

REPORT ON OIL ENGINE MACHINERY.

No. 11037

20 SEP 1929

Received at London Office

Writing Report Sept 9th 1929 When handed in at Local Office Sept 9th 1929 Port of Genova
 Date, First Survey Feb 21st '29 Last Survey Aug 9th 1929
 Number of Visits 83
 Survey held at Genova
 on the Single Twin Triple Quadruple Screw vessel "Messico" ex "Vejo"
 at Spezia By whom built Ansaldo San Giorgio Yard No. 195 When built 1921
 made at Jurin By whom made Ansaldo San Giorgio Engine No. 1921 When made 1921
 key Boilers made at Campiandarena By whom made S. Ansaldo Boiler No. 1921 When made 1921
 e Horse Power 2500 Owners Soc. Ital. di Nav. e Trasporti Port belonging to Genova
 Horse Power as per Rule 2500 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes
 e for which vessel is intended no

ENGINES, &c. Type of Engines Fiat Diesel 24 13/16 3 2 on 1 stroke cycle 2 Single or double acting Single
 num pressure in cylinders 35 kg/cm² Diameter of cylinders 630 mm Length of stroke 900 mm No. of cylinders 4 No. of cranks 2
 of bearings, adjacent to the Crank, measured from inner edge to inner edge 960 mm Is there a bearing between each crank yes
 utions per minute 110 Flywheel dia. 3000 mm Weight 14,000 kg Means of ignition compression Kind of fuel used Diesel oil
 k Shaft, dia. of journals 383 mm as per Rule 398 mm Crank pin dia. 398 mm Crank Webs 515 mm Mid. length breadth 220 mm Thickness parallel to axis 271 mm
 as fitted 398 mm as per Rule 1258 Thrust Shaft, diameter at collars 360 mm as fitted 360 mm
 heel Shaft, diameter 278 mm as per Rule 295 mm as fitted 295 mm Is the tube shaft fitted with a continuous liner yes
 e Shaft, diameter 330 mm as per Rule 330 mm as fitted 330 mm Is the after end of the liner made watertight in the yes
 ze Liners, thickness in way of bushes 16.5 mm as per Rule 21 mm as fitted 21 mm Is the after end of the liner made watertight in the yes
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner yes
 Is the space charged with a plastic material insoluble in water and non-corrosive yes
 Is an approved Oil Gland or other appliance fitted at the after yes
 Length of Bearing in Stern Bush 1350 mm next to and supporting propeller 1350 mm
 peller, dia. 3700 mm Pitch 3700 mm No. of blades 4 Material Bronze whether Moveable yes Total Developed Surface 1111 sq. feet
 od of reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication yes
 Thickness of cylinder liners 28 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with yes
 If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine yes
 Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes
 e Pumps worked from the Main Engines, No. 1 per eng. Diameter 135 mm Stroke 140 mm Can one be overhauled while the other is at work yes
 ps connected to the Main Bilge Line { No. and Size 2 each 300 mm x 300 mm x 250 mm stroke How driven Steam
 ast Pumps, No. and size 2 each 300 mm x 300 mm x 250 mm stroke Lubricating Oil Pumps, including Spare Pump, No. and size 1- Gear wheel per engine
 two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge yes
 ps, No. and size:—In Machinery Spaces 8-1 @ 200 mm; 5 @ 75 mm; 2 @ 80 mm
 olds, &c. 10-1 @ 200 mm; 10-2 @ 75 mm; 10-3 @ 75 mm; 10-4 @ 75 mm; 10-5 @ 75 mm
 ependent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 3, 1 @ 200 mm; 2 @ 80 mm
 all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes Are the Bilge Suctions in the Machinery Spaces yes
 rom easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yes
 all Sea Connections fitted direct on the skin of the ship yes Are they fitted with Valves or Cocks yes
 they fixed sufficiently high on the ship's side to be seen without lifting the platform plates yes Are the Overboard Discharges above or below the deep water line above
 they each fitted with a Discharge Valve always accessible on the plating of the vessel yes Are the Blow Off Cocks fitted with a spigot and brass covering plate yes
 t pipes pass through the bunkers none How are they protected yes
 t pipes pass through the deep tanks none Have they been tested as per Rule yes
 all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes
 e 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 yes
 artment to another yes Is the Shaft Tunnel watertight none Is it fitted with a watertight door yes
 wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork yes
 n Air Compressors, No. 1 per engine No. of stages 3 Diameters 180, 290, 360 Stroke 2A-550Z Driven by Main engine
 iliary Air Compressors, No. 2 No. of stages 3 Diameters 62, 210, 230 Stroke 175Z Driven by Main engine
 all Auxiliary Air Compressors, No. 2 (A+B) No. of stages 1 Diameters 13, 50 mm Stroke 100Z Driven by Main engine
 venging Air Pumps, No. 1 per engine Diameter 900 mm Stroke 550Z Driven by Main engine
 iliary Engines crank shafts, diameter 94 mm as per Rule 103 mm as fitted 103 mm
 RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes
 the internal surfaces of the receivers be examined yes What means are provided for cleaning their inner surfaces Hand hole
 here a drain arrangement fitted at the lowest part of each receiver yes
 h Pressure Air Receivers, No. 8 Cubic capacity of each 110 lit Internal diameter 227 mm thickness 13 mm
 mless, lap welded or riveted longitudinal joint Seamless Material Steel Range of tensile strength 41 kg/cm² Working pressure by Rules 65.5 kg/cm²
 orting Air Receivers, No. 30 Total cubic capacity 8,000 lit Internal diameter 294 mm thickness 13 mm
 mless, lap welded or riveted longitudinal joint Seamless Material Steel Range of tensile strength 41 kg/cm² Working pressure by Rules 78 kg/cm²

