



Marine & Offshore

Certificate number: 21545/C0 BV

File number: MAT 74896-2009

Product code: 8154I

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

PTC INDUSTRIES LIMITED
LUCKNOW - INDIA

for the type of product

STEEL CASTINGS

Carbon and stainless steel castings

Requirements:

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

This certificate is issued to attest that Bureau Veritas Marine & Offshore 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: 06 Nov 2024

For Bureau Veritas Marine & Offshore,

At BV MUMBAI (BOMBAY), on 06 Nov 2019,

Rajan VARDHAN



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 Marine & Offshore. 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 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 Marine & Offshore 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 :

Typical casting applications are boilers, pressure vessels and piping system.

Carbon steel castings of maximum weight 1000kg.

Stainless steel castings of maximum weight 2000kg.

Steelmaking by induction furnace. Investment castings. Heat treatment as applicable.

2. DOCUMENTS AND DRAWINGS :

As per following documents issued by PTC Industries Limited:

- Document Ref.PTC-AMTC-BV-CERT-01, Ref.PTC-AMTC-BV-CERT-02 dated 24/08/2018.

- "Specific information for NR480 Section 06" submitted August 2019.

- "General information about company and manufacturing data" and "Annexures" dated 07 August 2019.

3. TEST REPORTS :

3.1 Typical grades tested are:

- WCB according to ASTM A216 for carbon steel,

- CF8M according to ASTM A351 for stainless steel.

3.2 As per following documents issued by PTC Industries Limited:

- "Request for Foundry Approval" dated 29/01/2009.

- Test certificate No. SNR/2013/27513 dated 15/11/2013, No. IR/PTC/0002-R dated 25/10/2013, No.

LPT/VALCO/2013/1304DT dated 29/11/2013.

- Test certificate Ref.PTC-AMTC-BV-CERT-05 dated 10/10/2018.

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 Materials Rules and/or alternative specification mentioned on reviewed documents and drawings, as applicable.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The steel castings are to be supplied by PTC Industries Limited in compliance with the type and the requirements described in this certificate.

5.2 - This type of product is within the category IBV of Bureau Veritas Rule Note NR320.

5.3 - BV product certificate is required.

5.4 - For information, PTC Industries Limited has declared to Bureau Veritas the following production site:

**PTC Industries Limited,
Advanced Manufacturing and Technology Center
NH-25A, Sarai Sahjadi
Lucknow-22710, India**

6. MARKING OF PRODUCT :

As per Bureau Veritas Rules for Classification.

7. OTHERS :

This certificate replaces approvals No.21545/A0 BV to No.21545/B1 BV.

*** END OF CERTIFICATE ***