



CERTIFICATE NUMBER

DATE

11-HS684970-PDA

18 January 2011

ABS TECHNICAL OFFICE

Houston Materials

CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of
SHANXI TAIGANG STAINLESS STEEL CO., LTD

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

PRODUCT: **Stainless Steel Plate**

MODEL: **Grades :304, 304L, 316, 316L, S32304(2304) and S31803**

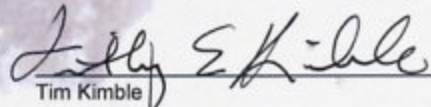
This Product Design Assessment (PDA) Certificate 11-HS684970-PDA, dated 18/Jan/2011 remains valid until 17/Jan/2016 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING


Tim Kimble

Engineering Type Approval Co-ordinator

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the abovesentioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A35.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

SHANXI TAIGANG STAINLESS STEEL CO., LTD

NO. 2 JIANCAOPING

TAIYUAN SHANXI

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Product: Stainless Steel Plate

Model: Grades :304, 304L, 316, 316L, S32304(2304) and S31803

Intended Service:
Marine & Offshore Application

Description:

Manufacturing System for Hot Rolled Austenitic Stainless Steel Plate & Duplex Stainless Steel Plate.
Grades : - UNS S30400(304)/S30403(304L), - UNS S31600(316)/S31603(316L), - UNS S32304(2304) and UNS S31803

Ratings:

Maximum Thickness of Rolled Plate: 40 mm.

Steel Making Practice: EAF, AOD, Killed;

Steel Casting Process: Continuous Casting.

Supply Condition: Solution heat treated.

Service Restrictions:

Unit Certification may be required for the products to be installed in ABS classed vessels or facilities and this type approval does not waive the requirements of unit certification. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard including inspection standards and tolerances must be clearly defined.

Comments:

None

Notes / Drawings / Documentation:

Supporting Documentation: Survey Report YA1916209-A.

Term of Validity:

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STANDARDS

ABS Rules:

2011 Steel Vessels Rules 1-1-4/7.7, 1-1-Appendix 3

National:

ASTM A240 / A240M