

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

No. 30488

Date of writing Report

10

When handed in at Local Office

23 OCT. 1930

Received at London Office

24 OCT 1930

No. in Survey held at 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

When built 1930.

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 WARRSWORTH, WIMBLEDON & 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

No. of Cranks 3

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"

Tube Shafts, diameter

as per Rule

as fitted

Screw Shaft, diameter

as per Rule 9.64

as fitted 10 1/2"

Is the { tube } 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"

How driven STEAM

Pumps connected to the

No. and size 1 at 9" x 11" x 10"

Ballast Pumps, No. and size 1 at 9" x 11" x 10"

Main Bilge Line

How driven STEAM

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"

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 BOILER NOW FORWARDED? Yes.

IS A DONKEY BOILER FITTED? No.

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting

(If not state date of approval)

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 cast. Iron plate — 1 cast. 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

010589-010604-0369

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 *HP. 22-8-30 MP. 15-8-30* Slides *HP. 29-8-30 MP. 20-8-30* 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. 1 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. Aft.* 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 \boxtimes 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.

J. J. 24/10/30.

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

J. D. Scott.
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.



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