

REPORT ON OIL ENGINE MACHINERY.

No. 11457

18 JUL 1930

Date of writing Report 26.6.30 When handed in at Local Office

14/7/30 Port of

Received at London Office

GENOA.

No. in Survey held at TURIN.
Reg. Book.

Date, First Survey AUGUST 13. 1929. Last Survey JUNE 24. 1930.

Number of Visits 56.

on the ^{Single}
~~Triple~~
~~Quadruple~~ Screw vessel

"BARBARIGO".

Tons { Gross
Net

Built at MONFALCONE. By whom built CANT. NAV. TRIESTINO. Yard No. 221. When built 1930.
Engines made at TURIN By whom made FIAT STABILIMENTO GRANDI Engine No. 1638. When made 1930.
Donkey Boilers made at / By whom made / Boiler No. / When made /
Brake Horse Power 4,400. Owners SOCIETA VENEZIANA DI NAV. A. VAP. Port belonging to VENICE.
Nom. Horse Power as per Rule 1220. Is Refrigerating Machinery fitted for cargo purposes / Is Electric Light fitted YES.
Trade for which vessel is intended 1219. /

OIL ENGINES, &c.—Type of Engines FIAT L. 758. 2 or 4 stroke cycle 2. Single or double acting SINGLE.
Maximum pressure in cylinders 35 Kgs. Diameter of cylinders 750 mm. Length of stroke 1250 mm. No. of cylinders 8. No. of cranks 8.
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 1060 mm. Is there a bearing between each crank YES.
Revolutions per minute 100. Flywheel dia. 3400 mm. Weight 15 Tons. Means of ignition COMPRESSION Kind of fuel used DIESEL OIL.
Crank Shaft, dia. of journals as per Rule 467.4 mm. as fitted 500 mm. Crank pin dia. 500 mm. Crank Webs Mid. length breadth 800 mm. Thickness parallel to axis 313 mm.
Flywheel Shaft, diameter as per Rule 500 mm. as fitted 500 mm. Intermediate Shafts, diameter as per Rule 362 mm. as fitted 390 mm. Thrust Shaft, diameter at collars as per Rule 380.9 mm. as fitted 440 mm.
Tube Shaft, diameter as per Rule / as fitted / Screw Shaft, diameter as per Rule 396.9 mm. as fitted 430 mm. Is the tube shaft fitted with a continuous liner YES.
Bronze Liners, thickness in way of bushes as per Rule 19.7 mm. as fitted 22 mm. Thickness between bushes as per rule 14.3 mm. as fitted 17 mm. Is the after end of the liner made watertight in the propeller boss YES.

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner YES.
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 /

Propeller, dia. 5000 mm. Pitch / No. of blades / Material / whether Moveable / Total Developed Surface / sq. feet
Method of reversing Engines DIRECT Is a governor or other arrangement fitted to prevent racing of the engine when decelerated YES. Means of lubrication

FORCED Thickness of cylinder liners 55 mm. Are the cylinders fitted with safety valves YES. 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. 2. 2557 ON x 2467 STROKE. 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 2. GEAR PUMPS.

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

ed 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 /

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. TWO. No. of stages THREE. Diameters 670/610/135 Stroke 720.2. Driven by MAIN ENGINES.

Auxiliary Air Compressors, No. TWO. No. of stages THREE. Diameters 310/270/65 Stroke 360.7. Driven by DIESEL ENGINES.

Small Auxiliary Air Compressors, No. ONE. No. of stages THREE. Diameters 185/165/42 Stroke 140.7. Driven by SEMI-DIESEL ENGINE.

Scavenging Air Pumps, No. TWO. TANDEM. Diameter 1320 mm. Stroke 1100 mm. Driven by MAIN ENGINES.

Auxiliary Engines crank shafts, diameter as per Rule 153 mm. as fitted 165 mm.

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 NO. 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. TWO. Cubic capacity of each 200 LITRES. Internal diameter 313 mm. thickness 14 mm.

Seamless, lap welded or riveted longitudinal joint SEAMLESS Material STEEL. Range of tensile strength 44-50 Kgs. Working pressure by Rules 85.4 Kgs/cm².

