



Marine & Offshore

Certificate number: 72412/A0 BV File number: MAT 2502-2022

Product code: 90151

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

HUTA BANKOWA Sp. z o.o.

DABROWA GORNICZA - POLAND

for the type of product

ROLLED PRODUCTS FOR MACHINERY AND EQUIPMENT

Hot rolled round bars in carbon, carbon-manganese and alloy steels.

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: 16 Mar 2028

For Bureau Veritas Marine & Offshore, At BV KATOWICE, on 16 Mar 2023, Wojciech Lubojanski

This certificate was created electronically and is valid without signature



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

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THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Rolled bars used as semi-finished products.

Steel type	Diameter	Delivery conditions (1)
Carbon, Carbon-manganese steel	Max. 220mm	As Rolled (AR) or normalized (N)
Alloy steel	Max. 220mm	As Rolled (AR) or quenched and tempered (QT)

(1) For the purpose of mechanical properties evaluation, the test samples are taken from as-rolled bars or heat treated rolled bars.

No steelmaking. Round bars made from ingots. Total reduction ratio above 2.3:1.

2. DOCUMENTS AND DRAWINGS:

- 2.1 Documents issued by Huta Bankowa Sp. z o.o.:
- "Company and manufacturing process data" submitted on December 2022.
- Approval test program dated 23/06/2022.
- Technical specification dated 25/05/2022.

3. TEST REPORTS:

- 3.1 Documents issued by Huta Bankowa Sp. z o.o.:
- Ref. 173-BV issued for grade S235JR AR Heat No.211355 dated 23/08/2022.
- Ref. 2488-2022 issued for grade S235JR AR Heat No.211355 dated 24/08/2022.
- Ref. 174-BV issued for grade S355J2 AR Heat No.212169 dated 23/08/2022.
- Ref. 2488-2022 issued for grade S355J2 AR Heat No.211355 dated 24/08/2022.
- Ref. 2488-2022 issued for grade $S355NL-Heat\ No.212169\ dated\ 24/08/2022$.
- Ref. 2488-2022 issued for grade C45R Heat No.231916 dated 24/08/2022.
- Ref. 2488-2022 issued for grade C60R Heat No.220105 dated 24/08/2022.
- Ref. 2488-2022 issued for grade 42CrMoS4 Heat No.62894 dated 24/08/2022.
- Metallographic test reports dated 24/08/2022.
- Report Ref.687-A-2022 dated 18/11/2022.

3.2 - Typical tested grades:

- S235J2 and S355J2 according to EN 10025-2, S355NL according to EN 10025-3, C45R and C60R according to ISO 683-1 for Carbon, carbon-manganese steels.
- 42CrMoS4 according to ISO 683-2 for Alloy steels.

4. APPLICATION / LIMITATION:

4.1 - 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 NR 216 and/or alternative specification mentioned on reviewed drawings, as applicable.

4.2 - Ingots are supplied by ArcelorMittal Poland S.A., or, Cognor S.A Oddzial Ferrostal Labedy w Zawierciu, or others steelmakers approved by Bureau Veritas.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 The rolled steel bars are to be supplied by Huta Bankowa Sp. z o.o 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:

Nil.

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*** END OF CERTIFICATE ***