DNV·GL

TYPE APPROVAL CERTIFICATE

Certificate No:
TAM00000SE

This is to certify:

That the Diesel Engine

with type designation(s)
8000Mx0/Mx1

Issued to
MTU Friedrichshafen GmbH
88045 Friedrichshafen, Germany

is found to comply with
DNV GL Rules for classification, Ships (RU-SHIP) and High speed and light craft (RU-HSLC) Reciprocating Internal Combustion Engines

Application :

propulsion, multi engine plant

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

This Certificate is valid until **17th December, 2022**.

Issued at **Hamburg** on **18th December, 2017**
DNV GL local station: **Augsburg** for **DNV GL**

Approval Engineer: **Sven Neddenien**

Burkhard Lilienthal
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.

Job Id: **262.1-001780-6**
Certificate No: **TAM00000SE**

Product description
four stroke, v-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, liquid fuel

Cylinder bore [mm]	265
Piston stroke [mm]	315
No. of cylinders	20

Additional place of production
not applicable

Application/Limitation

Rated power [kW/cyl.]	455
Rated speed [rpm]	1150
Mean effective pressure [bar]	27.33
Max. firing pressure [bar]	215
Definition	8000Mx1

Type Approval documentation

Tests carried out
Documentation:

Test report titel	Type Test of the MTU Diesel Engine Series 20V 8000 M71
Place of test	Friedrichshafen, Germany
Date of test	2006-07-20 until 2006-07-25

Test engine:

Model	20V8000M71
Serial no.	596 100 116
No. of cylinders	20
Power [kW/cyl.]	455
Speed [rpm]	1150

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

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

END OF CERTIFICATE