Certificate No: LR25171912TA
Issue Date: 07/04/2025
Expiry Date: 06/04/2030

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	**Tangqi(Shanghai) Industrial Co., Ltd.**
Address	Room 102, Building 5, No. 1005, Jiuxin Road, Songjiang District, Shanghai, China
Type	Emissions Monitoring System
Description	Continuous Emission Monitoring System Analyzer cabinet with gas analyser URA-209, Sample system with GAS 222.15-MA type of sample gas probe
Trade Name	TMC-7100
Application	Marine applications for use in environmental categories ENV1 and ENV2 in the "General Power Distribution Zones" as defined in LR Type Approval System Test Specification No. 1 July 2024.
Specified Standard	Manufacture's Technical Specification MEPC.340(77) 2021GUIDELINES FOR EXHAUST GAS CLEANING SYSTEM
Ratings	Power Supply: AC 230V, 50/60Hz

Component	Sensor method	Measuring range
SO2	NDIR	0~50ppm(Min.)0~500ppm(Max.)

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Ning Guan

Electrical & Control Technical Manager - Southeast Asia & Great China to Lloyd's Register Classification Society (China) Co.,

12th Floor, Chong Hing Finance Centre, No. 288 Nanjing West Road, Shanghai, 200003, China

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CO2	NDIR	0~5 vol.% (Min.)0~15 vol.% (Max.)

Other Conditions

1. The system type approval is limited to continuous monitoring of SOx emissions, as defined in IMO Resolution MEPC.340 (77).
2. Data recording and processing device not covered by this certificate.
3. In order to completely fulfil the requirements of MEPC.340 (77) for "Continuous Emission Monitoring", additional equipment (e.g. sampling tubes, gas dryer, data recording etc.) will have to be installed. Requirements of MEPC.340 (77), chapter6.6 and 6.7 regarding SO2 losses have to be observed.
4. The system shall be installed, calibrated and operated in compliance with the manufacturer's instructions.
5. In justified cases where the CO2 concentration is reduced by the EGC unit, the CO2 concentration can be measured at the EGC unit inlet, provided that the correctness of such a methodology can be clearly demonstrated.
6. Software has been tested to an extent required to verify correct functions during type approval testing.

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: **LR2002981TA**

The Design Appraisal Document LR25171912TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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