

2nd October, 1956

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Port of Augsburg

No. 804

Ulm

No. of visits

2

First date 3rd Sept.

Last date 15th September, 1956

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

LM C.

Name of Ship **MARGRETHE ROBBERT**

Or Contract No. if name unknown)

Owners
(Or Consignees)

Engine ordered by: **Ad. Strüver, Hamburg**

when 1956

Yard No. -

Auxiliary Engines or Gas Turbines made at **Ulm (Donau)**

by **Messrs. Klöckner-Humboldt-Deutz**

when 1956

Eng. Nos. 1592 527-28

Total No. of sets and description (including type name) **F2M 417**

INTERNAL COMBUSTION RECIPROCATING ENGINES.

No. of cylinders per engine **2** Dia. of cylinders **120 mm** Stroke **170 mm**
 or 4 stroke cycle **4** Maximum approved BHP **24** at **1000** RPM Corresponding MIP **1.5 kg/cm²** Maximum pressure **70 kg/cm²**
 fuel **gas oil** Are cylinders arranged in Vee or other special formation? **-** If so, No. of
 crankshafts per engine **-** Is engine of opposed piston type? **no** No. and type of mechanically driven scavenge pumps or blowers
 per engine **-** No. of exhaust gas driven blowers or superchargers per engine **-** Is welded construction
 used for: Bedplate? **no** Entablature? **-** Total Internal volume of crankcase (if 20 cu. ft. or over) **-** No. and total area of
 crankcase explosion relief devices **-** Are flame guards or traps fitted? **-** Cooling medium for: Cylinders **water**
 pistons **-** No. of attached pumps: F.W. cooling **1** S.W. cooling **-** Lubricating oil **1** How is engine started? **electr.**

SHAFTING.

Is a damper or detuner fitted? **no** No. of main bearings **2** Are bearings of ball or roller type? **roller** Distance between
 inner edges of bearings in way of cranks **418 mm** Crankshaft: Built, semi-built **solid** Material of crankshaft **SM Steel** Approved
 minimum tensile strength **80 kg/mm²** Dia. of pins **90 mm** Journals **95/70 mm** Breadth of webs at mid throw **120 mm** Axial
 thickness **54/90/54** If shrunk, radial thickness around eyeholes **-** Dia. of flywheel **512 mm** Weight **228 kgs** Are balance
 weights fitted? **yes** Total weight **68 kgs** Rad. of gyration **102 mm** Dia. of flywheel shaft **-**
 Has each engine been tested in shop? **yes** How long at full power? **4 h** Was it tested with driven machinery attached? **-** Was the
 governing tested and found satisfactory? **yes** Date of approval of torsional vibration characteristics (for engines of 150 BHP and over) **not applicable**
 Date of approval of shafting **30.1.1951** Identification marks on shafting **Lloyd's Aug. 10.9.56 20340/2 GH**
 Particulars of driven machinery **-**

Port and No. of Certificate for Starting Air Receivers **-**

AUXILIARY GAS TURBINES.

BHP per set **-** At **-** RPM of output shaft. Open or closed cycle?
 Arrangement of turbines. HP drives **-** at **-** RPM HP gas inlet temp. **-** pressure
 A small diagram should be attached showing gas cycle) IP **-** at **-** IP **-** **-** **-** **-** **-**
 LP **-** at **-** LP **-** **-** **-** **-** **-**
 No. of air compressors per set **-** Centrifugal or axial flow type? **-** Material of turbine blades **-**
 Material of compressor blades **-** No. of air coolers per set **-** No. of heat exchangers per set **-** How are
 turbines started? **-** Are the turbines operated in conjunction with free piston gas generators?
 Total No. of free piston gas generators **-** Dia. of working pistons **-** Dia. of compressor pistons **-** No. of double strokes
 per minute at full power **-** Gas delivery pressure **-** Gas delivery temperature **-**
 Have the turbines and attached equipment been tested in shop? **-** How long at full power? **-** Were they tested with driven machinery
 attached? **-** Particulars of gearing **-**
 Date of approval of plans **-** Identification marks **-** Particulars of driven machinery **-**

ELECTRIC GENERATORS.

Port and No. of Certificate for generators of 100 Kw. and over
 For generators under 100 Kw., has Makers' Certificate been obtained? **-** Are Certificates attached? **-**

The foregoing description is correct and the particulars are as approved for torsional vibration characteristics (strike out words not applicable)

KLOCKNER-HUMBOLDT-DEUTZ

WERK ULM

Manufacturer

2.57

Is this machinery duplicate of a previous case? **-** If so, which? **-**

GENERAL REMARKS.

State if the machinery has been constructed under special survey in accordance with the Rules, approved plans and Secretary's letters.
 State quality of materials and workmanship. Where existing machinery is submitted for classification the circumstances should be explained as fully as possible.
 This heavy oil auxiliary engine has been constructed under special survey in accordance with the require-
 ments of the Rules and Regulations of this Society and otherwise with the approved plans. The material used
 in the construction is good and the workmanship was found to be satisfactory. The engine has been tested
 running on makers' test bed under full-, over-, and partial loads with satisfactory results. In my opinion
 the engine can be recommended to be fitted into a ship classed with this Society.

Survey Fee **DM 80.-**

Expenses **DM 25.-**

Running test **30.-** Total **DM 135.-**

Date when a/c rendered **12.10.1956**

Engineer Surveyor to Lloyd's Register

Declaration to be signed by Surveyor at fitting-out Port:— The above described machinery has been fitted on board the

in a proper manner and found satisfactory when tested on the (date)

under full working conditions.

Engineer Surveyor to Lloyd's Register

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