

# REPORT ON OIL ENGINE MACHINERY.

No. 2794

Received at London Office 14 NOV 1927

Date of writing Report 19th Sept 1927 When handed in at Local Office 19 Port of Naples

No. in Survey held at Reg. Book 31006 on the Single Screw vessel Motorship Orazio Date, First Survey 16th Sept. 1926 Last Survey 14th April 1927 Number of Visits 13

Built at Baia (Naples) By whom built Cantieri ed Officine Meridionali Yard No. 111 When built Engines made at Trieste By whom made Stabilimento Tecnico Tr. Engine No. When made Donkey Boilers made at By whom made Boiler No. When made Brake Horse Power Owners Navigazione Generale Italiana Port belonging to Genoa Nom. Horse Power as per Rule Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted Trade for which vessel is intended

**IL ENGINES, &c.**—Type of Engines 2 or 4 stroke cycle Single or double acting Maximum pressure in cylinders Diameter of cylinders Length of stroke No. of cylinders No. of cranks Span of bearings, adjacent to the Crank, measured from inner edge to inner edge Is there a bearing between each crank Revolutions per minute Flywheel dia. Weight Means of ignition Kind of fuel used Crank Shaft, dia. of journals as per Rule as fitted Crank pin dia. Crank Webs Mid. length breadth Mid. length thickness Thickness parallel to axis Thickness around eyehole Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted 325 m/m Thrust Shaft, diameter at collars as per Rule as fitted Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted 383 m/m Is the tube screw shaft fitted with a continuous liner? yes Bronze Liners, thickness in way of bushes as per Rule 17.5 m/m as fitted 21 m/m - 23.5 m/m Thickness between bushes as per rule 13.1 m/m as fitted 17.5 m/m Is the after end of the liner made watertight in the propeller boss If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive If two liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft no Length of Bearing in Stern Bush next to and supporting propeller 2530 m/m

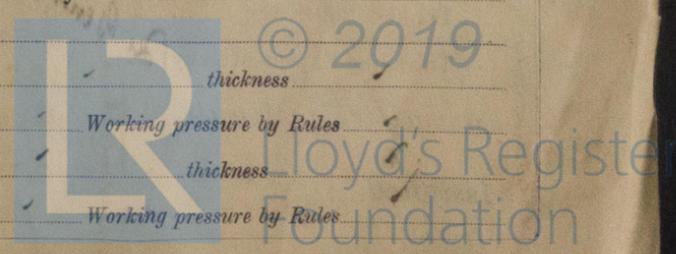
Propeller, dia. Pitch No. of blades Material whether Moveable Total Developed Surface sq. feet Method of reversing Engines Is a governor or other arrangement fitted to prevent racing of the engine when declutched Means of lubrication Thickness of cylinder liners Are the cylinders fitted with safety valves Are the exhaust pipes and silencers water cooled or lagged with non-conducting material If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine

Cooling Water Pumps, No. Is the sea suction provided with an efficient strainer which can be cleared within the vessel Bilge Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work Pumps connected to the Main Bilge Line No. and Size How driven Ballast Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size Are two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Machinery Spaces In Holds, &c.

**Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size** Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Are the Bilge Suctions in the Machinery Spaces led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Are all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks valves Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates Are the Overboard Discharges above or below the deep water line Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate What pipes pass through the bunkers How are they protected What pipes pass through the deep tanks Have they been tested as per Rule Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Is the arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

**Main Air Compressors, No.** No. of stages Diameters Stroke Driven by **Auxiliary Air Compressors, No.** No. of stages Diameters Stroke Driven by **Small Auxiliary Air Compressors, No.** No. of stages Diameters Stroke Driven by **Scavenging Air Pumps, No.** Diameter Stroke Driven by **Auxiliary Engines crank shafts, diameter** as per Rule as fitted

**IR RECEIVERS:**—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Can the internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces Is there a drain arrangement fitted at the lowest part of each receiver **High Pressure Air Receivers, No.** Cubic capacity of each Internal diameter thickness Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules **Starting Air Receivers, No.** Total cubic capacity Internal diameter thickness Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting  Receivers  Separate Tanks   
 (If not, state date of approval)  
 Donkey Boilers  General Pumping Arrangements  Oil Fuel Burning Arrangements

SPARE GEAR *One propeller shaft*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - }  
 { During erection on board vessel - - } 13.9.26 - 17.9.26 - 23.9.26 - 6.10.26 - 8.10.26 - 25.10.26 - 3.11.26 - 16.11.26 - 18.12.26 - 15.2.27 - 5.3.27, 14.4.27  
 Total No. of visits 12

Dates of Examination of principal parts—Cylinders  Covers  Pistons  Rods  Connecting rods   
 Crank shaft  Flywheel shaft  Thrust shaft  Intermediate shafts *see for. Certificate* Tube shaft   
 Screw shaft *see for. Certificate* Propeller  Stern tube 8.10.26 - 25.10.26 Engine seatings *see above dates* Engines holding down bolts   
 Completion of fitting sea connections 25.10.26 Completion of pumping arrangements  Engines tried under working conditions   
 Crank shaft, Material  Identification Mark  Flywheel shaft, Material  Identification Mark   
 Thrust shaft, Material  Identification Mark  Intermediate shafts, Material *S.M.I. steel* Identification Marks *see for. Certificate attached*  
 Tube shaft, Material  Identification Mark  Screw shaft, Material *S.M.I. steel* Identification Mark

Is the flash point of the oil to be used over 150° F.

Is this machinery duplicate of a previous case  If so, state name of vessel.

General Remarks (State quality of workmanship, opinions as to class, &c.)

*This vessel was taken to Genoa for completion and installation of machinery. In so far as the installation has been advanced at Naples the same is in accordance with the Rule requirements and the material and workmanship are good and to my satisfaction.*

*The machinery will be eligible in my opinion to have the award of +LMC when the installation has been completed to the satisfaction of the Society's Surveyors at Genoa.*

The amount of Entry Fee ... £	:	:	When applied for,
Special ... £	:	:	19
Donkey Boiler Fee ... £	:	:	When received,
Travelling Expenses (if any) £	:	:	19

Committee's Minute

FRI. 18 NOV 1927

Assigned

*See Gen. Feb rpt No 10081 attached*

Engineer Surveyor to Lloyd's Register of Shipping.

S. A. ARMSTRONG DI POZZUOLI

LIQUIDAZIONE  
LIQUIDATORI

Lloyd's Register  
Foundation



Certificate (if required) to be sent to  
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)