Certificate No: LR25226089TA
Issue Date: 30/07/2025
Expiry Date: 29/07/2030

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	**Taizhou Ocean Stainless Steel Tube Co.,Ltd**
Address	No.121, Qindong Road, Qintong Town, Jiangyan District, Taizhou, 225508, China
Place of Production	Taizhou Ocean Stainless Steel Tube Co.,Ltd No.121, Qindong Road, Qintong Town, Jiangyan District, Taizhou, 225508, China
Type	Multi Core Tube
Description	SUS304 & SUS316L Multi Core Tube
Trade Name	HJQE(FS) series
Application	Marine use for piping system in ships (applicable to hydraulic oils/ gases in valve remote control and liquid level telemetry)
Specified Standard	LR Rules and Regulations for the Classification of Ships, Part 5, Chapter 12, July 2025; GB/T 12771-2008 “Welded Stainless Steel Pipes for Liquid Delivery”
Ratings	Inner tube outer diameter (mm) x tube thickness (mm) x number of tubes: 6 x 1.0 x 1 / 8 x 1.0 x 1 / 8 x 1.5 x 1 / 8 x 1.0 x 2 / 8 x 1.0 x 4 / 8 x1.0 x 6 / 8 x 1.0 x 8 / 10 x 1.0 x 1 / 10 x 1.5 x 1 / 10 x 1.0 x 2 / 10 x 1.0 x 4 / 10 x 1.0 x 6 / 10 x 1.0 x 8 / 12 x 1.0 x 1 / 12 x 1.5 x 1.

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Torsten Schroeder
Engineering - Piping/ Decarbonisation -
Senior Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

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Tube material:	Stainless steel 304, 316L
Design pressure (MPa):	18
Test pressure (MPa):	27
Temperature range(°C):	-10 to +60

Other Conditions

1. The multi core tubes are not to be used for the service and location which require certification for fire endurance tests and smoke and toxic test in accordance with IMO Fire Test Procedures (FTP) Code.
2. Where the multi core tubes are used to penetrate watertight or gas tight bulkheads or decks, details of installation are to be approved.
3. Method and detail of connections of the multi-core tubes are to be approved.
4. The internal fluid, design pressure and temperature are as per those mentioned in certificate. Deviations may be considered in a separate verification by LR.
5. The multi core tubes are to be installed in accordance with the manufacturer's instructions.

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 EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: LR2004598TA-03

The Design Appraisal Document LR25226089_DAD and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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