

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

20 MAR 1925

Date of writing Report 6/3/1925 When handed in at Local Office 9/3/1925 Port of Middlesbrough  
 No. in Survey held at Middlesbrough Date, First Survey 7 September 1924 East Survey 5-3-1925  
 Reg. Book. 90944 on the Steel Screw Steamer "Lynebridge" (Number of Visits 31)  
 SUPP. Hawerton Hill By whom built Furness S. B. Coy. Ltd. Yard No. 78 Tons { Gross 4442  
 Built at -on-tees When built 1925 Net 2748  
 Engines made at Middlesbrough By whom made Richardsons Westgirth & Co Ltd Engine No. 2569 when made 1925  
 Boilers made at Middlesbrough By whom made do Boiler No. 2569 when made 1925  
 Registered Horse Power ✓ Owners North of England S/S Co. Ltd Port belonging to West Hartlepool  
 Nom. Horse Power as per Rule 382 376 Is Refrigerating Machinery fitted for cargo purposes ✓ Is Electric Light fitted yes  
 Trade for which Vessel is intended ✓

**ENGINES, &c.**—Description of Engines Triple Expansion Revs. per minute 60  
 Dia. of Cylinders 25 1/2, 42 & 69 Length of Stroke 48 No. of Cylinders 3 No. of Cranks 3  
 Crank shaft, dia. of journals as per Rule 13.508 Crank pin dia. 14 Crank webs Mid. length breadth 20.75 Thickness parallel to axis 8.5  
 Intermediate Shafts, diameter as fitted 14.00 Thrust shaft, diameter at collars as per Rule 13.508 Thickness around eye-hole 6.125  
 Tube Shafts, diameter as per Rule 12.71 Screw Shaft, diameter as per Rule 14.39 Is the screw shaft fitted with a continuous liner yes  
 Bronze Liners, thickness in way of bushes as per Rule Thickness between bushes as per Rule Is the after end of the liner made watertight in the propeller boss 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 one length tight fit  
 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 5.0  
 Propeller, dia. 17-6 Pitch 17-6 No. of Blades 4 Material C-1 whether Moveable Solid Total Developed Surface 98.54 sq. feet  
 Feed Pumps worked from the Main Engines, No. 2 Diameter 3 1/4 Stroke 27 Can one be overhauled while the other is at work yes  
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 3 3/4 Stroke 27 Can one be overhauled while the other is at work yes  
 Feed Pumps { No. and size One 6" x 4 1/4" x 6" Duplex Pumps connected to the { No. and size One, 9" x 10" x 10" Duplex  
 How driven Steam Main Bilge Line { How driven Steam  
 Ballast Pumps, No. and size One, 9" x 10" x 10" Duplex 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 2 - 3" dia ER & 2 - 3" dia BR.  
 In Holds, &c. No 1, 2 - 3", No 2, 2 - 3 1/2", No 3, 2 - 3", No 4, one 3", Tunnel well one 3".

Main Water Circulating Pump Direct Bilge Suctions, No. and size One, 6" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One, 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 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 B Off Cocks fitted with a spigot and brass covering plate yes  
 What Pipes are carried through the bunkers Food Suctions How are they protected wood ceiling  
 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 Sea Hull Rlt Is it fitted with a watertight door yes worked from Main Deck Level

**MAIN BOILERS, &c.**—(Letter for record S) Total Heating Surface of Boilers 6058-76  
 Is Forced Draft fitted no No. and Description of Boilers Two 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 ✓ Donkey Boilers yes  
 Superheaters ✓ General Pumping Arrangements With Hull Report Oil fuel Burning Piping Arrangements ✓

**SPARE GEAR.** State the articles supplied:— 2 Con Rod Top End Bolts, 2 Con Rod Bottom end bolts, 2 main bearing bolts, one set of Coupling bolts, one set of feed and bilge pump valves, 12 Junk Ring bolts, a quantity of assorted bolts & nuts & iron, Propeller, Screw Shaft, 8 boiler tubes, 3 condenser tubes, one main feed check valve and one auxiliary feed check valve, 2 Safety valve springs.

The foregoing is a correct description,  
 For RICHARDSONS, WESTGARTH & Co. LIMITED

*J. V. Morgan*  
 MANAGER, MIDDLESBROUGH WORKS.

Manufacturer.



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Lloyd's Register Foundation

W92-0084

1924.  
 During progress of work in shops -- } Sep. 4. 20. 25. Oct. 3. 8. 15. 21. 24. Nov. 5. 10. 24. 25. 28. Dec. 1. 5. 10. 13. 23. 1925: Jan. 5. 9. 19. 22. 24. Feb. 9. 12. 16. 18. 20. 24. Mar. 5.  
 Dates of Survey while building }  
 During erection of board vessel --- }  
 Total No. of visits 31

Dates of Examination of principal parts—Cylinders 10-12-24 Slides 23-12-24 Covers 10-12-24  
 Pistons 28-11-24 Piston Rods 23-12-24 Connecting rods 28-11-24  
 Crank shaft 15/10/24. West Hartlepool Thrust shaft 5-1-24 Intermediate shafts 5 & 19-1-25.  
 Tube shaft ✓ Screw shaft 19-1-25 Propeller 19-1-25  
 Stern tube 9-1-25 Engine and boiler seatings 23-1-25 Engines holding down bolts 12-2-25  
 Completion of pumping arrangements 24-2-25 Boilers fixed 12-2-25 Engines tried under steam 24-2-25  
 Main boiler safety valves adjusted (185 lbs) 24-2-25 Thickness of adjusting washers 3/8"  
 Crank shaft material S.M. INGOT STEEL Identification Mark NO. 5426. Thrust shaft material S.M. INGOT STEEL Identification Mark 5458 MB  
 Intermediate shafts, material SM INGOT STEEL Identification Marks 5461/2/3/4/5 Tube shaft, material ✓ Identification Mark ✓  
 Screw shaft, material SM INGOT STEEL Identification Mark (5459 MB MB W.H.R., 155 W.H.R.) Steam Pipes, material L.W. Steel Test pressure 540 lbs Date of Test 12-11-24  
 Is an installation fitted for burning oil fuel ✓ 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. ✓)

The machinery of this vessel has been built under special survey. The materials and workmanship are good, the boilers were tested by hydraulic pressure.

The engines boilers and auxiliaries were examined under steam and found satisfactory.

In my opinion this vessel is eligible for the notation of + LMC 3-25.

Note: Electric light & wireless fitted.

It is submitted that this vessel is eligible for THE RECORD. + LMC 3. 25. CL.

*[Signature]*  
 23/3/25.  
 W.A. Roberts  
 Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 5 : 0 :  
 Special ... £ 82 : 0 :  
 Donkey Boiler Fee ... £ : :  
 Travelling Expenses (if any) £ : :  
 When applied for, 19. 3. 1925.  
 When received, 20. 3. 1925.

Committee's Minute TUES. 24 MAR 1925  
 Assigned + LMC 3, 25  
*[Signature]*

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

