

19 DEC 1957

pt. 4c

Date of writing report 25.11.1957

Received London

6 JUN 1958

Port GENOA

No.

22848

Survey held at Riva Trigoso

No. of visits

11

First date

6.6.1957

Last date

7.11.1957

FIRST ENTRY REPORT ON AUXILIARY STEAM TURBINE OR STEAM
RECIPROCATING ENGINES

Name of Ship YARD N° 1826
(Or Contract No. if name unknown)

Ship Built at Trieste by Messrs. CRDA when 1957 Yard No. 1826

Auxiliary turbines or engines made at Riva Trigoso by Messrs. Cantieri del Tirreno when 1957 Eng. Nos. 5060/a
5060/b

Total No. of sets and description Two turbogenerator sets each one consisting of a steam turbine driving
a 600 KW - 450 Volt A.C. generator through a single reduction gearing 10.000/1200 Rpm

STEAM TURBINES. No. of turbines per set one BHP per set 816 Steam pressure 59.7 kg/cm² Steam temperature 454°C

Type of turbines Impulse type to multiple stages

Particulars of gearing single reduction gearing

RPM of turbine shaft(s) 10.000 PCD of pinion(s) 106,49 mm PCD of wheel(s) 893,50 mm Material of

pinion(s) Cr.Ni.Mo.steel Material of wheel rim(s) carbon steel Has rotor been dynamically balanced? yes Diameter of rotor

shaft at bearings 80 mm Does the set include a steam condenser? no Is an emergency governor fitted? yes No. and purpose of

attached pumps one lubricating oil pump Has the set been tested in the shop? yes If so, for how long at full

power? 4 hours Was the governing tested and found satisfactory? yes Was the set tested with driven machinery attached? yes

Identification marks please see attached sheet Particulars of driven machinery 600 KW - 450 Volt

962 Amp. A.C. generators - Makers N° 8003470 - 8003471

Verified at Trieste

STEAM RECIPROCATING ENGINES. BHP of each at RPM Steam pressure

Dia. of cylinders Stroke Dia. of crankshaft journals Pins Material of

crankshaft Is crankcase enclosed? If so, is the internal volume 20 cu. ft. or over? No. and total area of crankcase

explosion relief devices fitted? Are the bearings forced lubricated? No. and purpose of attached pumps

Is a Governor Fitted? Identification Marks

Particulars of Driven Machinery

ELECTRIC GENERATORS. Port and No. of Certificate for generators of 100 Kw. and over see Trieste Certificates

For generators under 100 Kw., has Makers' Certificate been obtained? Are Certificates attached? no (will be forwarded by Trieste Surveyors)

CANTIERI DEL TIRRENO

The foregoing description is correct.

Manufacturer

Is this machinery duplicate of a previous case? no 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.

These sets have been constructed under special survey of tested materials and are in accordance with the approved plans, Secretary's letters and Rule Requirements. The materials and workmanship are good. These sets have been despatched to Trieste to be fitted on board at Messrs. C.R.D.A. - Yard 1826.

Survey Fee Lt 162000 Km 15% = Lt 132700 =

EXPENSES Lt 2754 =

REV. TAX Lt 21866 =

Date when a/c rendered 4.12.57

(G. Vigo & A. Grasselli)

Engineer Surveyor to Lloyd's Register

S.T.T. "MARIAROSA AUGUSTA"

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

at TRIESTE in a proper manner and found satisfactory when tested on the (date) 3rd & 11th under full working April 1958.

conditions.

6618

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

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

Owners
(Or Consignees)

Ship Built at by when Yard No.

Auxiliary Engines or Gas Turbines made at by when Eng. Nos.

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

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine Dia. of cylinders Stroke
2 or 4 stroke cycle Maximum approved BHP at RPM Corresponding MIP Maximum pressure
Fuel Are cylinders arranged in Vee or other special formation? 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 Is welded construction
used for: Bedplate? 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
Pistons No. of attached pumps: F.W. cooling S.W. cooling Lubricating oil How is engine started?

SHAFTING. Is a damper or detuner fitted? No. of main bearings Are bearings of ball or roller type? Distance between
inner edges of bearings in way of cranks Crankshaft: Built, semi-built, solid. Material of crankshaft Approved
minimum tensile strength Dia. of pins Journals Breadth of webs at mid throw Axial
thickness If shrunk, radial thickness around eyeholes Dia. of flywheel Weight Are balance
weights fitted? Total weight Rad. of gyration Dia. of flywheel shaft
Has each engine been tested in shop? How long at full power? Was it tested with driven machinery attached? Was the
governing tested and found satisfactory? Date of approval of torsional vibration characteristics (for engines of 150 BHP and over)
Date of approval of shafting Identification marks on shafting
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)

Manufacturer

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.

Survey Fee

Expenses

Date when a/c rendered

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

under full working conditions.

Engineer Surveyor to Lloyd's Register

Lloyd's Register
Foundation