Morandini and dated 10 June 2008.
- "Material test report N°1150" issued by Forgiatura Morandini and dated 28 March 2008.

4. APPLICATION / LIMITATION :

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 manufactured, examined and tested by Forgiatura Morandini in accordance with the type described in this certificate and Bureau Veritas Rules for the Classification of Steel Ships.

Arrangements shall be made for a Society's Surveyor to attend the relevant tests and examinations at manufacturer's works or to perform the relevant audits when an alternative survey scheme (BV Mode I) has been agreed. Relevant Bureau Veritas certificate will be issued after satisfactory completion of the procedure.

6. MARKING OF PRODUCT :

As per Bureau Veritas Rules for Classification

7. OTHERS :

Nil.

*** END OF CERTIFICATE ***