

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

No. 30488

Date of writing Report 19 When handed in at Local Office 23 OCT. 1930 Received at London Office 24 OCT 1930
No. in Survey held at SUNDERLAND. Port of SUNDERLAND.
Reg. Book. on the S.S. TOLWORTH. Date, First Survey May 30 Last Survey Oct 22 1930
(Number of Visits 48)

Built at BURNISLAND. By whom built BURNISLAND S. B. C. LD. Yard No. 165 Tons Gross Net
Engines made at SUNDERLAND. By whom made N.E. MARINE ENG. CO. LD. Engine No. 2770 when made 1930.
Boilers made at SUNDERLAND. By whom made N.E. MARINE ENG. CO. LD. Boiler No. 2770. when made 1930.
Registered Horse Power Owners WANSWORTH, WIMLETON & EPSOM GAS CO. Port belonging to LONDON.
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 COLLIER.

ENGINES, &c.—Description of Engines TRIPLE EXPANSION.
Dia. of Cylinders 17" x 28" x 46" Length of Stroke 33" No. of Cylinders 3 Revs. per minute 82
Crank shaft, dia. of journals as per Rule 8.98 as fitted 9 1/4" Crank pin dia. 9 1/4" Crank webs Mid. length breadth ✓ Thickness parallel to axis 5 3/4" ✓
Intermediate Shafts, diameter as per Rule 8.56 as fitted NONE FITTED. ENG. AFT. Thrust shaft, diameter at collars as per Rule 8.98 as fitted 9 3/4" ✓ Thickness around eye-hole 4 5/8" ✓
Tube Shafts, diameter as per Rule ✓ Screw Shaft, diameter as per Rule 9.64 as fitted 10 1/2" Is the shaft fitted with a continuous liner Yes.
Bronze Liners, thickness in way of bushes as per Rule 0.59 as fitted 8" Thickness between bushes as per Rule 0.44 as fitted 7/16" 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 ✓
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 No. ✓
Propeller, dia. 13'-0" Pitch 14'-0" No. of Blades 4 Material BRONZE whether Moveable No. Total Developed Surface 48 sq. feet
Feed Pumps worked from the Main Engines, No. 2 Diameter 2 3/4" Stroke 16 1/2" Can one be overhauled while the other is at work Yes.
Bilge Pumps worked from the Main Engines, No. 2 Diameter 2 3/4" Stroke 16 1/2" Can one be overhauled while the other is at work Yes.
Feed Pumps { No. and size 1 at 5" x 3 1/2" x 6" Pumps connected to the Main Bilge Line { No. and size 1 at 9" x 11" x 10" How driven STEAM.
Ballast Pumps, No. and size 1 at 9" x 11" x 10" Lubricating Oil Pumps, including Spare Pump, No. and size -
Are two independent means arranged for circulating water through the Oil Cooler ✓
Bilge Pumps;—In Engine and Boiler Room 3 at 2 1/2" dia. Suctions, connected to both Main Bilge Pumps and Auxiliary In Holds, &c. Fore hold, 2 at 2 1/2" — Fore main hold 2 at 3" ✓

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 at 5" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 at 3 1/2" 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 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 MAIN BELOW. OTHERS 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 ✓ How are they protected -
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 Yes. Is the Shaft Tunnel watertight NONE Is it fitted with a watertight door ✓ worked from -

MAIN BOILERS, &c.—(Letter for record (S)) Total Heating Surface of Boilers 2730 sq. ft. ✓
Is Forced Draft fitted No. No. and Description of Boilers 1. S. B. 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 ✓ Main Boilers Yes. Auxiliary Boilers ✓ Donkey Boilers ✓
Superheaters ✓ General Pumping Arrangements Yes. Oil fuel Burning Piping Arrangements ✓

SPARE GEAR. State the articles supplied:— 1. C.I. Propeller, — 2 each Top end, Bottom end & Main Bearing bolts & nuts — 6 Coupling bolts & nuts — 2 each Feed and Bilge pump valves — 2 cut. Iron plate — 1 cut. Iron bar — 50 assorted bolts & nuts — 3 Dead plates — 50 Fine bars — 2 Back bridge plates — 2 side bars — 12 stay nut protectors.

The foregoing is a correct description,
FOR THE NORTH EASTERN MARINE ENGINEERING CO. LD.

John Neill

Manufacturer.

GENERAL MANAGER



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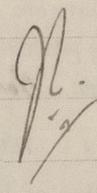
Lloyd's Register Foundation

1930. May. 30. June 3, 14. July. 18. 21. 24. 25. 28. 30. Aug. 6. 7. 11. 12. 14. 15. 19. 20. 22. 25. 26
 During progress of work in shops - - 27. 28. 29. Sep. 1. 2. 3. 4. 5. 8. 10. 11. 15. 16. 17. 22. 24. 25. 26. Oct. 6. 8. 9. 13. 14. 15. 16. 17. 20. 22
 Dates of Survey while building }
 During erection on board vessel - - - }
 Total No. of visits 48

Dates of Examination of principal parts - Cylinders H.P. 22-8-30 MP } 15-8-30 LP. } Slides H.P. 29-8-30 MP } 20-8-30 LP. } Covers 20-8-30.
 Pistons 20-8-30. Piston Rods 27-8-30. Connecting rods 18-7-30.
 Crank shaft 12-8-30. Thrust shaft 12-8-30. Intermediate shafts W. Bronze 15-8-30.
 Tube shaft ✓ Screw shaft 27-8-30. Propeller S. C. 9-10-30.
 Stern tube 15-9-30 Engine and boiler seatings 11-9-30 Engines holding down bolts 14-10-30.
 Completion of fitting sea connections 18-9-30.
 Completion of pumping arrangements 17-10-30. Boilers fixed 15-10-30 Engines tried under steam 17-10-30.
 Main boiler safety valves adjusted 17-10-30. Thickness of adjusting washers P 3/8" S 1/2"
 Crank shaft material STEEL Identification Mark 3648 T.D.S. Thrust shaft material STEEL Identification Mark 3715 T.D.S.
 Intermediate shafts, material Eng. A.F.T. Identification Marks ✓ Tube shaft, material ✓ Identification Mark ✓
 Screw shaft, material STEEL Identification Mark 3648 T.D.S. Steam Pipes, material STEEL Test pressure 540 lb. Date of Test 16-10-30
 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 Yes. If so, state name of vessel S.S. "EWELL."

General Remarks (State quality of workmanship, opinions as to class, &c. The Engines and Boilers of this vessel have been built under Special Survey. The materials and workmanship are good. On completion, the machinery was fitted in the vessel and tried under steam with satisfactory results.
 The Machinery of this vessel is eligible, in my opinion, to have the notation  L.M.C. 10.30 marked in red, in the Society's Register Book.

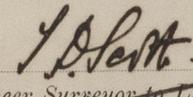
It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 10.30 C-L.

 24/10/30.

SUNDERLAND

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

The amount of Entry Fee ... £ 3 : 0 : 0 When applied for.
 Special ... £ 39 : 0 : 0 23 OCT 1930
 Donkey Boiler Fee ... £ : : : When received.
 Travelling Expenses (if any) £ : : : 28/10/30


 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 28 OCT 1930 CERTIFICATE WRITTEN.
 Assigned + L.M.C. 10.30 C.L.

