

Kpt. 4c

Date of writing report 31st January, 1964

Received London

Port of Augsburg

No. 1747

Survey held at Augsburg

No. of visits

11

First date 20th Feb. 63

Last date 21st January, 1964

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

Name of Ship
(Or Contract No. if name unknown).

Owners
(Or Consignees)

Ship Built at Genoa

by Societa Ansaldo SpA.

when 1963 Yard No. 1595

Auxiliary Engines or ~~Cox Turbines~~ made at Augsburg

by M.A.N. A.G.

when 1963/4 Eng. Nos. 303099

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

W8V17.5/22A supercharged

INTERNAL COMBUSTION RECIPROCATING ENGINES.

No. of cylinders per engine 8

Dia. of cylinders 175 mm

Stroke 220 mm

2 or 4 stroke cycle 4

Maximum approved BHP 305

at 750 RPM

Corresponding MIP 10.35 kg/cm²

Maximum pressure 75 kg/cm²

Fuel gas oil

Are cylinders arranged in Vee or other special formation?

no

If so, No. of

crankshafts per engine

Is engine of opposed piston type?

No. and type of mechanically driven scavenge pumps or blowers

per engine

No. of exhaust gas driven blowers or superchargers per engine one

Is welded construction

used for: Bedplate?

Entablature?

Total internal volume of crankcase (if 20 cu. ft. or over)

0.665 m³

No. and total area of

crankcase explosion relief devices

2; 80 cm² each

Are flame guards or traps fitted?

no

Cooling medium for: Cylinders water

Pistons

No. of attached pumps: F.W. cooling 1

S.W. cooling

Lubricating oil 1

How is engine started? by air

SHAFTING.

Is a damper or detuner fitted? yes

No. of main bearings 9

Are bearings of ball or roller type?

Distance between

inner edges of bearings in way of cranks 250 mm

Crankshaft: ~~solid~~ solid

Material of crankshaft S.M. Steel

34CrMo4 Approved

minimum tensile strength 80 kg/mm²

Dia. of pins 105 mm

Journals 105 mm

Breadth of webs at mid throw 178 mm

Axial

thickness 42 mm

If shrunk, radial thickness around eyeholes

Dia. of flywheel 800 mm

Weight 394 kgs. Are balance

weights fitted? yes

Total weight 60 kgs

Rad. of gyration 110 mm

Dia. of flywheel shaft

Has each engine been tested in shop? yes

How long at full power? 5 hrs.

Was it tested with driven machinery attached? no

Was the

governing tested and found satisfactory? yes

Date of approval of torsional vibration characteristics (for engines of 150 BHP and over)

17.9.1963

Date of approval of shafting 10.2.49

Identification marks on shafting LLOYD'S AUG D024/4431 C510699 H.K.S. 8.1.63

Particulars of driven machinery

Port and No. of Certificate for Starting Air Receivers none.

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)

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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

How long at full power?

Were they tested with driven machinery

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)

Maschinenfabrik Augsburg-Nürnberg A.G.

Manufacturer

Is this machinery duplicate of a previous case? yes If so, which? Yard Nos. 1593, 1594

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 generator engine has been built under Special Survey in accordance with the Society's Rules and Regulations, the approved plans and the Secretary's letters. The materials and workmanship are good. The engine has been examined during construction, under working conditions on completion, governor trials carried out with satisfactory results and are eligible in my opinion to be installed in a ship classed with this Society.

me

Survey Fee DM 409.50

est

expenses 100.-

DM 564.50

ate when a/c rendered 7.2.1964

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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