



Marine & Offshore

Certificate number: 20929/C0 BV

File number: MAT 2838-2009

Product code: 90071

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

ARCELORMITTAL BRASIL (AM TUBARAO)

Serra - ES - BRAZIL

for the type of product

HIGHER STRENGTH HULL STEEL ROLLED PRODUCTS

Hot rolled coils and plates from coils in steel grades AH32 and AH36.

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: 29 Nov 2024

For Bureau Veritas Marine & Offshore,
At BV RIO DE JANEIRO, on 29 Nov 2019,
Lando Ribeiro



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 :

Hot rolled coils and plates from coils.

Steel grade	Deoxydation practice & Refining	Delivery conditions
AH32	Al - Si Killed or Al Killed and grain refining with Al or Al+Nb or Al+Ti	As Rolled (AR) up to 16mm
AH36	Al - Si Killed or Al Killed and grain refining with Al or Al+Nb or Al+Ti	As Rolled (AR) up to 16mm

Steelmaking by BOF converters. Continuous Casting.

2. DOCUMENTS AND DRAWINGS :

As per following document issued by ArcelorMittal Brasil (AM Tubarao):

- "CST TEST REPORT - Hot Coils Approval for Plates - Higher Strength Hull Structural Steel (Grades AH-32)" dated May 2008.

3. TEST REPORTS :

As per following documents issued by ArcelorMittal Brasil (AM Tubarao):

- "CST TEST REPORT - Hot Coils Approval for Plates - Higher Strength Hull Structural Steel (Grades AH-32)" dated May 2008.

- "ArcelorMittal Tubarao's data book" dated July 2016.

- Weldability tests: Doc. No.B52240MRT0015 Revision1 and No.B52240MRT0014 Revision 1 dated 18 October 2016.

4. APPLICATION / LIMITATION :

As per Bureau Veritas Rules for Classification.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The hot rolled coils and plates from coils are to be supplied by ArcelorMittal Brasil (AM Tubarao) 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 No.20929/A0 BV and No.20929/B0 BV.

*** END OF CERTIFICATE ***