



Marine & Offshore

Certificate number: 43013/B0 BV

File number: MAT 61796-2015

Product code: 9012I

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

Shanxi Taigang Stainless Steel Co. Ltd.

Taiyuan - CHINA

for the type of product

FERRITIC STEEL ROLLED PRODUCTS FOR LOW TEMPERATURE APPLICATIONS

Hot rolled plates in nickel steel grades 5.0Ni and 9.0Ni

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: 21 May 2026

For Bureau Veritas Marine & Offshore,

At BV SHANGHAI, on 21 May 2021,

Jennifer Zhang



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 plates in nickel steel for low temperature applications.

Steel grade	Deoxidation practice & Refining	Delivery condition
5.0 Ni	Killed and fine grain treated with Al	Quenched and Tempered (QT) with thickness from 5mm to 50mm
9.0 Ni	Killed and fine grain treated with Al	Quenched and Tempered (QT) with thickness from 5mm to 50mm

Steelmaking by BOF Converter, LF furnace, RH vacuum degasing at N°2 steelmaking plant.
Continuous casting.

2. DOCUMENTS AND DRAWINGS :

- "Works approval document for BV of ferrite steel (5Ni and 9Ni) for low temperature service" issued by Shanxi Taigang Stainless Steel Co., Ltd - Linfen heavy plate mill and dated August 2015.
- NDT equipments and list of operators issued by Shanxi Taigang Stainless Steel Co., Ltd and dated 2015.

3. TEST REPORTS :

- "Works approval test and course for BV of ferrite steel (5Ni and 9Ni) for low temperature service" issued by Shanxi Taigang Stainless Steel Co., Ltd - Linfen heavy plate mill and dated August 2015.
- Heat treatment records issued by TISCO and dated August 2013.

4. APPLICATION / LIMITATION : s

As per Bureau Veritas Rules for Classification.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The steel plates are to be supplied by Shanxi Taigang Stainless Steel Co., Ltd 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 approval No.43013/A0 BV.

***** END OF CERTIFICATE *****