

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 29-3-1924 When handed in at Local Office 10 Port of Rotterdam
 No. in Survey held at Rotterdam Date, First Survey 8-5-10 Last Survey 23-3-1924
 Reg. Book. on the steel screw steamer "FORELAND" (Number of Visits 27)
 Built at Rotterdam By whom built Wilton's Eng. & Slipway Co Yard No. 294 Tons { Gross 522.03
 Engines made at do By whom made do Engine No. 415 When built 1924 Net 285.77
 Boilers made at do By whom made do Boiler No. 713 when made 1924
 Registered Horse Power 79 Owners Shipping & Coal Co. Port belonging to London
 Nom. Horse Power as per Rule 79 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no
 Trade for which Vessel is intended _____

ENGINES, &c.—Description of Engines Triple expansion marine Revs. per minute 105
 Dia. of Cylinders 12 1/4 x 20 x 33 Length of Stroke 25 No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule as per 6.58 Crank pin dia. 7 1/8 Crank webs Mid. length breadth 13 1/2 Thickness parallel to axis 5 1/2
 as fitted 7 1/8 Mid. length thickness 4 7/16 shrunk Thickness around eye-hole 3 1/4
 Intermediate Shafts, diameter as per Rule as per 6.27 Thrust shaft, diameter at collars as per Rule as per 6.58
 as fitted _____ as fitted 7 1/4
 Tube Shafts, diameter as per Rule _____ Screw Shaft, diameter as per Rule as per 7.05 Is the {tube} shaft fitted with a continuous liner { _____ }
 as fitted _____ as fitted 8 7/16 {screw} _____ { Yes }
 Bronze Liners, thickness in way of bushes as per Rule _____ Thickness between bushes as per Rule _____ Is the after end of the liner made watertight in the
 as fitted 1/2 as fitted 1/2 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 _____ Length of Bearing in Stern Bush next to and supporting propeller 33
 Propeller, dia. 9-4 Pitch 9-4 No. of Blades 4 Material Cast Iron whether Moveable no Total Developed Surface 36 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 2 1/4 Stroke 13 1/2 Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 2 1/4 Stroke 13 1/2 Can one be overhauled while the other is at work Yes
 Feed Pumps { No. and size one 6 x 4 1/2 x 6 Pumps connected to the { No. and size 2. 1 6 x 4 1/2 x 6 — 1 6 x 6 x 6
 How driven steam Main Bilge Line How driven steam
 Ballast Pumps, No. and size 1 6 x 6 x 6 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;—In Engine and Boiler Room 4 a 2" boiler room 2 a 2"
 In Holds, &c. 2 a 2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 a 3 1/2 Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 1 a 2 Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes
 Are the Bilge Suctions in the Machinery Space 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 Yes Are they fitted with Valves or Cocks Valves & cocks
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Overboard Discharges above or below the deep water line above
 Are 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
 What Pipes pass through the bunkers 2 hold suction bilge How are they protected iron plates
 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 Yes
 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 _____

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 1490 sq. ft.
 Is Forced Draft fitted no No. and Description of Boilers one multitubular Working Pressure 180 lbs
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
 IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? _____

PLANS. Are approved plans forwarded herewith for Shafting no Main Boilers no Auxiliary Boilers _____ Donkey Boilers _____
 (If not state date of approval) 4-9-10 11-5-10
 Superheaters _____ General Pumping Arrangements 9-12-20 Oil fuel Burning Piping Arrangements _____

SPARE GEAR. State the articles supplied:— one screw shaft, one propeller, 1 set of crankpin
crosshead brasses, 2 top and bottom end bolts, 2 main bearing bolts,
one set of coupling bolts, one set of feed and bilge pump valves, one set
of piston springs, a quantity of assorted bolts and nuts and iron
of various sizes.

The foregoing is a correct description,

WILTON'S ENGINEERING & SLIPWAY CO.

M. Wilton

Manufacturer.



© 2020

Lloyd's Register Foundation

N666-0085

If not, state whether and when, one will be sent

In a Report also sent on the Hull of the Ship?

