Certificate No: LR25400199TA
Issue Date: 03/12/2025
Expiry Date: 02/12/2030

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	**HD HYUNDAI HEAVY INDUSTRIES CO., LTD**
Address	1000, Bangeojinsunhwando-ro, Dong-gu, Ulsan, 44032, South Korea
Type	Dual fuel engine
Description	4-stroke, vertical, direct injection, single acting and trunk piston type, Internal combustion dual-fuel engine with second fuel injection system
Trade Name	HiMSEN H22CDF-LA
Application	As Marine Main Propulsion and Auxiliary Power Drives Classed or Intended for Classification with Lloyd's Register
Specified Standard	Part 5, Chapter 2 of Lloyd's Register's Rules and Regulations for the Classification of Ships (July 2024)
Ratings	Performance rating:- Number of cylinders : 6, 7, 8 and 9 Rated power (kW/cyl.) : 240 Engine speed (rpm) : 900 / 1000 Maximum cylinder pressure (bar) : 220 Indicated mean effective pressure (bar) : 28.7 / 25.8
Other Conditions	Where the engines are intended to be installed on a ship classed with LR, conditions of approval in paragraph 5 of Machinery General Design Appraisal

Downloaded Copy

Jong-Yong Ha

Engineering - Machinery - Senior Specialist to Lloyd's Register Asia
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Certificate No: LR25400199TA
Issue Date: 03/12/2025
Expiry Date: 02/12/2030

Type Approval Certificate

Document No. BTS/ENG/M243354, Issue No. 0, dated 03 December 2025 is to be satisfied.

Limitations:-

1) Type approval does not eliminate the need for normal inspection survey procedures required by the Rules and Regulations.

2) If the specified standards are amended during the validity of this certificate, the product is to be reapproved prior to it being supplied to vessels to which the amended standards apply.

3) (in case of applications other than Marine) The application of this Type Approval Certificate will be limited to the relevant scope of the specified standards and acceptance thereof by the local authorities.

4) Engine Safety Concept and Control systems are not covered by this type approval certificate.

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

The Design Appraisal Document LR25400199TA-01 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Downloaded copy

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.