

Rpt. 4c

Date of writing report 26-6-64

Received London

Port

No.

49

Survey held at

No. of visits

First date

Last date

## FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

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

Ship Built at Genova-Sestri

by Ansaldo - Cantieri Navali

when Yard No. 1594

Auxiliary Engines or Gas Turbines made at Milan

by Alfa Romeo

when 1963 Eng. Nos. 00486

Total No. of sets and description (including type name) 1 - 1627 Ind.

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine 6 Dia. of cylinders 125 mm. Stroke 170 mm.  
2 or 4 stroke cycle 4 Maximum approved BHP 165 NA 1800 RPM Corresponding MIP 8.5 Kg/cm<sup>2</sup> Maximum pressure 75 Kg/cm<sup>2</sup>  
Fuel Gas Oil Are cylinders arranged in Vee or other special formation? line 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) less than 20 cu. ft. and total area of  
crankcase explosion relief devices - Are flame guards or traps fitted? - Cooling medium for: Cylinders Water  
Pistons oil No. of attached pumps: F.W. cooling 1 S.W. cooling - Lubricating oil 2 How is engine started?  
by hand inertia starter.

SHAFTING. Is a damper or detuner fitted damper No. of main bearings 7 Are bearings of ball or roller type? no. Distance between  
inner edges of bearings in way of cranks 137 mm. Crankshaft: ~~Ball bearing~~ solid. Material of crankshaft 38 NCD4 steel Approved  
minimum tensile strength 95 Kg/mm<sup>2</sup> Dia. of pins 85 mm. Journals 94 mm. Breadth of webs at mid throw 200 mm. Axial  
thickness 31 mm. If shrunk, radial thickness around eyeholes - Dia. of flywheel 548 mm. Weight 137 Kg. Are balance  
weights fitted? - Total weight - Rad. of gyration 181.5 mm. Dia. of flywheel shaft 130 mm.  
Has each engine been tested in shop? yes How long at full power? 4 hours 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) 22.5.1963  
Date of approval of shafting 21.3.1963 Identification marks on shafting LLOYD'S M.L.G.L.  
Particulars of driven machinery centrifugal pump.

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)

ALFA ROMEO S.p.A., Milano Manufacturer

Is this machinery duplicate of a previous case? yes If so, which? Report No. 48 - Engine 00484 - for Ansaldo's Yard No. 1593

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.

The above machinery was constructed under special survey, in accordance with the Rules and approved plans.  
All the materials were submitted to the tests required by the Rules and found satisfactory.  
Workmanship satisfactory throughout.

Survey Fee

Expenses (see report No. 48)

Date when rendered

(Ing. G. LEVI)

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

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