

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 10 OCT 1925

WEST HARTLEPOOL

Date of writing Report Oct 19<sup>th</sup> When handed in at Local Office 8 Oct 19<sup>th</sup> Port of WEST HARTLEPOOL

No. in Survey held at West Hartlepool Date, First Survey 8 May Last Survey 1 Oct 1925  
Reg. Book. 35574 on the S S "TRESILLIAN" (Number of Visits 54)

Built at West Hartlepool By whom built Wm Gray & Co Ltd Yard No. 968 When built 1925  
Engines made at West Hartlepool By whom made Central Marine Engine Works Engine No. 968 when made 1925  
Boilers made at ditto By whom made Engine Works Boiler No. 968 when made 1925

Registered Horse Power Owners The Main S. S. Co Ltd Port belonging to London

Nom. Horse Power as per Rule 467 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

Trade for which Vessel is intended Ocean going

## ENGINES, &c.—Description of Engines Triple expansion Revs. per minute

Dia. of Cylinders 27"-44"-73" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3  
Crank shaft, dia. of journals as per Rule 13.86" Crank pin dia. 14 1/4" Crank webs Mid. length breadth 20 3/8" Thickness parallel to axis 8 1/16"  
as fitted 14 1/4" Mid. length thickness 8 1/16" shrunk Thickness around eye-hole 6 3/8"

Intermediate Shafts, diameter as per Rule 13.2" Thrust shaft, diameter at collars as per Rule 13.86"  
as fitted 13 3/4" as fitted 14 1/4"

Tube Shafts, diameter as per Rule 14.7" Is the tube shaft fitted with a continuous liner? yes  
as fitted 15 1/4" as fitted 15"

Bronze Liners, thickness in way of bushes as per Rule 25/32" F. 26/32" A. Thickness between bushes as per Rule 32/32" 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 yes  
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 yes  
If two liners are fitted, is the shaft lapped or protected between the liners yes Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft no

Propeller, dia. 18'-0" Pitch 17'-0" No. of Blades 4 Material whether Moveable no Total Developed Surface 102 sq. feet  
HOTWELL Feed Pumps worked from the Main Engines, No. 2 Diameter 4" Stroke 28" Can one be overhauled while the other is at work yes

Bilge Pumps worked from the Main Engines, No. 2 Diameter 4" Stroke 28" Can one be overhauled while the other is at work yes  
Feed Pumps No. and size 2. 9 1/2" x 7 x 18 1. 7 1/2" x 5 1/2" x 15" Singlex Pumps connected to the Main Bilge Line No. and size 2. main 4" x 28" 1. 9" x 10 1/2" x 10" duplex  
How driven Steam. 1. 7 1/2" x 5" x 6" Duplex Main Bilge Line How driven Steam

Ballast Pumps, No. and size 1 9" x 10 1/2" x 10" duplex Lubricating Oil Pumps, including Spare Pump, No. and size  
Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 3 of 2 3/4" dia. Tunnel 1 of 2 1/2" dia.  
In Holds, &c. No 1. 2 of 3" dia. No 2 2 of 3 1/2" No 3 2 of 3" No 4 2 of 3" dia

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 of 8" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size one of 4 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 yes

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 are carried through the bunkers none How are they protected  
What pipes pass through the deep tanks 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 see ship report Is it fitted with a watertight door yes worked from upper deck.

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 8118 sq. ft.  
Is Forced Draft fitted no No. and Description of Boilers 3 single ended Working Pressure 180 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes  
IS A DONKEY BOILER FITTED? yes If so, is a report now forwarded? yes

PLANS. Are approved plans forwarded herewith for Shafting Main Boilers yes Auxiliary Boilers yes Donkey Boilers yes  
(If not state date of approval)

Superheaters General Pumping Arrangements yes Oil fuel Burning Piping Arrangements yes

SPARE GEAR. State the articles supplied:— 2 Bolts & nuts for Con. Rods top ends. 2 ditto bottom ends.  
2 ditto main bearings 1 set coupling bolts & nuts. 1 set valves for hotwell pumps  
1 ditto for bilge pumps. 1 set springs for H.P. piston. 6 piston bolts.  
1 propeller shaft. 1 propeller. 6 boiler tubes 3 condenser tubes. Assorted bolts, nuts & iron.

The foregoing is a correct description, FOR THE CENTRAL MARINE ENGINE WORKS, (W. Gray & Co. Ltd.)

J. H. Stearns DIRECTOR.

Manufacturer.



Rpt. 5a  
 Date of writ  
 No. in Reg. Book.  
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1925. May 8. 11. 12. 14. 19. 25. 28. June 9. 11. 17. 18. 19. 22. 23. 25. July 1. 6. 24. 27. 28. 29. 31. Aug 10.  
 During progress of work in shops, -- 11. 12. 13. 14. 18. 19. 20. 21. 24. 25. 26. 27. 29. 31. Sept 2. 4. 7. 8. 9. 10. 11. 15. 16. 17. 18. 21. 22. 24.  
 Dates of Survey while building During erection on board vessel --- 28. Oct 1.  
 Total No. of visits 54.

Dates of Examination of principal parts—Cylinders 11.5.25—12.8.25 Slides 12.8.25—25.8.25 Covers 29.7.25—25.8.25  
 Pistons 29.7.25—29.8.25 Piston Rods 17.6.25—13.8.25 Connecting rods 8.5.25—24.7.25  
 Crank shaft 24.7.25—14.8.25 Thrust shaft 28.7.25—31.8.25 Intermediate shafts 10.8.25—31.8.25  
 Tube shaft ✓ Screw shaft 31.7.25—31.8.25 Propeller 7.9.25  
 Stern tube 6.7.25—29.8.25 Engine and boiler seatings 10.9.25 Engines holding down bolts 10.15.9.25  
 Completion of pumping arrangements 28.9.25 Boilers fixed 11.9.25 Engines tried under steam 24.9.25  
 Main boiler safety valves adjusted 24.9.25 Thickness of adjusting washers P 3/8 S 5/16 C 1/2 S 5/16 SP 3/8 S 3/8. | D. B. S 5/16  
 Crank shaft material Ingot steel Identification Mark 7634 Thrust shaft material Ingot steel Identification Mark 7669  
 Intermediate shafts, material Ingot steel Identification Marks 7662, 7663, 7664 Tube shaft, material ✓ Identification Mark ✓  
 Screw shaft, material Ingot steel Identification Mark 7665, 7667 Steam Pipes, material Lap Welded Steel Test pressure 600 lb Date of Test 16/17.9.25  
 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 no. If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c.)  
 An evaporator and a feed heater fitted, the shells of which were tested to 50 lb., and the coils of the former to 400 lb.

This vessel's machinery has been built and installed under Special Survey. The materials and workmanship are good and efficient.  
 On completion it was tried under full steam with satisfactory results and is now eligible to have the notation **L.M.C. 10.25**

When proceeding to the dry dock the propeller struck a floating object and a small piece was broken off one blade of the propeller. The efficiency is not effected. The Owners have arranged with the builders that this bronze propeller shall be repaired at the Owner's convenience.

It is submitted that this vessel is eligible for THE RECORD. + LMC 10.25. CL.  
 R. D. Shilston, 13/10/25  
 Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 5 : 0 :  
 Special ... £ 95 : 1 :  
 Donkey Boiler Fee ... £ 4 : 4 :  
 Travelling Expenses (if any) £ : :  
 When applied for, 9 Oct 1925  
 When received, 13 Oct 1925

Committee's Minute THES. 13 OCT 1925  
 Assigned + LMC 10.25 Cf.

CERTIFICATE WRITTEN.

