Certificate No: LR21457178TA
Issue Date: 15/11/2021
Expiry Date: 14/11/2026

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	**Yingkou ZICN Pipe Manufacturing Co., Ltd.**
Address	No.72 1st Street of Minxing River, Xinshi District, Yingkou, 115004, China
Place of Production	Yingkou ZICN Pipe Manufacturing Co., Ltd. No.72 1st Street of Minxing River, Xinshi District, Yingkou, 115004, China
Type	Butt Weld Fittings
Description	Seamless Elbow 45°, SR 90° and LR 90°. Equal Tees, Reduces, Caps and Couplings
Trade Name	Wrought Steel Butt Welded Pipe Fittings/Forged Steel Socket-Welded Pipe Fittings
Application	Marine & Offshore and Industrial use for welded steel piping systems
Specified Standard	LR Rules and Regulations for the Classification of Ships, July 2020 Lloyd's Register Type Approval System Test Specification Number 2, December 2020, Chapter 6, Appendix 5- Metallic Formed Pipe Pieces ASME B16.9-2018 ASME B16.11-2016

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Qing Dong

Specialist to Lloyd's Register Classification Society (China) Co Ltd
A member of the Lloyd's Register group

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Huangpu District, China

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Ratings

Nominal Diameters (mm):
DN15~DN600 (Butt Welded Fittings)
DN6~DN100 (Socket-Welded Fittings)

Maximum Design Pressure:
Refer to Yingkou ZICN Pipe Fitting designspecification document No. 1011-1, dated 23.11.2010for wrought butt welded fittings and documents No.1011-2, dated 23.11.2010 for forged socket weldedfittings for various outside diameter, wall thickness, corrosion allowance and material

Materials:
Carbon Steel
Alloy Steel
Stainless Steel

Other Conditions

1. The fittings are to be selected and installed in accordance with the manufacturer's instructions and recommendations.
2. In all cased, pressure and temperature rating of the fittings are to be suitable for the intended service conditions.
3. Materials for pipe fittings used in Class I and II piping systems are to be produced at a works approved by LR and are in general to be tested in accordance with the Rules for Materials. Part 5,Chapter 12, Section 1.7.1 of Rules refers.
4. Socket welded fittings used in Class I and II piping systems are to have outside diameter not exceeding 88.9mm. Part 5, Chapter 12, Section 2.8.1 of Rules refers.

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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.

Previous Version: 16/80113(E1)

The Design Appraisal Document LR21457178TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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