Certificate No: LR26456694TA
Issue Date: 21/09/2026
Expiry Date: 20/09/2031

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	**WH-STEEL CO., LTD.**
Address	South of Zhenggang Road, Xingma Village, Yanshan County, Cangzhou, Hebei, 061300, China
Type	Pipes and Fittings
Description	Elbows, Tees and Reducers
Trade Name	-
Application	Marinepiping systems
Specified Standard	LR Rules and Regulations for the Classification of Ships, July 2023 LR Type Approval System – Test Specification Number 2, December 2020 ASME B16.9-2024 SY/T 5992-2012
Ratings	As indicate in Table 1 of Test Outline of Pipe Fitting (File No.: 11B-BG-01-TYHX-24006)
Other Conditions	1. Where pipes are used in Class I or II systems on a LR Classed ship, the materials are to be supplied with an LR materials certification. 2. Pipe fittings material type/wall thickness selection is to be in accordance

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Lei Zhang

Engineering Piping - Senior Specialist to Lloyd's Register Classification Society (China) Co., Ltd.

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Type Approval Certificate

with the manufacturer's instruction and to attending Surveyor's satisfaction.
3. Where pipe fittings are used on a LR Classed ship, the minimum wall thickness of carbon steel and alloy steel pipe fittings is to comply with Part 5,Chapter 12,
Section 2.2.3and 2.2.4, the minimum wall thickness of stainless-steel pipe fittings is to comply with Part 5, Chapter 12, Section 10.1.1 of LR Ship Rule.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Classification Society (China) Co., Ltd. of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document STS/TA/LZX/PRJ11100500212/O-24-012836D and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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