CROATIAN REGISTER OF SHIPPING

Certificate No. 02-005617/027190

TYPE APPROVAL CERTIFICATE

This is to certify that this product complies with the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products.

TYPE AND DESCRIPTION OF PRODUCT:

Marine Reduction Gearboxes for Diesel Engine Propulsion
Type
DMT 450DL

MANUFACTURER:

D-I INDUSTRIAL CO., LTD.
1367-13, Namgang-ro, Jinju
Gyeongnam
Korea

THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

Rules for the classification of ships, Part 9 - Machines.

FURTHER DETAILS OF THE PRODUCT AND CONDITIONS FOR CERTIFICATION ARE GIVEN OVERLEAF.

APPROVAL IS VALID UNTIL: **2030-10-20**

Place and date: Split, 2026-10-20 **Seal**

Marinko Popović, dipl.ing.

NOTE: This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Croatian Register of Shipping of any modification or changes to the product in order to obtain a valid certificate.

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DETAILED PRODUCT DESCRIPTION:

Marine reduction gearboxes for propulsion with built-in hydraulic clutch, and with reversing stage.

APPLICATION / LIMITATIONS:

The approval status is based on application factor 1,30.

Model	*Max. Input Power (kW)*	*Max. Input Speed (rpm)*	*Max. Input Torque (Nm)*	*Reduction ratio(s)*
DMT 450DL	**1109,1**	**2400**	**4413**	**3,02; 3,28; 3,56; 4,07**
	985,9		**3922**	**4,48**
	887,3		**3530**	**4,95**

TYPE APPROVAL DOCUMENTATION:

Approved by the Croatian Register of Shipping with letter No.(dated): 1965/TSE/DL/025611 (2022-09-20)

MARKING OF PRODUCT:

- *manufacturer's mark*
- *serial No.*
- *location and year of manufacturing*
- *CRS mark*

CONDITIONS FOR CERTIFICATION:

The manufacturer shall make arrangements for the CRS Surveyor to attend the relevant tests and examinations at manufacturer's works or to perform the relevant audits in case an alternative survey scheme has been approved. Relevant CRS certificate for each particular reduction gearbox will be issued after satisfactory completion of the procedure.
Measuring devices, sensors and alarms shall be subject to CRS approval in each particular case and will depend on service applied and the degree of automation of the propulsion plant.