

Marine & Offshore

Certificate number: 21361/C0 BV File number: MAT 74631-2009

Product code: 8153l

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

www.veristar.com

APPROVAL CERTIFICATE for MATERIALS

This certificate is issued to

ZARMEN FPA

ZDZIESZOWICE - POLAND

for the type of product

STEEL FORGINGS

Carbon, carbon-manganese and alloy steel forgings with maximum weight 24 tons.

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 is a renewal of certificate N° 21361/B0 BV expiring on 30/09/2019

This certificate will expire on: 30 Sep 2024

For Bureau Veritas Marine & Offshore, At BV KATOWICE, on 23 Sep 2019, Wojciech Lubojanski





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.

Certificate number: 21361/C0 BV

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Carbon, carbon-manganese and alloy steel forged products for machinery, shafts and non-welded components in general. Maximum forgings weight 24 tons.

Forgings are made from ingots and open die forging. Heat treatment as applicable.

2. DOCUMENTS AND DRAWINGS:

As per following document issued by ZARMEN FPA:

- "Application for plant authorization" dated 27 November 2008.

3. TEST REPORTS:

- 3.1 Typical tested products are round bars in steel grade:
- S355J2G3 according to EN10250-2 in normalized condition
- C22.8 according to DIN17243 in normalized condition
- 42CrMo4 according to EN 10250-3 in quenched and tempered condition.
- 3.2 As per following documents issued by ZARMEN FPA:
- "Approval test report" submitted in 2009.
- Statistics_mechanical properties submitted 2014.

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 mentionned on reviewed documents and drawings, as applicable.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 The steel forgings are to be supplied by ZARMEN FPA 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.

6. MARKING OF PRODUCT:

As per Bureau Veritas Rules for Classification.

7. OTHERS:

This certificate replaces approvals from No. 21361/A0 BV to No.21361/B0 BV.

*** END OF CERTIFICATE ***