



MARINE DIVISION

Certificate number: 16026/B2 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, 316, 316L, UNS S32304 (ASTM A240) and UNS S31803.

**Requirements:**

Bureau Veritas Rules on Materials and Welding for the Classification of Marine Units

*This certificate is issued to attest that BUREAU VERITAS 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: 14 Jan 2016**

**For BUREAU VERITAS,**

At BV SHANGHAI, on 10 Jul 2013,

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. 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 Division available on the internet site [www.veristar.com](http://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 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.

Steel grade	Delivery condition	Dimension
304 - 304L	Solution treated	Thickness range 6 mm to 60 mm
306 - 316 L	Solution treated	Thickness range 6 mm to 60 mm
UNS S32304 (ASTM A240)	Solution treated	Thickness range 6 mm to 40 mm
UNS S31803	Solution treated	Thickness range 6 mm to 40 mm

Steelmaking by Electric Arc Furnace, Argon Oxygen Decarburization and vertical continuous casting. Plates are made by hot rolling of slabs with a solution treatment followed by rapid cooling.

### 2. DOCUMENTS AND DRAWINGS :

- "Works approval document" issued by Stainless steel incorporated company Ltd. of TISCO and dated August 2005.
- "Works approval document for duplex stainless steel plate for ships" issued by Shanxi Taigang Stainless Steel Co. Ltd and dated January 2007.
- "Part I-The testing plan for works approval of hot rolled austenitic and duplex stainless steel plate for ships" issued by Shanxi Taigang Stainless Steel Co. Ltd (Linfen plate plant).
- "Part II-Technique and equipment introduce for stainless steel plate for ships" issued by Shanxi Taigang Stainless Steel Co. Ltd (Linfen plate plant).
- "Linfen Heavy plate mill Austenitic Steel Plate (extend scope) for BV Works approval document" issued by Shanxi Taigang Stainless Steel Co. Ltd (Linfen heavy plate mill) and dated June 2013.
- Source recording list of course issued issued by Shanxi Taigang Stainless Steel Co. Ltd.

### 3. TEST REPORTS :

- "The testing conspectus for works approval of hot rolled austenitic stainless steel for ships" issued by Stainless steel incorporated company Ltd. of TISCO and dated September 2005;
- "Works approval for stainless steel plate 316L - Testing reports" issued by Stainless steel incorporated company Ltd. of TISCO and dated September 2005;
- "Works approval document for duplex stainless steel plate for ships" issued by Shanxi Taigang Stainless Steel Co. Ltd and dated January 2007.
- "Part III- Stainless steel plate works approval - Testing reports" issued by Shanxi Taigang Stainless Steel Co. Ltd (Linfen plate plant) and dated 7 May 2011.
- "Linfen Heavy plate mill Austenitic Steel Plate (extend scope) for BV Works approval document" issued by Shanxi Taigang Stainless Steel Co. Ltd (Linfen heavy plate mill) and dated June 2013.

### 4. APPLICATION / LIMITATION :

As per Bureau Veritas Rules for Classification.

### 5. PRODUCTION SURVEY REQUIREMENTS :

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.

This type of product is within the category IBV of Bureau Veritas Rule Note NR320. BV product certificate is required.

### 6. MARKING OF PRODUCT :

As per Bureau Veritas Rules for the Classification.

**7. OTHERS :**

This certificate cancels and replaces approval number 16026/A0 dated 06 January 2006, 16026/A1 dated 13 February 2009, 16026/B0 dated 14 January 2011 and 16026/B1 dated 23 June 2011.

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