

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

10 JUL 1942

Date of writing Report 27.6.42 When handed in at Local Office 8 JUL 1942 Port of HULL  
12-5-42  
No. in Survey held at HULL Date, First Survey 6.12.41 Last Survey 25.6.1942  
Reg. Book (Number of Visits 50)  
on the H.M.T. INKPEN  
Built at BEVERLEY By whom built Corn Walters & Gannell Ltd. Yard No. 689 Tons {Gross 511  
Engines made at HULL By whom made Chas. D. Holmes & Co. Engine No. 1607 When built 1942  
Boilers made at HULL By whom made Chas. D. Holmes & Co. Boiler No. 1605 When made "  
Registered Horse Power Owners THE ADMIRALTY Port belonging to  
Nom. Horse Power as per Rule 156. Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted Yes.  
Trade for which vessel is intended

ENGINES, &c.—Description of Engines Triple Expansion Contract Revs. per minute 120.  
Dia. of Cylinders 15", 25", 42" Length of Stroke 27" No. of Cylinders 3 No. of Cranks 3  
Crank shaft, dia. of journals as per Rule 8.3. Crank pin dia. 8 1/2" Mid. length breadth Thickness parallel to axis 5 1/2"  
as fitted 8 1/2" Crank webs shrunk Thickness around eye-hole 3 1/16"  
Intermediate Shafts, diameter as per Rule 7.9. Thrust shaft, diameter at collars as per Rule 8.3.  
as fitted 8 1/8" as fitted 8 1/2"  
Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule 8.8.  
as fitted Is the {tube screw} shaft fitted with a continuous liner {Yes.  
Bronze Liners, thickness in way of bushes as per Rule 5.64. Thickness between bushes as per Rule 5/8. Is the after end of the liner made watertight in the  
propeller boss Yes. If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner One length.  
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  
at No. If so, state type Length of Bearing in Stern Bush next to and supporting propeller 4 1/2".  
Propeller, dia. 10'-9" Pitch 11'-7 1/2" No. of Blades 4 Material C.I. whether Moveable Fixed Total Developed Surface 43 sq. feet  
Feed Pumps worked from the Main Engines, No. One Diameter 3" Stroke 16" Can one be overhauled while the other is at work.  
Bilge Pumps worked from the Main Engines, No. One Diameter 3" Stroke 16" Can one be overhauled while the other is at work.  
Feed Pumps {No. and size One 6" x 8 1/2" x 13" Pumps connected to the {No. and size One 3" x 16" One 7" x 5" x 6" Duplex One 3" Ejector.  
How driven Independent Steam Main Bilge Line How driven Main Eng. Independent Steam Ind. Steam  
Ballast Pumps, No. and size One 7" x 5" x 6" Duplex Lubricating Oil Pumps, including Spare Pump, No. and size NONE.  
Are two independent means arranged for circulating water through the Oil Cooler NONE. Suctions, connected to both Main Bilge Pumps and Auxiliary  
Bilge Pumps:—In Engine and Boiler Room 2 @ 2" and 3" Steam Ejector.  
In Pump Room In Holds, &c. One 2" Dia in each.—Fore Hold. D.C. Store  
Spirit Room Magazine & Lobby.  
Main Water Circulating Pump Direct Bilge Suctions, No. and size One 5". Independent Power Pump Direct Suctions to the Engine Room Bilges,  
No. and size One 3" Steam Ejector. Included 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 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 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 Forward friction. How are they protected Wood casing.  
What pipes pass through the deep tanks NONE. 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 Yes. Is the Shaft Tunnel watertight None. Is it fitted with a watertight door. worked from.

MAIN BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 2358 ft.<sup>2</sup>  
Which Boilers are fitted with Forced Draft All. Which Boilers are fitted with Superheaters None.  
No. and Description of Boilers One S.B. Working Pressure 220 lb./sq. in.  
IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes.  
IS A DONKEY BOILER FITTED? No. If so, is a report now forwarded?  
Can the donkey boiler be used for domestic purposes only.  
PLANS. Are approved plans forwarded herewith for Shafting 26-3-41 Main Boilers 30-1-41 Auxiliary Boilers None. Donkey Boilers None.  
(If not state date of approval)  
Superheaters None. General Pumping Arrangements 15-4-41 Oil fuel Burning Piping Arrangements.

## SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes.  
State the principal additional spare gear supplied In accordance with Admiralty Specification.  
See attached list.

The foregoing is a correct description.  
OF CHARLES D. HOLMES & CO., LTD.

Manufacturer.



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Lloyd's Register  
Foundation



During progress of work in shops - - 1941. Dec. 6. 20. 1942. Feb. 29. 27. Mar. 6. 13. 20. 25. 27. Apr. 3. 11. 13. 18. 21. 24. 25. 30.  
 Dates of Survey while building During erection on board vessel - - May. 1. 5. 6. 7. 8. 9. 11. 13. 14. 15. 18. 19. 20. 22. 24. 28. 30. June 1. 2. 3. 4. 5. 8. 9. 10. 11. 12.  
 Total No. of visits 50.

Dates of Examination of principal parts - Cylinders 25/4/42 22/4/42 18/4/42 Slides 24/4/42 Covers 25/4/42 22/4/42 18/4/42  
 Pistons 24/4/42 1/5/42 Piston Rods 24/4/42 Connecting rods 24/4/42  
 Crank shaft 25/3/42 Thrust shaft 16/3/42 Intermediate shafts 25/3/42  
 Tube shaft ✓ Screw shaft 13/3/42 Propeller 13-3-42  
 Stern tube 6-12-41 Engine and boiler seatings 18/5/42 Engines holding down bolts 18/5/42

Completion of fitting sea connections 20/12/41  
 Completion of pumping arrangements 9/6/42 Boilers fixed 18/5/42 Engines tried under steam 9/6/42  
 Main boiler safety valves adjusted 9/6/42 Thickness of adjusting washers 6619, AEG, 7-1-42  
 Crank shaft material M.S. Identification Mark 6621, AEG, 6622, AEG, 7-1-42 Thrust shaft material M.S. Identification Mark 6620, AEG, 7-1-42  
 Intermediate shafts, material M.S. Identification Marks 6602, AEG, 5-2-42 Tube shaft, material ✓ Identification Mark ✓  
 Screw shaft, material M.S. Identification Mark 5-2-42 Steam Pipes, material Steel Test pressure 660 Date of Test 2-6-42

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 No 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 "BIRCH"

General Remarks (State quality of workmanship, opinions as to class, &c.)  
 The Machinery of the Vessel has been fitted on board under Special Survey in accordance with the Admiralty requirements, the approved plans, and the Society's Rules and Specification.

The Workmanship materials are good and when tried under steam it was found satisfactory in every respect.

It is eligible, in our opinion, when the Vessel is classed, to have the records of  
 \* Lmc 6-42. Cl and the Notations of T. 3 Cy. 15", 25", 42", -27".  
 156 NFP 220 lb 158 3 cf. G. S. 63. H. S. 2358. F.O.

The amount of Entry Fee ... £ : : When applied for, 8 JUL 1942  
 Special ... £ 78 : - :  
 Donkey Boiler Fee ... £ : : When received,  
 Travelling Expenses (if any) £ : : 10

Committee's Minute 7 Lmc 6-42  
 Assigned 28. C.R.

W.S. Shields, Engineer Surveyor to Lloyd's Register of Shipping.