

RECEIVED
28 JAN 1944
IN D.O.

REPORT ON OIL ENGINE MACHINERY.

No. 22560

Received at London Office

27 JAN 1944

Date of writing Report 17th JAN. 1944 When handed in at Local Office 20th JAN. 1944 Port of GREENOCK

No. in Survey held at GREENOCK Date, First Survey 27th OCT. 1943. Last Survey 11th JANUARY 1944
Reg. Book, 39937 on the Single } Screw vessel
Screw }
Triple }
Quadruple }

TREVANION

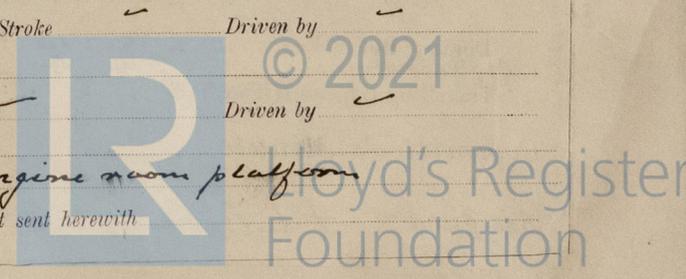
Tons { Gross 7375.27
Net 5733.54

Built at PORT GLASGOW By whom built LITHGOWS LTD Yard No. 985 When built 1944
Engines made at GLASGOW By whom made HARLAND & WOLFF LTD Engine No. 2462 1/2 When made 1943
Donkey Boilers made at GREENOCK By whom made JOHN G. KINCAID & CO LTD Boiler No. 153 When made 1943
Brake Horse Power 3300 Owners Hain Steamship Co Ltd Port belonging to LONDON
Nom. Horse Power as per Rule 490 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
Trade for which vessel is intended OPEN SEA SERVICE

OIL 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 _____
 Mean Indicated Pressure _____
 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, { Solid forged _____ as per Rule _____ Crank pin dia. _____ Crank Webs _____ Mid. length breadth _____ Thickness parallel to axis _____
 { Semi built dia. of journals _____ as fitted _____ Mid. length thickness _____ shrunk _____ Thickness around eye-hole _____
 { All built _____ as fitted _____
Flywheel Shaft, diameter _____ as per Rule _____ Intermediate Shafts, diameter _____ as per Rule _____ Thrust Shaft, diameter at collars _____ as per Rule _____
 _____ as fitted _____ as fitted _____ as fitted _____
Tube Shaft, diameter _____ as per Rule _____ Screw Shaft, diameter _____ as per Rule _____ Is the { tube } shaft fitted with a continuous liner {
 _____ as fitted _____ as fitted _____ as fitted _____ screw }
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 _____ as fitted _____
 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 _____ If so, state type _____ Length of Bearing in Stern Bush next to and supporting propeller _____
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. Two 1 M.ENG 150 tons/hr ✓ Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes ✓
 1 Steam 200 tons/hr ✓
Bilge Pumps worked from the Main Engines, No. NONE Diameter _____ Stroke _____ Can one be overhauled while the other is at work _____
Pumps connected to the Main Bilge Line { No. and Size Two 1 @ 100 tons/hr ✓ 1 @ 170 tons/hr ✓
 { How driven Steam ✓
 Is the cooling water led to the bilges No If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping
 arrangements _____
Ballast Pumps, No. and size 1 @ 170 tons/hr ✓ **Power Driven Lubricating Oil Pumps,** including Spare Pump, No. and size Two ✓
 Are two independent means arranged for circulating water through the Oil Cooler yes ✓ **Suctions,** connected to both Main Bilge Pumps and Auxiliary Bilge
 Pumps, No. and size:—In Machinery Spaces Two @ 3" Three @ 2 1/2" Tunnel well One @ 2 1/2" In Pump Room _____
 In Holds, &c. N°1-2 @ 3" N°2-2 @ 3 1/2" Dept tank-2 @ 2 1/2" N°3-2 @ 3" N°4-2 @ 3" ✓
Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size Two @ 5" ✓
 Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes ✓ 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 yes ✓
 Are all Sea Connections fitted direct on the skin of the ship yes ✓ Are they fitted with Valves or Cocks Both ✓
 Are 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 Below ✓
 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 No How are they protected _____
 What pipes pass through the deep tanks For hold suction ✓ Have they been tested as per Rule yes ✓
 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 Shaft Tunnel watertight yes ✓ Is it fitted with a watertight door No ✓ worked from Access from U.D. ✓
 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. One ✓ No. of stages 2 ✓ Diameters 4 3/4 & 11 1/4" ✓ Stroke 8" ✓ Driven by Steam engine ✓
Auxiliary Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____
Small Auxiliary Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____
 What provision is made for first Charging the Air Receivers. Steam compressor above ✓
Scavenging Air Pumps, No. _____ Diameter _____ Stroke _____ Driven by _____
Auxiliary Engines crank shafts, diameter _____ as per Rule IPSWICH CER 9-4-43 ✓ No. 1 ✓ Position Engine room platform ✓
 _____ as fitted _____
 Have the Auxiliary Engines been constructed under special survey _____ Is a report sent herewith _____

