

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 17 FEB 1933

Date of writing Report 19 When handed in at Local Office 16. 2. 1933 Port of Glasgow
 No. in Survey held at Glasgow (Bowling) Date, First Survey 8th Jan'y '31 Last Survey 16-2-1933
 Reg. Book. on the S.S. "EMILIA" Number of Visits 10
 Built at Bowling By whom built Scott Low Yard No. 303 Tons {Gross 71
 Engines made at Ayrhan, Wrexham By whom made Hughes & Lancaster Ltd Engine No. A. 3507 When built 1933
 Boilers made at Glasgow By whom made A. & W. Dalglis. Boiler No. 807 When made 1920.
 Registered Horse Power 49 Owner The Lords Commissioners of the Admiralty Port belonging to
 Nom. Horse Power as per Rule 28.5 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted no
 Trade for which Vessel is intended

ENGINES, &c.—Description of Engines Triple expansion. Revs. per minute
 Dia. of Cylinders 9 1/2" + 15 1/2" + 26" Length of Stroke 18" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule ✓ Crank pin dia. ✓ Crank webs Mid. length breadth ✓ shrunk Thickness parallel to axis ✓
 as fitted ✓ Mid. length thickness ✓ Thickness around eye-hole ✓
 Intermediate Shafts, diameter as per Rule ✓ Thrust shaft, diameter at collars as per Rule ✓
 as fitted ✓ Tube Shafts, diameter as per Rule ✓ Screw Shaft, diameter as fitted 6 Is the screw shaft fitted with a continuous liner ✓
 as fitted 15.25 ✓ Thickness between bushes as per Rule 1/2" Is the after end of the liner made watertight in the
 as fitted 9 1/16 ✓ 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 one liner Is an approved Oil Gland or other appliance fitted at the after end of the tube
 shaft no If so, state type Length of Bearing in Stern Bush next to and supporting propeller 2-0" ✓
Propeller, dia. 6'-6" Pitch 8'-9" No. of Blades 4 Material G.I. whether Movable no Total Developed Surface 18 1/2 sq. feet
Feed Pumps worked from the Main Engines, No. 1 Diameter 2" Stroke 9" Can one be overhauled while the other is at work ✓
Bilge Pumps worked from the Main Engines, No. 1 Diameter 2" Stroke 9" Can one be overhauled while the other is at work ✓
Feed Pumps { No. and size 1-4 3/4 x 3" x 5" Pumps connected to the Main Bilge Line { No. and size 1-4 3/4 x 3" x 5" / 1-2" x 9" How driven Steam Main Engines.
Ballast Pumps, No. and size ✓ 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 1-2 1/2" BILGE INJECTION, 1-2" DKY SUCTION, 1-2" M.E. SUCTION.
 In Pump Room 1-2" CREW SPACE FOR? ✓
 1-2" AFTER CABIN SPACE. ✓

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 2 1/2" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 1 @ 2" ✓ Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes ✓
 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 ✓ Are they fitted with Valves or Cocks BOTH ✓
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates ✓ 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 ✓ Are the Blow Off Cocks fitted with a spigot and brass covering plate ✓
 What Pipes pass through the bunkers Steam, Exhaust, Feed pipes How are they protected Inside steel trunk ✓
 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 ✓

MAIN BOILERS, &c.—(Letter for record (5)) Total Heating Surface of Boilers 990. ft.
 Is Forced Draft fitted ✓ No. and Description of Boilers 1. S.B. Working Pressure 180 lb.
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? ✓
 IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? ✓
 Is the donkey boiler intended to be used for domestic purposes only ✓
PLANS. Are approved plans forwarded herewith for Shafting ✓ Main Boilers ✓ Auxiliary Boilers ✓ Donkey Boilers ✓
 (If not state date of approval) Superheaters ✓ General Pumping Arrangements ✓ Oil fuel Burning Piping Arrangements ✓

SPARE GEAR.

Has the spare gear required by the Rules been supplied.
 State the principal additional spare gear supplied.
 2 Top end bolts, 6 Condenser tubes.
 2 Bottom end bolts, 12 Condenser ferrules.
 2 Main bearing bolts, 6 cyl. cover studs nuts.
 1 set Coupling bolts, 6 pump ring bolts nuts.
 1 set feed pump valves, 24 Assorted
 1 set bilge pump valves.
 1 set air pump valves.
 1 set circulating pp. valves.

The foregoing is a correct description,

Manufacturer.



During progress of work in shops - -
 Dates of Survey while building { 1931 Jan: 8 Mar: 18 May: 13 June: 2 Dec: 17 (1933) Jan: 30 Feb: 8 13 15 }
 During erection on board vessel - - -
 Total No. of visits 10

See Liverpool Rpt No 80720 of 27 May 1920.

Dates of Examination of principal parts—Cylinders Slides Covers
 Pistons Piston Rods Connecting rods
 Crank shaft Thrust shaft Intermediate shafts
 Tube shaft Screw shaft 30-12-24 Propeller 13-5-31
 Stern tube 18-3-31 Engine and boiler seatings 30-1-33 Engines holding down bolts 13-2-33
 Completion of fitting sea connections 2-6-31
 Completion of pumping arrangements 18-2-33 Boilers fixed 13-2-33 Engines tried under steam 16-2-33
 Main boiler safety valves adjusted 15-2-33 Thickness of adjusting washers 1/2 (18/2/33)
 Crank shaft material Steel Identification Mark 3507 Thrust shaft material Steel Identification Mark 8/88
 Intermediate shafts, material Steel Identification Marks 1096 ATT. Tube shaft, material ✓ Identification Mark ✓
 Screw shaft, material Steel Identification Mark 8/88 SGO. 6-2-28. Steam Pipes, material Copper Test pressure 360 lb Date of Test 13-2-33
 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 the use of oil as fuel 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 ✓
 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 yes. If so, state name of vessel "Haut de Quarante" - No. 50960.

General Remarks (State quality of workmanship, opinions as to class, &c.) The engines of this vessel have now been opened up and examined internally, and found free from deterioration. They have been properly fitted on board, together with the boiler. The machinery of this vessel is eligible, in my opinion, to be classed in the Register Book with notation of +L.M.C. - 2-33. to be assigned by the Committee in accordance with instructions received in London letter 10/7/31.

Date of build of engines recommended 2-33
 J. Harbottle

16/2/33

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

The amount of Entry Fee ... £ 2	When applied for,
Special 1/5 ... £ 3	16-2-1933
Donkey Boiler Fee ... £	When received,
Travelling Expenses (if any) £	18-2-1933

For self & G. O. Compton,
 H. Sutherland,
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FEB 17 1933
 Assigned + L.M.C. 2-33
 C.L.

