



Approval No. ST10PI Certificate No. TA16360E

APPROVAL OF MANUFACTURING PROCESS

This is to certify that

Sungwon Co., Ltd. Kwangyang, Jeonanam Korea

has been approved for the manufacturing process of undermentioned materials by the NIPPON KAIJI KYOKAI in accordance with the requirements of 1.2, Part K of the Society's "Rules for the Survey and Construction of Steel Ships" and Chapter 2, Part 1 of the Society's "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use".

MATERIALS

Stainless Steel Pipes

The details of the relevant approval conditions are given in the PARTICULARS OF APPROVAL listed in the reverse of this certificate.

The products for the ships classed with the Society are to be manufactured, tested and inspected in compliance with the Rules.

This certificate is valid until 15 May 2018. Issued at Tokyo on 23 March 2016.

Renewal Date: 16 May 2013

T. Imamura General Manager Material and Equipment Department



No. : TA16361E

Date: 23 March 2016

PARTICULARS OF APPROVAL

Approval Condition for Manufacturing Process of Stainless Steel Pipes

Manufacturer

: Sungwon Co., Ltd.

Grade 2.

: See Table

3. Deoxidation Practice

: Not Applicable

4. Method of Manufacturing: See Table

5. Dimension : Range of Outside Dia.

: See Table

Range of Wall Thickness: See Table

6. Condition of Supply

: Solid Solution Treatment

Welding Method

: Automatic Arc Welding

Remark

: Semi-finished products are to be supplied by the Society-approved manufacturers who are able to deliver the said semi-finished products with the specified chemical composition corresponding to the above materials approved in accordance with Chapter K 1.2.1, Part K of the Survey Guidance.

Table Part of Approval Conditions

	Grade	Method of Manufacturing	Range of Outside Dia.	Range of Wall Thickness
	K304LTP	Welded Steel Pipe	17.3mm ~ 762mm	2.0mm ~ 9.52mm
	K316LTP	Welded Steel Pipe	17.3mm ~ 762mm	2.0mm ~ 9.52mm

T. Imamura

General Manager Material and Equipment Department