Certificate No: LR2686585TA
Issue Date: 26/02/2026
Expiry Date: 05/03/2030

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, Internal combustion dual-fuel engine with a common rail pilot fuel injection system
Trade Name	HiMSEN H27DF
Application	Marine main propulsion and auxiliary power drives
Specified Standard	Part 5, Chapter 2 of Lloyd's Register's Rules and Regulations for the Classification of Ships (July 2025) Lloyd's Register's Rules and Regulations for the Classification of Ships using Gases or other Low-flashpoint Fuels (July 2025), incorporating the IGF code adopted on 11 June 2015, Resolution MSC.391(95) Lloyd's Register's Rules and Regulations for the Construction and Classification of Ships for the Carriage of Liquified Gases in Bulk (July 2025), incorporating the IGC Code adopted on 22 May 2014, Resolution MSC.370(93)
Ratings	Number of cylinders: 6, 7, 8 and 9 in-line Rated power (kW/cyl.): 228/237/285/310 Engine speed (rpm): 720/750/900/1000 Maximum firing pressure (bar): 180

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Jong-Yong Ha

Lead Specialist to Lloyd's Register Asia
A member of the Lloyd's Register group

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

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Mean indicated pressure (bar): 22.45 for 720, 750 and 900 rpm, 22.0 for 1000 rpm

Other Conditions

1) Where the engine is intended to be supplied for a ship built or being built to LR class, mandatory requirements in paragraphs 3 & 4 of LR Global Technical Support Office's (Busan) Machinery General Design Appraisal Document No. TSO25-044233, Issue No. 0 dated 26 February 2026 are to be satisfied.
2) Type approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.
3) 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.
4) (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.

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.

Previous Version: LR2018976TA

The Design Appraisal Document LR2686585TA-01 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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