Certificate No: LR2550280TA
Issue Date: 29/04/2025
Expiry Date: 28/04/2030

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	**Hoppe Marine GmbH**
Address	Kieler Str. 318, Hamburg, 22525, Germany
Type	Transmitters/Transducers
Description	Shaft power meter Comprising the following modules: MDS Transmission unit MDS 31 Sensor MDS 263 Shaft measuring block
Trade Name	MAIHAK Shaft Power Meter
Application	Marine applications for use in environmental categories ENV1 and ENV2 (general power distribution zone) as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 – 2013.
Specified Standard	Manufacturer's specification IACS unified requirements E10 (Rev.9 Aug 2023)
Ratings	Power supply: 24 VDC
Additional Tests	Low temperature (0°C/16hrs)

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Thorsten Wolff

Electrical & Control - Senior Specialist to
Lloyd's Register EMEA
A member of the Lloyd's Register group

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Other Conditions The system is to be in compliance with the requirements of LR Rules and Regulations for the Classification of Ships.
Requirements for use of Blue Tooth techniques are to be considered.

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: This certificate supersedes certificate number LR2004283TA issued on 31 August 2020 which is hereby cancelled.

The Design Appraisal Document TSO-25-029710/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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