



# TÜRK LOYDU

## TYPE APPROVAL CERTIFICATE

This Certificate consists of 3 pages.

This is to certify that the

### REDUCTION GEARS FOR ENGINES

With type designations

DMT330DL/ DMT450DL / DMT600DL/ DMT600BL

Manufactured by

D-I INDUSTRIAL Co. Ltd.

Is found to comply with

"TL Rules, Part A, Chapter 2, Material July 2019", "TL Rules, Part B, Chapter 4, Machinery January 2020".

<b>Application</b>	: These gear boxes intended for main propulsion with diesel engine.
<b>Design</b>	: D-I INDUSTRIAL Co. Ltd.
<b>Sizes</b>	: See Appendix I
<b>Address of Manufacturer</b>	: 13, NAMGANG-RO 1367 BEON-GIL, JINJU-SI GYEONGSANGNAM-DO KOREA
<b>Place and date</b>	: İSTANBUL / 15.02.2021

Subject to the conditions referred to in the following pages, this certificate is valid until 14.02.2026

**Emrah SÖĞÜTÇÜ**  
New Building Division Manager



**Product description** : Reduction Gears for Engines

**Type Designation** : DMT330DL/ DMT450DL / DMT600DL/ DMT600BL

**Materials used** : To be referred to the approved drawing dated 06.01.2021.

**Application/ Limitation (Approval conditions):**

- These gear boxes may be fitted on ships granted with an automation notation provided that all requirements stated in our rules are complied with.
- The reduction gears must be equipped with the parts listed in the manufacturer's parts catalog exclusively.
- The reduction gears must be delivered with the relevant documentation for their maintenance and their operation.
- The acceptance of the above mentioned products and other units following tests must be carried out for each gear box on board ship according to Türk Loydu rules.
  - Load and functional tests.
  - Visual inspection.

**Documentation** : To be referred to the approved drawing dated 06.01.2021 with  
Ref: PAE-EPAS/008320/20-1969/OAK

**Test carried out (and results)** : Following tests were carried out, found satisfactory.

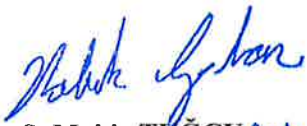
- Spin and functional tests.
- Pressure tests.
- Material tests (Reviewed)
- Alarm tests
- Measurement Control& Visual Inspection,

Found Satisfactory.

**Place of test carried out** : D-I INDUSTRIAL Co. Ltd., JINJU-SI GYEONGSANGNAM-DO KOREA

**Marking of product:** The product to be marked same as below mentioned.

- Maker's name or trade mark.
- Serial number of the units.
- Equipment type or model identification.
- Rated power and speed.



**S. Mahir TUĞCU Act.**  
**Surveyor**

This certificate is subject to terms and conditions described below:

- Any significant change in design or construction may render this Certificate invalid. Type Approval Certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. This certificate is not valid for products without marking above mentioned. The manufacturer should notify TÜRK LOYDU of any modifications or changes to the equipment in order to obtain valid certificate. This certificate shows that tested specimens as representative of the product complies of the TÜRK LOYDU rules, and relevant international instruments that apply to it.



# TÜRK LOYDU

## APPENDIX-I

Model	Reduction Ratio	Max. Input torque [kg.m]	Max. Input [rpm]	Power / rpm		1800		2000		2300		2400	
				kW	Hp	kW	Hp	kW	Hp	kW	Hp	kW	Hp
DMT330DL	2,61	276	2400	0,283	0,380	510,0	683,4	566,7	759,3	651,7	873,2	680,0	911,2
	3,1	276	2400	0,283	0,380	510,0	683,4	566,7	759,3	651,7	873,2	680,0	911,2
	3,56	276	2400	0,283	0,380	510,0	683,4	566,7	759,3	651,7	873,2	680,0	911,2
	4,13	276	2400	0,283	0,380	510,0	683,4	566,7	759,3	651,7	873,2	680,0	911,2
	4,59	276	2400	0,283	0,380	510,0	683,4	566,7	759,3	651,7	873,2	680,0	911,2
DMT450DL	3,02	453	2400	0,465	0,623	837,4	1122,1	930,4	1246,8	1070,0	1433,8	1116,5	1496,1
	3,28	453	2400	0,465	0,623	837,4	1122,1	930,4	1246,8	1070,0	1433,8	1116,5	1496,1
	3,56	453	2400	0,465	0,623	837,4	1122,1	930,4	1246,8	1070,0	1433,8	1116,5	1496,1
	4,07	426	2400	0,438	0,586	787,5	1055,3	875,0	1172,5	1006,3	1348,4	1050,0	1407,0
	4,48	361	2400	0,371	0,497	667,5	894,5	741,7	993,8	852,9	1142,9	890,0	1192,6
	4,95	300	2400	0,295	0,396	555,0	743,7	616,7	826,3	709,2	950,3	740,0	991,6
DMT600DL	2,28	625	2300	0,642	0,860	1155,5	1548,4	1283,9	1720,4	1476,5	1978,5	-	-
	2,53	625	2300	0,642	0,860	1155,5	1548,4	1283,9	1720,4	1476,5	1978,5	-	-
	3,02	625	2300	0,642	0,860	1155,5	1548,4	1283,9	1720,4	1476,5	1978,5	-	-
	3,28	625	2300	0,642	0,860	1155,5	1548,4	1283,9	1720,4	1476,5	1978,5	-	-
	3,56	625	2300	0,642	0,860	1155,5	1548,4	1283,9	1720,4	1476,5	1978,5	-	-
	4,07	591	2300	0,607	0,813	1092,5	1463,9	1213,9	1626,6	1395,9	1870,6	-	-
	4,48	520	2300	0,534	0,716	961,2	1288,0	1068,0	1431,1	1228,2	1645,8	-	-
	4,95	432	2300	0,443	0,594	798,3	1069,7	887,0	1188,5	1020,0	1366,8	-	-
DMT600BL	4,12	625	2300	0,642	0,860	1155,5	1548,4	1283,9	1720,4	1476,5	1978,5	-	-
	4,48	625	2300	0,642	0,860	1155,5	1548,4	1283,9	1720,4	1476,5	1978,5	-	-
	5,11	560	2300	0,575	0,771	1035,2	1387,1	1150,2	1541,3	1322,7	1772,5	-	-
	5,62	502	2300	0,516	0,691	928,1	1243,6	1031,2	1381,8	1185,9	1589,1	-	-
	5,91	432	2300	0,443	0,594	798,3	1069,7	887,0	1188,5	1020,0	1366,8	-	-


  
**S. Mahir TUGCU**  
 Surveyor