



Certificate Number 19-NB3638838
 Effective Date 17-July-2019
 Expiration Date 16-July-2024
 ABS Port Office CN Ningbo Port MLO
 Website www.china-stainless.com

CERTIFICATE OF Manufacturing Assessment

This is to certify that the Undersigned evaluated the manufacturing quality procedures of
ZHEJIANG YONGSHANG SPECIAL MATERIAL CO., LTD.
 located at

Daoqiao Village, Maogao Street, Suichang County, Lishui City, Zhejiang, P. R. China

The quality monitoring systems during production were verified to reflect the specific surveys, required by the ABS Rules, Guides, the associated Specifications and Standards for the manufacture of

Pipe, Stainless Steel

This manufacturer presented a sample or specimen of the product, representative of the "type" approved for the purpose of verifying that the "type" has been manufactured in conformance with the Manufacturer's Product Design Assessment(s).

This Certificate is manufacturer and location specific and is subject to annual audits. Consult the ABS Type Approval website to confirm the continued validity of this certificate and the status of products.

The ABS Office issuing the certificate is to be kept updated with changes to the production methods, quality control systems, products and models and any changes made.



Luo Jiang-Hu, Surveyor

Annual Endorsement

First	Second	Third	Fourth
4473810 10 Oct. 2020	4952276 23 Sep. 2021	5425468 15 Sep. 2022	6069481 09 Oct. 2023
WG and Date			

NOTE: This Certificate evidences compliance with one or more of the Rules, guides, standards or other criteria of American Bureau of Shipping and is issued solely for the use of the Bureau, its committees, its clients or other authorized entities. This Certificate is a representation only that the structure, item of material, equipment, machinery or any other item covered by this Certificate has met one or more of the Rules, guides, standards or other criteria of American Bureau of Shipping as of the date of issue. Parties are advised to review the Rules for the scope and conditions of classification and to review the survey records for a fuller description of any restrictions or limitation on the vessel's service or surveys. The validity, applicability and interpretation of this Certificate is governed by the Rules and standards of American Bureau of Shipping who shall remain the sole judge thereof. Nothing contained in this Certificate or in any notation made in contemplation of this Certificate shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied.



CERTIFICATE NUMBER 19-SQ1865951-PDA

EFFECTIVE DATE 14 June 2019

EXPIRATION DATE 13 June 2024

ABS TECHNICAL OFFICE GCD Materials

CERTIFICATE OF

Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

ZHEJIANG YONGSHANG SPECIAL MATERIAL CO., LTD

Located at

DAQIAO VILLAGE, MIAOGAO STREET, SUICHANG COUNTY,
LISHUI CITY, ZHEJIANG PROVINCE, CHINA

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 Pipe, Stainless Steel

Model ASTM A312 TP304L/304 with O.D. 406.4mm X W.T. 31.75mm, O.D. 219.1mm X WT 12.7 mm, O.D. 10mm X W.T. 1mm, ASTM A312 TP316L/316 with O.D. 406.4mm X W.T. 31.75mm, O.D. 219.1mm X WT 12.7...

This Product Design Assessment (PDA) Certificate remains valid until 13 June 2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping

Zhiyi Li for Bin-Hong Wang

Bin-Hong Wang
Manager

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 aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

ZHEJIANG YONGSHANG SPECIAL MATERIAL CO.

DAQIAO VILLAGE, MIAOGAO STREET, SUICHANG COUNTY, LISHUI CITY, ZHEJING PROVINCE

LISHUI ZHEJIANG

China

Telephone: 86-578-8196682

Fax: 86-578-8121777

Email: 20434157@qq.com

Web: www.china-stainless.com

Tier: 5 - Unit Certification Required

Product: Pipe, Stainless Steel
Model: ASTM A312 TP304L/304 with O.D. 406.4mm X W.T. 31.75mm, O.D. 219.1mm X WT 12.7mm, O.D. 10mm X W.T. 1mm
ASTM A312 TP316L/316 with O.D. 406.4mm X W.T. 31.75mm, O.D. 219.1mm X WT 12.7mm, O.D. 10mm X W.T. 1mm
ASTM A312 TP321 with O.D. 406.4mm X W.T. 31.75mm, O.D. 10mm X W.T. 1mm, O.D. 219.1mm X W.T. 12.7mm
ASTM A790 S32205/S31803 with O.D. 426mm X W.T. 12mm, O.D. 219.08mm X W.T. 20.62mm, O.D. 10mm X W.T. 2mm
ASTM A790 S32750 with O.D. 325mm X W.T. 10mm, O.D. 219.08mm X W.T. 20.62mm, O.D. 14mm X W.T. 2mm

Intended Service:

Marine and Offshore Applications - Seamless Steel Tubes and Pipes (Process Piping only).

Description:

Product: Seamless stainless steel Pipe

Grades/Standards: ASTM A312/A312M TP304, TP304L, TP316, TP316L, TP321; ASTM A790 S32205, 31803, S32750

Size Range: For A312 TP304, TP304L, TP316, TP316L, TP321 with Max. O.D. 406.4mm, max. W.T. 31.75 mm; For A790 S32205, S31803 with Max. O.D. 426 mm, Max. W.T. 20.62mm; For A790 S32750 with Max. O.D. 325mm, Max. W.T. 20.62mm.

