Certificate No: LR2006608TA
Issue Date: 20/07/2020
Expiry Date: 19/07/2025

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	**MTU Friedrichshafen GmbH**
Address	Maybachplatz 1, Friedrichshafen, 88045, Germany
Type	Exhaust Gas Systems
Description	High speed rotating exhaust gas turbocharger
Trade Name	ZR1.116.I
Application	As exhaust turbochargers for MTU engine type 12V 396TBx4
Specified Standard	Lloyd's Register Rules and Regulations for the Classification of Ships, 2020

Ratings

Turbine Wheel Diameter [mm]	Compressor Wheel Diameter [mm]	Speed [rpm]	Exhaust Gas Temp. [°C]
108	116 Ti	90.000	800

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document No. HPC/HMD 4058-00, Issue No. 6 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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