

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report 22<sup>nd</sup> May 1929 When handed in at Local Office 22<sup>nd</sup> May 1929 Port of Belfast  
 Received at London Office 23 MAY 1929  
 No. in Survey held at Belfast Date, First Survey 20<sup>th</sup> Dec. 1928 Last Survey 20<sup>th</sup> May 1929  
 Reg. Book. on the Steel hull Iron utē (Number of Visits 54)  
 Built at Belfast By whom built Harland & Wolff Ltd. Yard No. 862  
 Engines made at Belfast By whom made Harland & Wolff Ltd. Engine No. 862  
 Boilers made at Belfast By whom made Harland & Wolff Ltd. Boiler No. 862  
 Registered Horse Power Owners Lagan Shipping Co. Ltd (A. Wei & Co. Mgrs.) Port belonging to London  
 Nom. Horse Power as per Rule 228 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 Inverted triple expansion  
 Dia. of Cylinders 14 1/2" x 24" x 38 1/2" Length of Stroke 27" No. of Cylinders Six Revs. per minute  
 No. of Cranks Six  
 Crank shaft, dia. of journals as per Rule 7.539" as fitted 7 3/4" Crank pin dia. 7 3/4" Crank webs Mid. length breadth 15 1/4" Thickness parallel to axis 5" Mid. length thickness 5" shrunk Thickness around eye-hole 3 3/8"  
 Intermediate Shafts, diameter as per Rule 7.18" as fitted ✓ Thrust shaft, diameter at collars as per Rule 7.539" as fitted 7 3/4"  
 Tube Shafts, diameter as per Rule 17.57" as fitted 17 1/2" Screw Shaft, diameter as per Rule 8.32" as fitted 8 1/2" Is the { tube } shaft fitted with a continuous liner { No }  
 { screw }  
 Bronze Liners, thickness in way of bushes as per Rule 18 1/2" as fitted 18 1/2" Thickness between bushes as per Rule 16 1/2" as fitted 16 1/2" 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 No Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft Yes ✓  
 Propeller, dia. 9' 6" Pitch 9' 3" No. of Blades 4 Material Man. Bronze whether Moveable No Total Developed Surface 31 (each) sq. feet  
 Feed Pumps worked from the Main Engines, No. 2 Diameter 2 1/2" Stroke 13 1/2" Can one be overhauled while the other is at work Yes  
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 2 1/2" Stroke 13 1/2" Can one be overhauled while the other is at work Yes  
 Feed Pumps { No. and size Two main 8 1/2" x 6" x 18" Pumps connected to the { No. and size One 8 1/2" x 6" x 18" One 9" x 10" x 24" How driven Steam Main Bilge Line How driven Steam }  
 Ballast Pumps, No. and size One 9" x 10" x 24" 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 One 2 1/2" forward One 3 1/2" aft (2. 2 1/2" Cofferdam suction to oil fuel pumps)  
 In Holds, &c. (forward pump room one 2" suction to hand pump one 2" suction to cargo pump; Cargo Spaces P+S. in way of No. 4. Tank two 2 1/2" suction to cargo pump After Cofferdam one 2 1/2" suction to cargo pump) ✓  
 Main Water Circulating Pump Direct Bilge Suctions, No. and size Two 5" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One 4" 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 pass through the bunkers none ✓ How are they protected ✓  
 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 4360 square feet ✓  
 Is Forced Draft fitted No. No. and Description of Boilers Two S.E. Cylindrical multi- 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 25. 1. 29 Main Boilers 13. 12. 28 Auxiliary Boilers ✓ Donkey Boilers ✓  
 (If not state date of approval)  
 Superheaters ✓ General Pumping Arrangements 15. 4. 29 Oil fuel Burning Piping Arrangements 15. 4. 29  
 SPARE GEAR. State the articles supplied:— In excess of rule requirements see separate list

The foregoing is a correct description,  
 For HARLAND AND WOLFF LIMITED

Delebeek

Manufacturer.



© 2021

Lloyd's Register  
 Foundation



1928

1929

Dec 20

Jan 1. 4. 5. 7. 11. 14. 18. 21. 22. 24. 25. 28. 31

Feb 4. 5. 6. 7. 8. 9. 11. 13.

During progress of work in shops - -

18. 20. 22. 26. 28

Mar 12. 15. 18. 19. 20. 25

Apr 3. 4. 5. 15. 17. 19. 22. 25. 26.

Dates of Survey while building

During erection on board vessel - - -

29. 30

May 1. 2. 3. 8. 9. 11. 13. 14. 16. 20

Total No. of visits

54

Dates of Examination of principal parts—Cylinders

26. 4. 29

Slides

9. 5. 29

Covers

26. 4. 29

Pistons

19. 4. 29

Piston Rods

2. 5. 29

Connecting rods

2. 5. 29

Crank shaft

17. 4. 29

Thrust shaft

29. 4. 29

Intermediate shafts

✓

Tube shaft

✓

Screw shaft

22. 4. 29

19. 4. 29

Propeller

26. 4. 29

Stern tube

19. 4. 29

Engine and boiler seatings

29. 4. 29

Engines holding down bolts

13. 5. 29

Completion of fitting sea connections

29. 4. 29

Completion of pumping arrangements

16. 5. 29

Boilers fixed

13. 5. 29

Engines tried under steam

16. 5. 29

Main boiler safety valves adjusted

16. 5. 29

Thickness of adjusting washers

Port Boiler  $P\frac{11}{32} S\frac{3}{8}$  Star Boiler  $P\frac{13}{32} S\frac{3}{8}$

Crank shaft material

S. M. Steel

Identification Mark

42 R.L.A.

Thrust shaft material

S. M. Steel

Identification Mark

45 R.L.A.

Intermediate shafts, material

✓

Identification Marks

Tube shaft, material

✓

Identification Mark

Screw shaft, material

S. M. Steel

Identification Mark

45 R.L.A.

Steam Pipes, material

S. M. Steel

Test pressure

540 lb

Date of Test

8. 11. 5. 29

Is an installation fitted for burning oil fuel

Yes

Is the flash point of the oil to be used over 150°F.

Yes

Have the requirements of the Rules for carrying and burning oil fuel been complied with

Yes

Is this machinery duplicate of a previous case

Yes

If so, state name of vessel

"Tamare"

General Remarks (State quality of workmanship, opinions as to class, &c.)

This machinery has been constructed under special survey. The materials and workmanship are sound and good. The main engines and auxiliaries were tried out under steam at a motored trial and a sea-trial under fully loaded conditions, with satisfactory results. In my opinion the vessel is eligible for notation in the Society's Register Book at L.M.C. 5. 29. Boiler pressure 180 lb sq. in. o.g. Fitted for oil fuel ✓ F.P. above 150°F 5. 29.

The amount of Entry Fee ... £ 4 : - : When applied for,

Special ... £ 57 : - : 22 May 1929

Donkey Boiler Fee ... £ : : When received,

Travelling Expenses (if any) £ : : 7. 6. 29

R. Lee Ames.

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute THE 28 MAY 1929

Assigned

+ L.M.C. 5. 29 o.g.  
Fitted for Oil Fuel 5. 29 F.P. above 150°F

CERTIFICATE WRITTEN:



© 2021

Lloyd's Register Foundation