



Marine & Offshore
Division

Certificate number: 07800/D1 BV

File number: MAT 6485/01

Product code: 2003I

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

Sungwon Co., Ltd.
Jeonnam - KOREA (REPUBLIC OF)

for the type of product

WELDED PIPES AND FITTINGS

Longitudinally welded pipes made of stainless steel grade STS304, STS304L, STS316 and STS316L

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: 19 Apr 2018

For BUREAU VERITAS,

At BV PUSAN, on 02 Mar 2016,

Chang-uk HONG



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 & Offshore Division 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 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 :

Longitudinally welded austenitic stainless steel pipes

Steel grade	Dimensions	Delivery condition
304, 304L	Outside diameter from 9.525mm up to 1066.8mm Wall thickness from 2.0mm up to 22mm	Solution treated
316, 316L	Outside diameter from 9.525mm up to 1066.8mm Wall thickness from 2.0mm up to 22mm	Solution treated

Automatic longitudinal welding by TIG, Plasma, and TIG + Plasma.
Heat treatment by solution annealing followed by water quenching.

2. DOCUMENTS AND DRAWINGS :

- "Additional size type approval request under BV" issued by Sung Won Pipe Co., Ltd and dated 9 February 2007.

3. TEST REPORTS :

- WPS SW007 issued by Sung Won Pipe Co., Ltd and dated 07 June 2007.
 - "Additional size type approval request under BV" issued by Sung Won Pipe Co., Ltd and dated 07 June 2007.
 - "Report of work approval test result" issued by Sung Won Pipe Co., Ltd and dated 25 March 2002.
 - "Report of type approval test result" issued by Sung Won Pipe Co., Ltd and dated 07 March 2006
- SUNG 98 - 11 dated 17/06/1998 :
- Mechanical property test reports N° 01 to 04 dtd 29/05/1998
 - Test reports N° T010315-1 & 2 dated 08/06/1998 from Korea Institute of Machinery & Materials
 - Test report N° TP-05019 dated 13/06/1998 from Korea Testing & Research Institute for Chemical Industry
 - Test reports N° T010316-1 to 8 dated 16/06/1998 from Korea Institute of Machinery & Materials

4. APPLICATION / LIMITATION :

As per Bureau Veritas Rules for the Classification.
Coils are to be supplied by steelmakers approved by Bureau Veritas and with manufacturer's certificate as a minimum.

5. PRODUCTION SURVEY REQUIREMENTS :

The welded pipes are to be supplied by Sungwon 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 approval certificate replaces approval certificates from N°07800/B0 to N°07800/D0.

*** END OF CERTIFICATE ***