

19 DEC 1957

Copy Sent to Trieste Surveyors

pt. 4c

Date of writing report 25.11.1957

Received London 5 JUN 1958

Port GENOA

No. 22878

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 Owners Messrs. C.R.D.A. - Trieste
 (Or Contract No. if name unknown) (Or Consignees)

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)

The foregoing description is correct.

CANTIERI DEL TIRRENO
Pantoni
 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.

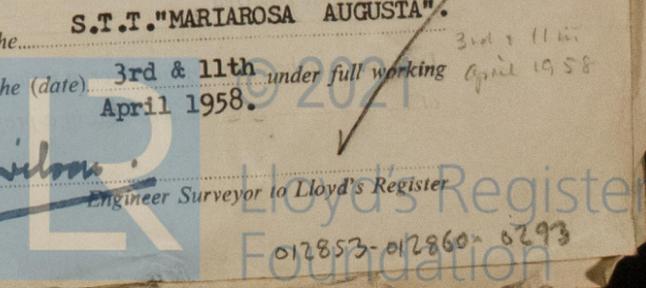
These sets have been constructed under special survey of tested materials and are in accordance with the approved plans, Secretary's letters and Rule Requirements. The materials and workmanship are good. These sets have been despatched to Trieste to be fitted on board at Messrs. C.R.D.A. - Yard 1826.

Survey Fee lt 162000 less 15% = lt 137700 =
 CAR FUNG lt 2754 =
 Expenses lt 21866 =
 REV. TAX lt 4870 =
 Date when a/c rendered 4-12-57

100
 (G. Vigo & A. Grasselli)
 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 S.T.T. "MARIAROSA AUGUSTA" at TRIESTE in a proper manner and found satisfactory when tested on the (date) 3rd & 11th April 1958 under full working conditions.

6618
 J.G. Wilson
 Engineer Surveyor to Lloyd's Register



Date of writing report, Received London, Port, No., Survey held at, No. of visits, First date, Last date

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

Name of Ship, Owners, Ship Built at, Auxiliary Engines or Gas Turbines made at, Total No. of sets and description

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine, Dia. of cylinders, Stroke, 2 or 4 stroke cycle, Maximum approved BHP, 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, 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, in a proper manner and found satisfactory when tested on the (date), under full working conditions.

