



# TYPE APPROVAL CERTIFICATE

Certificate No:  
**TAM00000RH**  
Revision No:  
**1**

## This is to certify:

**That the Reduction Gear for Propulsion**

with type designation(s)  
**DMT240H / DMT260H / DMT260HL / DMT280H / DMT280HL**

Issued to  
**D-I Industrial Co., Ltd.**  
**Jinju-si, Gyeongsangnam-do, Korea, Republic of**

is found to comply with  
**DNV rules for classification – Ships**

## Application :

**The approval is valid for propulsion use.**

**Products approved by this certificate are accepted for installation on all vessels classed by DNV.**

**Input torque**  
**Input speed**      **see page two for data**  
**Reduction ratio**

Issued at **Høvik** on **2022-08-03**

for **DNV**

This Certificate is valid until **2027-06-30**.

DNV local station: **Gimhae Station**

Approval Engineer: **Dag Harald Williksen**

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**Oddvar Deinboll**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



### Product description

Single stage reduction gears for propulsion with built-in hydraulic operated clutch and reversing gear.

### Application/Limitation

The gears are approved for an application factor  $K_A=1.20$

Gear	Reduction ratio [Z1/Z2]	Input speed [RPM]	Torque [Nm]
DMT240H	25/85	2300	1750
	28/82	2300	2000
	37/73	2300	2150
DMT260H	23/75	2300	2535
DMT260HL	23/104	2300	2510
	25/102	2300	2535
DMT280H	23/75	2300	2625
	25/73	2300	2840
	28/70	2300	2925
DMT280HL	23/104	2300	2510
	25/102	2300	2750
	28/99	2300	2925

### Type Approval documentation

Drawing no.	Rev.	Title
240000		Marine Transmission DMT240H
250000		Marine Transmission DMT260H
260000		Marine Transmission DMT260HL
270000		Marine Transmission DMT280H
280000		Marine Transmission DMT280HL
240117	A-D-A	Pinion ass'y
240117	E-A	Pinion ass'y
250117	A-D-C	Pinion ass'y
270117	A-D-A	Pinion ass'y
240302	A	Gear output
240302	B-D	Gear output
240302	E	Gear output
270302	A-D-A	Gear output
280302	A-C	Gear output
280006		Carrier bearing
270006		Carrier bearing
260006		Carrier bearing
250006		Carrier bearing
240006		Carrier bearing
260004		Cover case
250004		Cover case
240004		Cover case
260001		Case
250001		Case
240001		Case
260203		Clutch housing astern
280203		Clutch housing astern
260103		Clutch housing input
260103	A	Clutch housing input
260107		Plate sintered
260108		Plate sintered
280108		Plate steel
240300	AG-EG	Output shaft group

270300	AG-DG	Output shaft group
280300	AG-CG	Output shaft group
280200	A-C	Astern shaft group
270200	A-D	Astern shaft group
260200	A-C	Astern shaft group
250200	A-D	Astern shaft group
240200	A-E	Astern shaft group
270100	A-D	Input shaft group
260100	A-C	Input shaft group
250100	A-D	Input shaft group
280100	A-C	Input shaft group
240100	A-E	Input shaft group
280102	C	Shaft input
260102	C	Shaft input
280202	C	Shaft astern
260202	C	Shaft astern
240301	B	Shaft output
270301	B	Shaft output
280301	B	Shaft output
260008	A	Coupling input
240306	B	Coupling output
250306	B	Coupling output
260306	B	Coupling output
240117E-A/240302E		Datasheet DMT240H 25/85
240117D-A/240302D		Datasheet DMT240H 28/82
240117B-A/240302B		Datasheet DMT240H 37/73
250117D-C/270302D-A		Datasheet DMT260H 23/75
250117D-C/280302C		Datasheet DMT260HL 23/104
250117C-C/280302B		Datasheet DMT260HL 25/102
270117D-A/270302D-A		Datasheet DMT280H 23/75
270117C-A/270302C-A		Datasheet DMT280H 25/73
270117B-A/270302B-A		Datasheet DMT280H 28/70
270117D-A/280302C		Datasheet DMT280HL 23/104
270117C-A/280302B		Datasheet DMT280HL 25/102
270117B-A/280302A		Datasheet DMT280HL 28/99

**Marking of product**

Manufacturers name or trademark and type number designation.

**Periodical assessment**

For retention of the Type Approval, a DNV surveyor shall perform an assessment after 2 years and after 3.5 years to verify that the conditions of the type approval are complied with. A renewal assessment will be performed at renewal of the certificate.

In cases where the Type Approved product is manufactured at other companies, the Periodical Assessment shall verify that the Type Approval applicant has a quality control system for consistent production at their licensees/subcontractors. Furthermore Periodical Assessment shall be carried out randomly at these companies.

**Other conditions**

The following items are not covered by the Type Approval:

- Connections to external shafts
- Ice class notations
- Control and monitoring system
- Mounting/installation of gearbox

END OF CERTIFICATE