



Marine & Offshore

Certificate number: 16026/D2 BV

File number: MAT 61796

Product code: 9013I

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

STAINLESS STEEL ROLLED PRODUCTS

Hot rolled plates in stainless steel grades 304, 304L, 304N, 316, 316L, 317, 317L, UNS S32304, UNS S31803 and UNS S32101 (ASTM A240).

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 05 Dec 2023,

Hong Zhang

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.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

- Hot rolled plates in austenitic stainless steel and austenitic-ferritic (duplex) stainless steel manufactured by Shanxi Taigang Stainless Steel Co., Ltd. - **Taiyuan Plant:**

Steel grade	Delivery condition	Dimension
304 - 304L 316 - 316L 304N (ASTM A240)	Solution treated	Thickness range 6 mm to 60 mm
317 - 317L	Solution treated	Thickness range 6 mm to 40 mm
UNS S31803	Solution treated	Thickness range 6 mm to 40 mm

- Hot rolled plates in austenitic stainless steel and austenitic-ferritic (duplex) stainless steel manufactured by Shanxi Taigang Stainless Steel Co., Ltd. - **Linfen Plant:**

Steel grade	Delivery condition	Dimension
304 - 304L 316 - 316L 304N (ASTM A240)	Solution treated	Thickness range 6 mm to 60 mm
UNS S32304 UNS S31803 UNS S32101 (ASTM A240)	Solution treated	Thickness range 6 mm to 40 mm

No.2 Steel-smelting plants continuously cast bloom, in Taiyuan city for 4300mm hot rolling mill.

No.2 Steelmaking plant, in Taiyuan city for Linfen heavy plant mill.

Steelmaking by Electric Arc Furnace, Argon Oxygen Decarburization, Ladle furnace and vertical continuous casting.

Plates are made at wide plate mill by hot rolling of slabs with a solution treatment followed by rapid cooling.

2. DOCUMENTS AND DRAWINGS :

2.1-Documents issued by Shanxi Taigang Stainless Steel Co., Ltd. - Taiyuan Plant:

- "Works approval document" dated August 2005.
- "Works approval document for duplex stainless steel plate for ships" dated January 2007.
- "BV application documents for 317L update" dated August 2021.

2.2-Documents issued for Shanxi Taigang Stainless Steel Co., Ltd. - Linfen Plant:

- "Part I-The testing plan for works approval of hot rolled austenitic and duplex stainless steel plate for ships".
- "Part II-Technique and equipment introduce for stainless steel plate for ships".
- "Linfen Heavy plate mill Austenitic Steel Plate (extend scope) for BV Works approval document" dated June 2013.
- "Austenitic azotic stainless steel plate for ships" dated September 2018.
- "Technique and equipment introduce for stainless steel plate for ships" dated January 2018.
- "Technical documentation for extension 16026-D2" dated 26 April 2023.
- "Manufacturing documentation 16026-D2" dated 23 September 2022.

3. TEST REPORTS :

3.1-Reports issued by Shanxi Taigang Stainless Steel Co., Ltd. - Taiyuan Plant:

- "The testing conspectus for works approval of hot rolled austenitic stainless steel for ships" dated September 2005.
- "Works approval for stainless steel plate 316L - Testing reports" dated September 2005.
- "Works approval document for duplex stainless steel plate for ships" dated January 2007.
- "Test report for 317L update" dated May 2021.
- "Test report for 16026 D2 extension -Austenitic stainless steel" dated 7 September 2023.

3.2-Reports issued for Shanxi Taigang Stainless Steel Co., Ltd. - Linfen Plant:

- "Part III- Stainless steel plate works approval - Testing reports" dated 7 May 2011.
- "Linfen Heavy plate mill Austenitic Steel Plate (extend scope) for BV Works approval document" dated June 2013.
- "Austenitic azotic stainless steel plates – Works approval testing reports" dated August 2018.
- "Test report_Duplex_16026 D2 extension" dated June 2018.
- "Welding test report_Duplex_16026 D2 extension - S32101" dated May 2018.

4. APPLICATION / LIMITATION :

As per Bureau Veritas Rules for Classification.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The rolled products 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.

5.4 - For information, Shanxi Taigang Stainless Steel Co., Ltd. has declared to Bureau Veritas the following production sites:

Shanxi Taigang Stainless Steel Co., Ltd. Taiyuan Plant

No.2 Jian Caoping Street, Taiyuan,
Shanxi 030003 Taiyuan
CHINA

Shanxi Taigang Stainless steel Co.,Ltd. Linfen Plate Plant

No.3, Qiaodong Street, Linfen City
Shanxi,
CHINA

6. MARKING OF PRODUCT :

As per Bureau Veritas Rules for the Classification.

7. OTHERS :

This certificate replaces approvals from No.16026/A0 BV to No.16026/D1 BV.

It is Shanxi Taigang Stainless Steel Co., Ltd.'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

*** END OF CERTIFICATE ***