

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Dual-Fuel Engine (Gas)

with type designation(s)
Wärtsilä 25DF

issued to

Wärtsilä Finland Oy
Teollisuuskatu 1, 65170 Vaasa, Finland

is found to comply with

DNV rules for classification – Ships Pt.4 Ch.3 Sec.1 Reciprocating internal combustion engines

Application:

propulsion / auxiliary

The engine type is approved for use in both inherently gas safe and emergency shutdown protected machinery spaces.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Rating see page two

Issued at **Høvik** on **2024-09-16**

This Certificate is valid until **2029-09-15**.

for **DNV**

DNV local unit: **Finland CMC**

Approval Engineer: **Dag Harald Williksen**

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

four stroke, in line engine, non-reversible, trunk-piston, with supercharging, with charge air cooling, constant-pressure charging system, direct injection, injection operation electronically controlled, valve operation by cams, fuel oil, dual fuel, natural gas

Cylinder bore [mm]	250
Piston stroke [mm]	340
No. of cylinders	6, 7, 8 and 9 in-line

Application/Limitation

Rated power [kW/cyl.]	315	345
Rated speed [rpm]	900	1000
Mean effective pressure [bar]	25,2	24,8
Max. firing pressure [bar]	230	230

Type Approval documentation

Tests carried out

Documentation:	
Test report title	W25DF Type approval test report
Place of test	Vaasa, Finland
Date of test	2024-06-05 until 2024-06-08

Test engine:	
Model	Wärtsilä 6L25DF
Serial no.	XAAD676561
No. of cylinders	6
Power [kW]	2070
Speed [rpm]	1000

Marking of product

The product to be marked with manufacturer's name or trademark and type number identification.

Periodical assessment

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

The objective of the Periodical Assessment is to verify that the conditions for the Type Approval are not altered since the Type Approval certificate was issued.

In case 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

Flexible hoses to be Type Approved by DNV.

Engine safety, control and monitoring systems, including sensors and actuators are not covered by this type approval certificate. Documentation for engine safety, control including speed governing and monitoring systems shall be submitted for approval according to the Rules Pt.4 Ch.9 Sec.1 Table 5 and/or as listed in relevant type approval certificates.

Electric cables and installation of this is not covered by this approval and must be verified to comply with the requirement of the Rules Pt.4 Ch.8 - Electrical Installation.

END OF CERTIFICATE