Starting Air Receivers, No. 36 { 20 @ 500 LITRES 16 @ 300 LITRES Total cubic capacity 14800 LITRES. Internal diameter 313 mm. thickness 14 mm.

Seamless, lap welded or riveted longitudinal joint SEAMLESS Material STEEL. Range of tensile strength 44-50 Kgs. Working pressure by Rules 85.4 & 84 Kgs/cm².

009930-007937-0048

IS A DONKEY BOILER FITTED? ☒

If so, is a report now forwarded? ☒

PLANS. Are approved plans forwarded herewith for Shafting 25/9/29. 30/5/29. Receivers 3/2/30. 26/3/30. Separate Tanks ☒

Donkey Boilers ☒

General Pumping Arrangements ☒

Oil Fuel Burning Arrangements ☒

SPARE GEAR

Will Be Placed On Board At TRIESTE.

The foregoing is a correct description,

FIAT
STABILIMENTO GRANDI MOTORI
S. Dizzellora

Manufacturer.

Dates of Survey while building
During progress of work in shops - 1929 AUG. 13. SEPT. 3, 6, 10, 27. OCT. 15, 25, 29. NOV. 5, 8, 12, 16, 19. DEC. 3, 13, 17, 24, 31. 1930. JAN. 7, 14, 21, 24, 28, 30. FEB. 4, 7, 11, 14, 18, 21, 25, 28. MAR. 7, 5, 11, 14, 25. APRIL 1, 3, 8, 16, 25, 29. MAY 13, 16, 20, 23.
During erection on board vessel - 30. JUNE 5, 13, 10, 17, 20, 24. 56
Total No. of visits in shops. 56.

Dates of Examination of principal parts—Cylinders 7.2.30. 14.2.30 Covers 4.2.30. Pistons 2.11.29. 31.1.30 Rods 15.10.29. 4.2.30 Connecting rods 14.2.30

Crank shaft 5.6.30. Flywheel shaft — Thrust shaft 30.2.29. 10.6.30 Intermediate shafts 28.3.30 Tube shaft —

Screw shaft 25.3.30. 10.6.30 Propeller — Stern tube — Engine seatings — Engines holding down bolts —

Completion of fitting sea connections — Completion of pumping arrangements — Engines tried under working conditions —

Crank shaft, Material STEEL. Identification Mark GB. 94.18.1.30. Flywheel shaft, Material — Identification Mark SEE THRUST.

Thrust shaft, Material STEEL. Identification Mark GB. 535. Intermediate shafts, Material STEEL. Identification Marks GB. 0124, 084, 008, 0102, 008.

Tube shaft, Material — Identification Mark — Screw shaft, Material STEEL. Identification Mark GB. 079. SPARE. GB. 0215.

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

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with —

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo — If so, have the requirements of the Rules been complied with —

Is this machinery duplicate of a previous case No. If so, state name of vessel —

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

THE MACHINERY OF THIS VESSEL HAS BEEN CONSTRUCTED UNDER SPECIAL SURVEY OF TESTED MATERIALS AND IS IN ACCORDANCE WITH THE SECRETARY'S LETTER APPROVED PLANS AND RULE REQUIREMENTS.

THE MATERIALS AND WORKMANSHIP ARE GOOD AND THE ENGINES WHEN TRIED ON THE TEST BED WERE FOUND TO WORK SATISFACTORILY.

THE MACHINERY HAS NOW BEEN FORWARDED TO TRIESTE WHERE IT WILL BE INSTALLED ON BOARD THE M.V. "BARBARIGO". AND WHEN THIS HAS BEEN CARRIED OUT TO THE SATISFACTION OF THE SOCIETY'S SURVEYORS AT THAT PORT THE VESSEL WILL BE ELIGIBLE IN OUR OPINION TO BE CLASSED IN THE SOCIETY'S REGISTER BOOK AND TO HAVE THE NOTATION "OIL ENGINES" + L.M.C. (WITH DATE).

The amount of Entry Fee £ 588.

Special £ 9710.

Donkey Boiler Fee £ 1950.

Travelling Expenses (if any) £ 1950.

When applied for, 19.

When received, 13.11.30

Committee's Minute

FRI. 17 OCT 1930

Assigned

See F.E. Rph.

John Leicate
Gde Ballardie
Engineer Surveyor to Lloyd's Register of Shipping.