22 ft.

given as it

Capacity.

Tons.

51

3

1921

36

8-17-29-30/5 - 3-5-6-25-26/6 - 1-4-0-30/4 - 13/8 - 24/9 - 17/10 - 13-10/11

During progress of work in shops -- 3/12-18 - 3-23/11 - 10/4 - 18-19-21/11 - 29 - 2/2 - 10-24/6 - 26/4 - 1921

Dates of Survey while building During erection on board vessel --- 20-30/9-21 - 13/7-24 - 14-18-21/2 - 2-23/3-24

Total No. of visits 37

Dates of Examination of principal parts—Cylinders 3-25/6-24 - 3/12-18 Slides 24/9 - 3/12-18 Covers 24/9 - 3/12-18

Pistons 5/6-4/7-13/8-10 Piston Rods 4/4-13/8-10 Connecting rods 4/7-13/8-10

Crank shaft 8-17-30/5-26/6-13/11-10 Thrust shaft 1-4/4-13/11-10 Intermediate shafts ✓

Tube shaft ✓ Screw shaft 18-27/6-26/7-21 Propeller 28/9-21

Stern tube 2 1/2 - 28/9-21 Engine and boiler seatings 1/2-24 Engines holding down bolts 1/2-24

Completion of fitting sea connections 28/9-21

Completion of pumping arrangements 2/3-24 Boilers fixed 1/2-24 Engines tried under steam 23-3-24

Main boiler safety valves adjusted 100 lbs. Thickness of adjusting washers Rod 30^m Steels 18^m

Crank shaft material S.M. steel Identification Mark F.N.B. 14-11-10 Thrust shaft material S.M. steel Identification Mark F.N.B. 14-11-10

Intermediate shafts, material ✓ Identification Marks ✓ Tube shaft, material ✓ Identification Mark ✓

Screw shaft, material S.M. steel Identification Mark no. 878. 20-9-21 Steam Pipes, material Steel ✓ Test pressure 540 lbs. Date of Test 20-9-21

Is an installation fitted for burning oil fuel no ✓ Is the flash point of the oil to be used over 150°F. ✓

Have the requirements of the Rules for carrying and burning oil fuel 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 and boilers have been made in accordance with the Society's Rules, approved plans and Secretary's letters, material tested as required and workmanship good. The whole was found in a good working condition during a trial trip on the River Meas and Tam of opinion that this vessel is eligible to be recorded in the Society's Register Book with * L.M.C. 3-27 C.L.

It is submitted that this vessel is eligible for THE RECORD. + LMC 3. 27. CL.

J.W.D.
8/4/27

F. N. Bemmie
Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 24.00
Special ... £ 237.00
Donkey Boiler Fee ... £
Travelling Expenses (if any) £ 22.00

When applied for, 5/4 1927
When received, 20/4/27

Committee's Minute FRI. 8 APR 1927
Assigned + L.M.C. 3-27 C.L.

The Surveys are requested not to write on or below the space for Committee's Minute.

Date of writing Report

No. in Survey held Reg. Book.

on the

Master

Engines made at

Boilers made at

Nominal Horse Power

MULTITUBULAR

Manufacturers of Steam Engines

Total Heating Surface

No. and Description of Tubes

Tested by hydraulic

Area of Firegrate in

Area of each set of

In case of donkey boiler

Smallest distance between tubes

Smallest distance between tubes

Largest internal diameter

Thickness 1/16

long seams double

Percentage of strength

Percentage of strength

Thickness of butt straps

Material S.M.

Length of plain part

Dimensions of stiffeners

End plates in steam chest

How are stays secured

Tube plates: Material

Mean pitch of stay tubes

Girders to combustion chamber

at centre 8 3/4"

in each 3 x

Tensile strength

Pitch of stays to ditto

Working pressure by

Thickness 3/4

Pitch of stays at water level

Working Pressure

Diameter { At body of stay or Over threads

Working pressure by

Diameter { At turned off end or Over threads

