

# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: AMMM000035D

	nis is to certify	1
--	-------------------	---

That

## YUSUNG BEND INC.

14 Hwajeonsandan 6-ro 102beon-gil Gangseo-gu Busan, Korea

is an approved manufacturer of Steel Pipes and Fittings

in accordance with

DNV rules for classification – Ships DNV class programme – DNV-CP-0252 Steel pipes and steel pipe fittings

and the following particulars:

Product Pipe fittings (elbows, reducers, tees and caps)

Application area Pipe fittings

Steel type Austenitic stainless

Manufacturing methodSeamlessMax. outer diameterSee page 2Max. wall thicknessSee page 2Heat treatment conditionSee page 2Additional approval conditionsSee page 2

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules. Materials to be applied to DNV classed object shall fulfill the material requirements in the applicable DNV class rules.

Issued at **Hamburg** on **2024-03-27**This Certificate is valid until **2027-03-26**.
DNV local unit: **Gimhae Station** 

for **DNV** 

Approval Engineer: Stefan Röhr

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: AM 311 Revision: 2022-12 www.dnv.com Page 1 of 2



Job Id: **263.11-012740-1** Certificate No: **AMMM000035D** 

## Particulars of the approval

### Piping fittings (elbows, tees, reducers and caps)

Steel type <sup>3)</sup>	Manufacturing method <sup>1)</sup>	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition <sup>2)</sup>
Austenitic stainless steel	CFS	508	19	SHT

#### Remarks:

- 1) CFS: Cold finished seamless (starting material: welded pipes/seamless pipes)
- 2) SHT: Solution Heat Treated (solution annealing)
- Suitable pipe fittings shall be selected from the following recognized standards: KS B 1543, EN 10253, ASTM A234, ASTM A403, ASME SA403, ASTM A420, ASTM A774, ASTM A815, ASTM A960, ASTM A961, JIS B2312, JIS B2313 or JIS B2316

#### Additional approval conditions

Heat treatment subcontracted to DNV approved heat treatment workshop Shinsung Fitting Co., Ltd., Busan, Korea; Including austenitic stainless steel pipe fittings for approved low-temperature applications

Form code: AM 311 Revision: 2022-12 www.dnv.com Page 2 of 2