Lloyd's Register
W1302-0231

IS A DONKEY BOILER FITTED?

Yes

If so, is a report now forwarded?

Yes

PLANS. Are approved plans forwarded herewith for Shafting

(If not, state date of approval)

Yes

Receivers

Separate Tanks

Yes

Donkey Boilers

Yes

General Pumping Arrangements

Yes

Oil Fuel Burning Arrangements

Yes

SPARE GEAR

1. Crank shaft.
2. Propeller blades.
2. Cylinder liners.
1. Cylinder cover complete for main engines.
1. Set of cylinder cover studs and nuts.
1. Complete set of valves, seats, springs etc for one cylinder of the main engines
1. Piston complete for the main engines.
1. Fuel pump complete for the main and auxiliary engines
1. Complete set of piston rings for one piston of the main and auxiliary engines.
2. Top and bottom end bolts complete for both main and auxiliary engines.
2. Main bearing bolts complete for both main and auxiliary engines.
1. Set of coupling bolts complete for the crank shaft.
1. Complete set of piston rings for each piston of the main and auxiliary compressors
1. Set of valves for the main and auxiliary compressors, daily fuel supply pump, water circulating pumps, bilge and scavenge pumps, A quantity of assorted bolts, nuts, iron several spars of every type of pump, dynamo and deck machinery aboard

The foregoing is a correct description,

Manufacturer.

Dates of Survey while in service
Feb. 21, 27. March 1, 6, 14, 16, 21, 27, 29, 30. April 2, 4, 8, 16, 17, 18, 29, 30.
May 2, 3, 13, 14, 20, 23, 27. June 3, 10, 12, 14, 18, 19, 24, 28, July 1, 5,
10, 11, 12, 13, 14, 16, 17, 20, 22, 24, 27, 29, Aug. 2, 3, 5, 6, 7, 9.
Total No. of visits 55

Dates of Examination of principal parts—Cylinders 22/2/29 Covers 21/3/29 Pistons 27/5/29 Rods 27/5/29 Connecting rods 21/3/29

Crank shaft 29/4/29 Flywheel shaft ✓ Thrust shaft 29/4/29 Intermediate shafts ✓ Tube shaft 11/7/29

Screw shaft 11/7/29 Propeller 8/7/29 Stern tube 10/7/29 Engine seatings 2/8/29 Engines holding down bolts 2/8/29

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

Crank shaft, Material Steel Identification Mark 44005, CRH. 2324. 24825 Flywheel shaft, Material Steel Identification Mark 44005, CRH. 2324. 24825

Thrust shaft, Material Steel Identification Mark Intermediate shafts, Material Steel Identification Marks

Tube shaft, Material Steel Identification Mark Screw shaft, Material PORT. STEEL Identification Mark NO MARKS DECIPHERABLE

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 Yes

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo No 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, etc.) The machinery of this vessel has been

opened out and examined in accordance with the Secretary's letter approved and Rule requirements. The condition of the engines is good, and the workmanship and materials appear to be of good quality, and the installation when tried under working conditions at sea was found to work satisfactorily.

The vessel is eligible in our opinion, to be classed in the Society's Register Book, and to have the notation of L.M.C 8.29 and T.S.C.L. 8.29 also 2 D.B. 100 lbs per sq inch, subject to the copper starting air pipes of the main engines being renewed on return from present voyage.

N.B. The working pressure, as per Rule, of the copper starting air pipes found to be only 59 kg/cm. The Owners have decided to replace these, on the vessel's return from present voyage, with seamless steel pipes W.P. not less than 80 kg/cm.

The electrical installation onboard has been examined, found satisfactory and generally in accordance with the Society's Rules.

The amount of Entry Fee ... £1.558

30% Special ... £5497

Donkey Boiler Fee ... £605

Travelling Expenses (if any) ... £360

Committee's Minute ... 200

Assigned ... L.M.C 8.29 Subject ... 200 100 lb

Oil engine

200 100 lb

200 100 lb