Manufacturing process: cold rolling/drawing

Delivery condition: Solution treated

Rating:

Size Range:

For A312 TP304, TP304L, TP316, TP316L, TP321 with Max. O.D. 406.4mm, max. W.T. 31.75 mm

For A790 S32205, S31803 with Max. O.D. 426 mm, Max. W.T. 20.62mm

For A790 S32750 with Max. O.D. 325mm, Max. W.T. 20.62mm

Service Restriction:

Unit Certification is required for this product used in Piping Class I & II except for hydraulic piping. If the manufacturer or purchaser requests an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

2. All Steel Pipe Fittings are to be suitable for the intended piping system in accordance with 4-6-1/ Table 1 of the Marine Vessels Rules.

3. The piping component is to bear permanent identification, such as manufacturer's name or trademark, standard of compliance, material identity, pressure rating, etc., as required by the standard of compliance or the manufacturer's specification.

4. All tubes (pipes) are to be hydrostatically or NDE tested during manufacturing as per ABS Marine Vessels Rules part 2-3-12/29.1. In addition, Class I & II pipes are to be hydrostatically tested as per ABS Marine Vessels Rule part 4-6-2/7.3.

Notes/Drawing/Documentation:

Drawing No. ABS11, Test Report from Zhejiang Yongshang Special Material Co., Ltd dated 25 APR 2019, Revision: 0, Pages: 1

Drawing No. ABS12, Test Report from Zhejiang Yongshang Special Material Co., Ltd dated 25 APR 2019, Revision: 0, Pages: 1

ZHEJIANG YONGSHANG SPECIAL MATERIAL CO.
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Tier: 5 - Unit Certification Required

Drawing No. ABS13, Test Report from Zhejiang Yongshang Special Material Co., Ltd dated 25 APR 2019, Revision: 0, Pages: 1
Drawing No. ABS21, Test Report from Zhejiang Yongshang Special Material Co., Ltd dated 25 APR 2019, Revision: 0, Pages: 1
Drawing No. ABS22, Test Report from Zhejiang Yongshang Special Material Co., Ltd dated 25 APR 2019, Revision: 0, Pages: 1
Drawing No. ABS23, Test Report from Zhejiang Yongshang Special Material Co., Ltd dated 25 APR 2019, Revision: 0, Pages: 1
Drawing No. ABS31, Test Report from Zhejiang Yongshang Special Material Co., Ltd dated 25 APR 2019, Revision: 0, Pages: 1
Drawing No. ABS32, Test Report from Zhejiang Yongshang Special Material Co., Ltd dated 25 APR 2019, Revision: 0, Pages: 1
Drawing No. ABS33, Test Report from Zhejiang Yongshang Special Material Co., Ltd dated 25 APR 2019, Revision: 0, Pages: 1
Drawing No. ABS41, Test Report from Zhejiang Yongshang Special Material Co., Ltd dated 25 APR 2019, Revision: 0, Pages: 1
Drawing No. ABS42, Test Report from Zhejiang Yongshang Special Material Co., Ltd dated 25 APR 2019, Revision: 0, Pages: 1
Drawing No. ABS43, Test Report from Zhejiang Yongshang Special Material Co., Ltd dated 25 APR 2019, Revision: 0, Pages: 1
Drawing No. ABS51, Test Report from Zhejiang Yongshang Special Material Co., Ltd dated 25 APR 2019, Revision: 0, Pages: 1
Drawing No. ABS52, Test Report from Zhejiang Yongshang Special Material Co., Ltd dated 25 APR 2019, Revision: 0, Pages: 1
Drawing No. ABS53, Test Report from Zhejiang Yongshang Special Material Co., Ltd dated 25 APR 2019, Revision: 0, Pages: 1
Drawing No. Asbestos Free Declaration, Asbestos Free Declaration, Revision: 0, Pages: 1
Drawing No. MA-Quality Assurance System Information of Stainless Steel Pipes for DA and MA by ABS, MA-Quality Assurance System Information of Stainless Steel Pipes for DA and MA by ABS, Revision: 0, Pages: 1
Drawing No. PDA-Design Assessment Document of Seamless Stainless Steel Pipe, PDA-Design Assessment Document of Seamless Stainless Steel Pipe, Revision: 0, Pages: 1
Drawing No. Type Approval Request Form, Type Approval Request Form, Revision: 0, Pages: 1

Terms of Validity:

This Product Design Assessment (PDA) Certificate 19-SQ1865951-PDA, dated 14/Jun/2019 remains valid until 13/Jun/2024 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.

STANDARDS

ABS Rules:

ABS Steel Vessels Rules (2019) 1-1-4/7.7, 1-1-A3, 1-1-A4, 2-3-12, 4-6-2

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Tier: 5 - Unit Certification Required

ABS Marine Vessels Rules (January 2019) 1-1-4/7.7, 1-1-A3, 1-1-A4, 2-3-12, 4-6-2

ABS Mobile Offshore Drilling Units Rules (2019) 1-1-4/9.7, 1-1-A2, 1-1-A3, 2-3-12, 4-2-2

ABS Mobile Offshore Units Rules (January 2019) 1-1-4/9.7, 1-1-A2, 1-1-A3, 2-3-12, 4-2-2

National:

ASTM A312/A312M (2018)

ASTM A790/A790M (2018)

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA