Certificate No: **2608181103583938**
TL Project No: **26-1697**

TÜRK LOYDU

TYPE APPROVAL CERTIFICATE

This is to certify that the

Internal Combustion Engine

Manufacturer : **WEICHAI POWER CO., LTD.**

Address : **Weichai Power Co., Ltd. - 197 A,Fushou East Street,High-Tech Development Zone, Weifang,China**

Product Type : **M55**

Reference Rule : **TL Rules, Part B, Chapter 4-1, Automation, 01.01.2022**
TL Rules, Part E, Chapter 103 - Metallic Materials, Special Materials for Naval Ships, 01.01.2022
TL Rules, Part E, Chapter 104 - Naval Ship Technology, Propulsion Plants, 01.01.2022
TL Rules, Part E, Chapter 105 - Naval Ship Technology, Electrical Installations, 01.01.2022
TL Rules, Part E, Chapter 106 - Naval Ship Technology, Automation, 01.01.2022
TL Rules, Part A, Chapter 3, Welding, 01.01.2023
TL Rules, Part B, Chapter 5, Electric , 01.01.2024
TL Rules, Part A, Chapter 2, Material, 01.07.2024
TL Rules, Part B, Chapter 4 - Machinery, 01.01.2026

Subject to the conditions referred to in the following pages, this certificate is valid until **10.11.2031**
Surveyor: **Caner COŞKUN**

Issued at **İstanbul** on **11.11.2026**

This document is electronically signed and does not require a manual signature

Click here for the verification website

Emrah SÖĞÜTÇÜ
New Building Division Manager
TÜRK LOYDU

Expire Date of Previous Certificate:

For Information Only

This certificate is subject to terms and conditions described below:
Any significant change in design or construction may render this Certificate invalid. 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 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.

Product	:	Internal Combustion Engine
Approval No / Date	:	- PAE-EPAS/025420/26-1697/ŞÜ dated 20.07.2026 - PAE-EPAS/025112/26-1697/MY dated 16.06.2026 - PAE-EPAS/026087/26-1697/ŞÜ dated 21.09.2026 - PAE-EPAS/026272/26-1697/MY dated 09.10.2026
Stroke	:	215 mm
Bore	:	180 mm
Method of Operation	:	Four Stroke
Kind of Starting Device	:	Electric starter
Kind of Cooling	:	Water
Fuel Type	:	Diesel
Last Inspection Date	:	23.07.2026
Performed Tests	:	- Type approval quality audit - Controls according to approved drawing - Subcomponent Controls (crankshaft, pistons, connecting road etc.) - Integration controls - Fire protection controls - Load tests - Leakage test - The type test reports of IACS member classification societies conducted on 18-20 June 2024 for 12M55C3450-18E201 Diesel Engine, Serial no: 6124E000169 were accepted.
Test Place	:	Weichai Power Co.,Ltd. - 197 A,Fushou East Street,High-Tech Development Zone, Weifang,China
Surveyor Remarks	:	- Explosion-relief valves will be located at both ends of the crankcase.
Application/Limitation	:	The engine is a liquid-cooled four-stroke diesel engine, with direct injection, V-line, trunk-piston, non-reversible, charge air cooled, supercharged, constant-pressure charging system, Electronically controlled injection. 1. Environmental conditions according to TL Machinery Rules and IACS UR M28. Inclination limits (degrees): Main and Auxiliary enginery Athwartships Static Dynamic: ± 15,0° ± 22,5° Fore and Aft Static Dynamic: ± 5,0° ± 7,5° Seawater temperature: +32 °C Temperature range: 0°C ÷ +45 °C Atmospheric pressure: 1 bar Suction air temperature: +45 °C Relative humidity: 60 % For electric components: 0°C ÷ +55 °C 2. Limitation 2.1.For single-engine propulsion applications, the engine shall be provided with two independent control systems, together with independent standby lubricating oil and cooling water pumps. The main machines must be fitted with stand-by lubrication oil and cooling pump that operate independently. If this equipments is not on the machine, the ships should be equipped with more than one engine. 2.2. Other Conditions; 2.2.1. Flexible hoses with couplings are to be type approved. 2.2.2. Electric cables and cabling are not covered by this approval and must be verified to comply to the TL - Part B - Chapter 5 - Section 9 (January 2024). 2.2.3. WEICHAI POWER CO., LTD. shall be responsible for providing shipbuilders and/or their subcontractors with all necessary instructions concerning the installation, operation and maintenance of the approved equipment, and for ensuring compliance with the conditions specified in this approval. 2.3. Service Restriction: 2.3.1. Each engine intended for use on TL-classed ships shall be subject to individual Türk Loydu Product Certification in accordance with IACS UR M51. 2.3.2. Engine alarm, monitoring and safety functions shall be subject to Türk

For Information Only

Loydu approval for each installation, taking into account the vessel?s service and degree of automation. For ships with automation notation, the engine and its associated systems shall comply with the applicable Türk Loydu Rules for Automation, and compliance shall be verified by a Türk Loydu Surveyor.
2.3.3. Equipment must be provided for enabling "turning gear engaged" signal.
3. Comments.
3.1. Torsional vibration analysis is required for each propulsion installation unit.
3.2. For engines intended to be used for emergency services, supplementary tests in accordance with regulations of the Administration whose flag the vessel flies may be required. For engines intended for emergency service, additional tests may be required in accordance with the applicable requirements of the vessel?s Flag Administration.
3.3. This certificate does not cover the following plans which are to be reviewed for each installation:
3.3.1. Schematic diagram of engine control and safety system. Electronic monitoring and control system(s) - software and hardware
3.3.2. Piping diagram of fuel oil system, lubricating oil system and cooling water system.
3.3.3. Governor Arrangements.
3.3.4. Turbochargers
3.3.5. Flexible Hoses.
3.3.6. Fuel management system (where dual fuel arrangements are fitted)
3.3.7. Engine driven pumps.
3.3.8. Engine mounted filters.
3.4. Use of the Product for non-Türk Loydu units is subject to arrangement between the manufacturer and the intended client.
3.5. The Manufacturer has provided a declaration confirming that the product is free from Asbestos.
3.6. The electrical and electronic equipment located within areas protected by local Fixed Pressure Water-spraying or Water-mist Fire Extinguishing system and those with in adjacent areas exposed to direct spray are to have a degree of protection not less than IP 44.

	Type of Product	Product Description	Application	Rated Power	Rated RPM	Mean Effective Pressure	Number of Cylinders
1	M55	12M55C2030 -15E200	Propulsion	1493 [kW]	1500 [rpm]	1.82 MPa	12
2	M55	12M55C2250 -15E200	Propulsion	1654 [kW]	1500 [rpm]	2.02 MPa	12
3	M55	12M55C2250 -18E201	Propulsion	1654 [kW]	1800 [rpm]	1.68 MPa	12
4	M55	12M55C2450 -15E200	Propulsion	1800 [kW]	1500 [rpm]	2.19 MPa	12
5	M55	12M55C2450 -16E200	Propulsion	1800 [kW]	1600 [rpm]	2.06 MPa	12
6	M55	12M55C2450 -18E201	Propulsion	1800 [kW]	1800 [rpm]	1.83 MPa	12

For Information Only

7	M55	12M55C2600-18E201	Propulsion	1912 [kW]	1800 [rpm]	1.94 MPa	12
8	M55	12M55C2700-15E200	Propulsion	1985 [kW]	1500 [rpm]	2.42 MPa	12
9	M55	12M55C2700-16E200	Propulsion	1985 [kW]	1600 [rpm]	2.27 MPa	12
10	M55	12M55C2738-18E201	Propulsion	2013 [kW]	1800 [rpm]	2.04 MPa	12
11	M55	12M55C3000-18E201	Propulsion	2205 [kW]	1800 [rpm]	2.24 MPa	12
12	M55	12M55C3450-18E201	Propulsion	1800 [kW]	1800 [rpm]	2.58 MPa	12
13	M55	12M55C2030-15E210	Propulsion	1493 [kW]	1500 [rpm]	1.82 MPa	12
14	M55	12M55C2250-15E210	Propulsion	1654 [kW]	1500 [rpm]	2.02 MPa	12
15	M55	12M55C2250-18E211	Propulsion	1654 [kW]	1800 [rpm]	1.68 MPa	12
16	M55	12M55C2450-15E210	Propulsion	1800 [kW]	1500 [rpm]	2.19 MPa	12
17	M55	12M55C2450-16E210	Propulsion	1800 [kW]	1600 [rpm]	2.06 MPa	12
18	M55	12M55C2450-18E211	Propulsion	1800 [kW]	1800 [rpm]	1.83 MPa	12
19	M55	12M55C2600-18E211	Propulsion	1912 [kW]	1800 [rpm]	1.94 MPa	12
20	M55	12M55C2700-15E210	Propulsion	1985 [kW]	1500 [rpm]	2.42 MPa	12
21	M55	12M55C2700-16E210	Propulsion	1985 [kW]	1600 [rpm]	2.27 MPa	12
22	M55	12M55C2738-18E211	Propulsion	2013 [kW]	1800 [rpm]	2.04 MPa	12
23	M55	12M55C3000-18E211	Propulsion	2205 [kW]	1800 [rpm]	2.24 MPa	12

For Information Only

24	M55	12M55C3450-18E211	Propulsion	2100 [kW]	1800 [rpm]	2.58 MPa	12
25	M55	12M55CD1682E200	Propulsion	1529 [kW]	1500 [rpm]	1.40 MPa	12
26	M55	12M55CD1805E200	Propulsion	1641 [kW]	1500 [rpm]	1.50 MPa	12
27	M55	12M55CD1805E201	Propulsion	1641 [kW]	1800 [rpm]	1.25 MPa	12
28	M55	12M55CD1936E200	Propulsion	1760 [kW]	1500 [rpm]	1.61 MPa	12
29	M55	12M55CD2050E200	Propulsion	1864 [kW]	1500 [rpm]	1.70 MPa	12
30	M55	12M55CD2184E200	Propulsion	1985 [kW]	1500 [rpm]	1.81 MPa	12
31	M55	12M55CD2184E201	Propulsion	1985 [kW]	1800 [rpm]	1.51 MPa	12
32	M55	12M55CD2420E200	Propulsion	2200 [kW]	1500 [rpm]	2.95 MPa	12
33	M55	12M55CD2420E201	Propulsion	2200 [kW]	1800 [rpm]	1.68 MPa	12
34	M55	12M55CD1682E210	Propulsion	1529 [kW]	1500 [rpm]	1.40 MPa	12
35	M55	12M55CD1805E210	Propulsion	1641 [kW]	1500 [rpm]	1.50 MPa	12
36	M55	12M55CD1805E211	Propulsion	1641 [kW]	1800 [rpm]	1.25 MPa	12
37	M55	12M55CD1936E210	Propulsion	1760 [kW]	1500 [rpm]	1.61 MPa	12
38	M55	12M55CD2050E210	Propulsion	1864 [kW]	1500 [rpm]	1.70 MPa	12
39	M55	12M55CD2184E210	Propulsion	1985 [kW]	1500 [rpm]	1.81 MPa	12
40	M55	12M55CD2184E211	Propulsion	1985 [kW]	1800 [rpm]	1.51 MPa	12

For Information Only

41	M55	12M55CD2420E210	Propulsion	2200 [kW]	1500 [rpm]	2.95 MPa	12
42	M55	12M55CD2420E211	Propulsion	2200 [kW]	1800 [rpm]	1.68 MPa	12
43	M55	16M55C2800-15E200	Propulsion	2060 [kW]	1500 [rpm]	1.88 MPa	16
44	M55	16M55C3000-15E200	Propulsion	2205 [kW]	1500 [rpm]	2.02 MPa	16
45	M55	16M55C3128-18E201	Propulsion	2300 [kW]	1800 [rpm]	1.75 MPa	16
46	M55	16M55C3400-15E200	Propulsion	2500 [kW]	1500 [rpm]	2.29 MPa	16
47	M55	16M55C3400-18E201	Propulsion	2500 [kW]	1800 [rpm]	1.90 MPa	16
48	M55	16M55C3810-18E201	Propulsion	2800 [kW]	1800 [rpm]	2.13 MPa	16
49	M55	16M55C4000-18E201	Propulsion	2941 [kW]	1800 [rpm]	2.24 MPa	16
50	M55	16M55C2800-15E210	Propulsion	2060 [kW]	1500 [rpm]	1.88 MPa	16
51	M55	16M55C3000-15E210	Propulsion	2205 [kW]	1500 [rpm]	2.02 MPa	16
52	M55	16M55C3128-18E211	Propulsion	2300 [kW]	1800 [rpm]	1.75 MPa	16
53	M55	16M55C3400-15E210	Propulsion	2500 [kW]	1500 [rpm]	2.29 MPa	16
54	M55	16M55C3400-18E211	Propulsion	2500 [kW]	1800 [rpm]	1.90 MPa	16
55	M55	16M55C3810-18E211	Propulsion	2800 [kW]	1800 [rpm]	2.13 MPa	16
56	M55	16M55C4000-18E211	Propulsion	2941 [kW]	1800 [rpm]	2.24 MPa	16
57	M55	16M55CD2640E200	Propulsion	2400 [kW]	1500 [rpm]	2.19 MPa	16

For Information Only

58	M55	16M55CD2640E201	Propulsion	2400 [kW]	1800 [rpm]	1.83 MPa	16
59	M55	16M55CD2970E200	Propulsion	2700 [kW]	1500 [rpm]	2.47 MPa	16
60	M55	16M55CD3190E200	Propulsion	2900 [kW]	1500 [rpm]	2.65 MPa	16
61	M55	16M55CD3190E201	Propulsion	2900 [kW]	1800 [rpm]	2.21 MPa	16
62	M55	16M55CD2640E210	Propulsion	2400 [kW]	1500 [rpm]	2.19 MPa	16
63	M55	16M55CD2640E211	Propulsion	2400 [kW]	1800 [rpm]	1.83 MPa	16
64	M55	16M55CD2970E210	Propulsion	2700 [kW]	1500 [rpm]	2.47 MPa	16
65	M55	16M55CD3190E210	Propulsion	2900 [kW]	1500 [rpm]	2.65 MPa	16
66	M55	16M55CD3190E211	Propulsion	2900 [kW]	1800 [rpm]	2.21 MPa	16
67	M55	12M55CD1682E200	Auxiliary	1529 [kW]	1500 [rpm]	1.40 MPa	12
68	M55	12M55CD1805E200	Auxiliary	1641 [kW]	1500 [rpm]	1.50 MPa	12
69	M55	12M55CD1805E201	Auxiliary	1641 [kW]	1800 [rpm]	1.25 MPa	12
70	M55	12M55CD1936E200	Auxiliary	1760 [kW]	1500 [rpm]	1.61 MPa	12
71	M55	12M55CD2050E200	Auxiliary	1864 [kW]	1500 [rpm]	1.70 MPa	12
72	M55	12M55CD2184E200	Auxiliary	1985 [kW]	1500 [rpm]	1.81 MPa	12
73	M55	12M55CD2184E201	Auxiliary	1985 [kW]	1800 [rpm]	1.51 MPa	12
74	M55	12M55CD2420E200	Auxiliary	2200 [kW]	1500 [rpm]	2.95 MPa	12

For Information Only

75	M55	12M55CD2420E201	Auxiliary	2200 [kW]	1800 [rpm]	1.68 MPa	12
76	M55	12M55CD1682E210	Auxiliary	1529 [kW]	1500 [rpm]	1.40 MPa	12
77	M55	12M55CD1805E210	Auxiliary	1641 [kW]	1500 [rpm]	1.50 MPa	12
78	M55	12M55CD1805E211	Auxiliary	1641 [kW]	1800 [rpm]	1.25 MPa	12
79	M55	12M55CD1936E210	Auxiliary	1760 [kW]	1500 [rpm]	1.61 MPa	12
80	M55	12M55CD2050E210	Auxiliary	1864 [kW]	1500 [rpm]	1.70 MPa	12
81	M55	12M55CD2184E210	Auxiliary	1985 [kW]	1500 [rpm]	1.81 MPa	12
82	M55	12M55CD2184E211	Auxiliary	1985 [kW]	1800 [rpm]	1.51 MPa	12
83	M55	12M55CD2420E210	Auxiliary	2200 [kW]	1500 [rpm]	2.95 MPa	12
84	M55	12M55CD2420E211	Auxiliary	2200 [kW]	1800 [rpm]	1.68 MPa	12
85	M55	16M55CD2640E200	Auxiliary	2400 [kW]	1500 [rpm]	2.19 MPa	16
86	M55	16M55CD2640E201	Auxiliary	2400 [kW]	1800 [rpm]	1.83 MPa	16
87	M55	16M55CD2970E200	Auxiliary	2700 [kW]	1500 [rpm]	2.47 MPa	16
88	M55	16M55CD3190E200	Auxiliary	2900 [kW]	1500 [rpm]	2.65 MPa	16
89	M55	16M55CD3190E201	Auxiliary	2900 [kW]	1800 [rpm]	2.21 MPa	16
90	M55	16M55CD2640E210	Auxiliary	2400 [kW]	1500 [rpm]	2.19 MPa	16
91	M55	16M55CD2640E211	Auxiliary	2400 [kW]	1800 [rpm]	1.83 MPa	16

For Information Only

92	M55	16M55CD2970E210	Auxiliary	2700 [kW]	1500 [rpm]	2.47 MPa	16
93	M55	16M55CD3190E210	Auxiliary	2900 [kW]	1500 [rpm]	2.65 MPa	16
94	M55	16M55CD3190E211	Auxiliary	2900 [kW]	1800 [rpm]	2.21 MPa	16

Approval Conditions **: -**

For Information Only