014887 - 014898 - 0331



AIR RECEIVERS:—Have they been made under survey Yes State No. of Report or Certificate —
 Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes
 Can the internal surfaces of the receivers be examined and cleaned Yes Is a drain fitted at the lowest part of each receiver Yes
Injection Air Receivers, No. — Cubic capacity of each — Internal diameter — thickness —
 Seamless, lap welded or riveted longitudinal joint — Material — Range of tensile strength — Working pressure —
Starting Air Receivers, No. One Total cubic capacity 750 cu ft Internal diameter 6'-4" thickness 1/32"
 Seamless, lap welded or riveted longitudinal joint T.P.D.B.S. Material S Range of tensile strength 29/33 tons Working pressure —
 by Rules 368 lbs
 Actual 356 lbs

IS A DONKEY BOILER FITTED? Yes Yes If so, is a report now forwarded? Yes
 Is the donkey boiler intended to be used for domestic purposes only —

PLANS. Are approved plans forwarded herewith for Shafting 425 Receivers 29-5-42 Separate Fuel Tanks 1-4-43
8-5-43 (If not, state date of approval)
 Donkey Boilers 20-10-42 General Pumping Arrangements 25-11-42 Pumping Arrangements in Machinery Space 9-1-43
 Oil Fuel Burning Arrangements 16-6-43

SPARE GEAR.

Has the spare gear required by the Rules been supplied —

State the principal additional spare gear supplied —

See separate list.

The foregoing is a correct description,
 For JOHN G. KINCAID & CO. LIMITED.

W. G. Kincaid Director. Manufacturer.

Dates of Survey while building { During progress of work in shops - - }
 { During erection on board vessel - - } (1943) OCT. 27-29. NOV. 1-3-5-8-10-12-15-16-17-19-23-26. DEC. 2-7-9-13-14-15-16-20-27-28-29. (1944) JAN. 11.
 Total No. of visits 24

Dates of Examination of principal parts—Cylinders — Covers — Pistons — Rods — Connecting rods —
 Crank shaft — Flywheel shaft — Thrust shaft — Intermediate shafts — Tube shaft —
 Screw shaft — Propeller — Stern tube — Engine seatings 12-11-43 Engines holding down bolts 15-12-43
 Completion of fitting sea connections 8-11-43 Completion of pumping arrangements 11-1-44 Engines tried under working conditions 11-1-44
 Crank shaft, Material — Identification Mark — Flywheel shaft, Material — Identification Mark —
 Thrust shaft, Material — Identification Mark — Intermediate shafts, Material — Identification Marks —
 Tube shaft, Material — Identification Mark — Screw shaft, Material — Identification Mark —
 Identification Marks on Air Receivers N° 2332
LLOYD'S TEST
556 lbs
WP 356 lbs
CHH 7-5-43

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 War emergency only If so, have the requirements of the Rules been complied with See app. plans
 If the notation for Ice Strengthening is desired, state whether the requirements in this respect have 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 boiler & machinery of this vessel have been built under Special Survey in accordance with the Rules & approved plans. They have been efficiently installed in the vessel & tested out on a short sea trial with satisfactory results. This installation is eligible in my opinion to be classed in the Society's Register Book with Record
 + LMC 1-44 and Notation Screw shaft (CL 2DB, 150 lbs)

For particulars not on this report please see Glasgow report N° 6774.

The amount of Entry Fee .. £ : : When applied for,
 £ 98-10. for 94 & 65-13. Special ... £ 32 : 17 : 21st JAN. 1944.
 Donkey Boiler Fee ... £ 19 : 10 : When received,
 AIR RECEIVER ... £ 4 : 4 :
 Travelling Expenses (if any) £ : : 19

Charles J. Hunter
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 25 JAN 1944

Assigned + LMC 1, 44. 2DB, 150 lb.



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