

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

25 MAY 1927

Date of writing Report May 24 1927 When handed in at Local Office May 24 1927 Port of Bristol
 No. in Survey held at Bristol Date, First Survey July 1926 Last Survey May 17 1927
 Reg. Book. 90498 on the S/S PORTWAY (Number of Visits 39) Tons } Gross 288
 } Net 187
 Built at Bristol By whom built Wm. Henderson & Co Yard No. 159 When built 1927
 Engines made at Southampton By whom made Day, Summers & Co Engine No. 360 when made 1920
 Boilers made at Glasgow By whom made A. W. Dalziel Boiler No. 839 when made 1926
 Registered Horse Power _____ Owners J. R. Brown & Son Ltd. Port belonging to Bristol
 Nom. Horse Power as per Rule 54 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Inverted compound surface condensing
 Dia. of Cylinders 15-30 Length of Stroke 24 Revs. per minute _____ No. of Cylinders 2 No. of Cranks 2
 Dia. of Crank shaft journals as per rule 6.5 as fitted 6.5 Dia. of Crank pin 6.5 Crank webs Mid. length breadth _____ Thickness parallel to axis _____
 as fitted _____ Mid. length thickness 4.5 shrunk _____ Thickness around eye-hole _____
 Diameter of Thrust shaft under collars as per rule 6.5 as fitted 6.5 Diameter of Tunnel shaft as per rule _____ as fitted _____ Diameter of Screw shaft as per rule 7.1 as fitted 7.25 Is the Screw shaft fitted with a continuous liner the whole length of the stern tube No Is the after end of the liner made watertight in the propeller boss _____
 If the liner is in more than one length are the joints burned _____ 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 appliance fitted at the after end of the shaft to permit of it being efficiently lubricated No Length of Stern Bush 2.6 Diameter of Propeller 7.6
 Pitch of Propeller 10-3 No. of Blades 3 State whether Moveable No Total Surface 21 square feet.
 No. of Feed Pumps fitted to the Main Engines 1 Diameter of ditto 2.2 Stroke 12 Can one be overhauled while the other is at work _____
 No. of Bilge Pumps fitted to the Main Engines 1 Diameter of ditto 2.2 Stroke 12 Can one be overhauled while the other is at work _____
 Total number and size of power driven Feed and Bilge Auxiliary Pumps 1- 4 1/2 x 2 3/4 x 4 1/2
 No. and size of Pumps connected to the Main Bilge Line _____
 No. and size of Ballast Pumps _____ No. and size of Lubricating Oil Pumps, including Spare Pump _____
 Are two independent means arranged for circulating water through the Oil Cooler _____ No. and size of suction connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 2- 2 1/2 and in Holds, &c. _____

No. and size of Main Water Circulating Pump Bilge Suctions 3 1/2 No. and size of Donkey Pump Direct Suctions _____
 to the Engine Room Bilges 1- 2 1/2 Are all the Bilge Suction Pipes in hold 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 Yes
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both
 Are they sized sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Discharge Pipes above or below the deep water line Both
 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 are carried through the bunkers _____ How are they protected _____
 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 Yes Is the Screw Shaft Tunnel watertight _____ Is it fitted with a watertight door _____ worked from _____

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 1053
 Is Forced Draft fitted No No. and Description of Boilers 1- S.E. Multitubular Working Pressure 13 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 Yes Main Boilers Yes Auxiliary Boilers _____ Donkey Boilers _____
 (If not state date of approval)
 General Pumping Arrangements Yes Oil fuel Burning Piping Arrangements _____

SPARE GEAR. State the articles supplied:— Two top & two bottom end bells & nuts
Two main-bearing bells & nuts, one set of coupling bells & nuts, one set of bilge pump valves, assorted bells & nuts etc.

The foregoing is a correct description

Manufacturer.



010545-010553-0108

During progress of work in shops - -

Dates of Survey while building

During erection on board vessel - - *July 4, 1926. Aug 10, 11, 17. Sept 13. Oct 15, 28. Nov 19, 20, 24, 30. Dec 18*

23, 24 Jan 4 (427) 6, 7, 11, 12, 13, 14, 15, 17, 18, 20, 21 Feb 3, 19, 21, 22, 24, 28. 9 Mar 28. Apr 20

Total No. of visits *37*

Dates of Examination of principal parts - Cylinders Slides

Covers Pistons Rods

Connecting rods Crank shaft Thrust shaft

Tunnel shafts Screw shaft Propeller

Stern tube *28.10.26* Engine and boiler seatings *20.11.26* Engines holding down bolts *7.12.26*

Completion of pumping arrangements *3.2.27* Boilers fixed *30.11.26* Engines tried under steam *21.1.27*

Completion of fitting sea connections *28.10.26* Stern tube *28.10.26* Screw shaft and propeller *28.10.26*

Main boiler safety valves adjusted *18.12.26* Thickness of adjusting washers *3/16*

Material of Crank shaft Identification Mark on Do.

Material of Thrust shaft *Scrap Iron* Identification Mark on Do. *7561. J.D. 22.12.26*

Material of Tunnel shafts Identification Marks on Do.

Material of Screw shafts *Scrap Iron* Identification Marks on Do. *7561. J.D. 21.8.26*

Material of Steam Pipes *Copper* Test pressure *260 lb* Date of Test *18.12.26*

Is an installation fitted for burning oil fuel 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 If so, state name of vessel

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

See Southampton Reports No 10924 + 12381

These engines have now been fitted & secured on board in accordance with the rules. They have been tried under steam & found satisfactory, subsequently small cracks developed at both ends of the condenser these have been repaired & arrangements made for a new condenser to be fitted at a suitable opportunity. It is submitted the vessel is eligible for record L.M.C. 5.27 subject to the condenser being renewed at a convenient opportunity.

Date of build of Engines 1927.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 5.27. Subject to the main condenser being renewed at a convenient opportunity.

The amount of Entry Fee ... £ *2* : *0* : *0* When applied for.

Special *Filling out* ... £ *5* : *0* : *0* *24/11/1927*

Donkey Boiler Fee ... £ : : When received.

Travelling Expenses (if any) £ : : *25.5.27*

John W. Gwynne
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *FRI 27 MAY 1927*

Assigned *+ L.M.C. 5.27 Subject*

FRI 12 AUG 1927

TUES. 13 SEP 1927
TUES. 6 DEC 1927
TUES. 12 JUN 1928
TUE. 19 MAR 1929



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