

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY

APR. 10 1924

Received at London Office THU. MAR. 20 1924

Date of writing Report 15<sup>th</sup> Mar 1924 When handed in at Local Office 19 March 1924 Port of WEST HARTLEPOOL  
 No. in Survey held at Hartlepool Date, First Survey 16 April 1924 Last Survey 14 March 1924  
 Reg. Book. 27970 on the S.S. "KILDALE" (Number of Visits 94)  
 Built at Sunderland By whom built Wm Pickersgill & Sons Ltd Yard No. 206 26<sup>th</sup> St When built 1924  
 Engines made at Hartlepool By whom made Richardsons Westgarth Engine No. 2640 when made 1924  
 Boilers made at ditto By whom made ditto Boiler No. 2640 when made 1924  
 Registered Horse Power Owners Rowland & Barwood S. S. Co Ltd Port belonging to Whitty  
 Nom. Horse Power as per Rule 345 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

**ENGINES, &c.**—Description of Engines Triple expansion  
 Dia. of Cylinders 25"-41"-68" Length of Stroke 45" Revs. per minute 62 No. of Cylinders 3 No. of Cranks 3  
 Dia. of Crank shaft journals as per rule 13.03" as fitted 13 1/4" Dia. of Crank pin 13 1/2" Crank webs Mid. length breadth 19 3/4" Thickness parallel to axis 9 1/8" shrunk Thickness around eye-hole 5 1/16"  
 Diameter of Thrust shaft under collars as per rule 13.03" as fitted 14 1/2" Diameter of Tunnel shaft as per rule 12.4" as fitted 12 1/2" Diameter of Screw shaft as per rule 13.94" as fitted 14 1/4" Is the Screw shaft fitted with a continuous liner the whole length of the stern tube yes 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 joints burned If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with plastic material insoluble in water and non-corrosive yes  
 If two liners are fitted, is the shaft lapped or protected between the liners Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated no Length of Stern Bush 4'-9 1/4" Diameter of Propeller 16'-9"  
 Pitch of Propeller 16'-9" No. of Blades 4 State whether Movable no Total Surface 889 sq ft square feet  
 No. of Feed Pumps fitted to the Main Engines 2 Diameter of ditto 3" Stroke 27" Can one be overhauled while the other is at work yes  
 No. of Bilge Pumps fitted to the Main Engines 2 Diameter of ditto 3 3/4" Stroke 27" Can one be overhauled while the other is at work yes  
 Total number and size of power driven Feed and Bilge Auxiliary Pumps 1 Main feed 8 1/2" x 6" x 18" single General service 7 1/2" x 5" x 6" duplex Ball. 9" x 10 1/2" x 10" duplex  
 No. and size of Pumps connected to the Main Bilge Line 2 engine pumps as above & ballast donkey  
 No. and size of Ballast Pumps One 9" x 10 1/2" x 10" duplex No. and size of Lubricating Oil Pumps, including Spare Pump  
 Are two independent means arranged for circulating water through the Oil Cooler No. and size of suction connections connected to both Main Bilge Pumps and Auxiliary Bilge Pumps:—In Engine and Boiler Room 3 of 2 1/2" and in Holds, &c. No 1 2 of 2 3/4" No 2 2 of 3 1/4" No 3 2 of 2 3/4" No 4 2 of 2 3/4" Tunnel 1 of 2 1/2"

No. and size of Main Water Circulating Pump Bilge Suctions One 5 1/2" No. and size of Donkey Pump Direct Suctions to the Engine Room Bilges 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 connections with the sea direct on the skin of the ship yes Are they 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 Discharge Pipes 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  
 What Pipes are carried through the bunkers none How are they protected  
 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 Screw Shaft Tunnel watertight see ship report Is it fitted with a watertight door yes worked from

**MAIN BOILERS, &c.**—(Letter for record S) Total Heating Surface of Boilers 5437 sq ft  
 Is Forced Draft fitted no No. and Description of Boilers 2 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? Sunderland  
 PLANS. Are approved plans forwarded herewith for Shafting Main Boilers yes Auxiliary Boilers Donkey Boilers  
 (If not state date of approval)  
 General Pumping Arrangements Oil fuel Burning Piping Arrangements

**SPARE GEAR.** State the articles supplied:— 2 Bolts & nuts for piston rods, 2 ditto for connecting rods, 2 main bearing ditto, 1 set coupling ditto, 1 set feed & bilge pump valves, 2 feed check valves, 3 condenser tubes, 2 safety valve springs, 1 propeller shaft, Assorted bolts, nuts and iron.

The foregoing is a correct description, FOR RICHARDSONS, WESTGARTH & CO. LIMITED.

*S. S. Co Ltd*  
GENERAL MANAGER.

Manufacturer.



© 2020

Lloyd's Register Foundation

1923. Apr 16. 19. May 2. 3. 4. 7. 8. 9. 17. 28. 29. 30. 31. Jun 1. 5. 8. 12. 19. 22. July 4. 11. 13. 23  
 During progress of work in shops -- A  
 24. 25. 27. 30. 31. Aug 1. 20. 21. 24. 27. 28. 29. 31. Sept 3. 6. 7. 10. 11. 12. 21. 25. 26. 27. Oct 1. 9. 11. 14. 18.  
 22. 24. 26. 29. 30. Nov 5. 16. 26. Decr 3. 7. 11. 12. 1924. Jan 16. 17. 21. 24. 28. Feb 9. 12. 13. 19. 21.  
 During erection on board vessel ---  
 29. Mar 3. 3. 5. 6. 10. 10. 11. 12. 12. 13. 14. Sld: 24. Feb 19. Mar 19. 27. Apr 12. 5  
 Total No. of visits 89.

Dates of Examination of principal parts - Cylinders 27.7.23 - 11.10.23 Slides 11.10.23  
 Covers 17.10.23 Pistons 11.9.23 - 30.10.23 Rods 3.5.23 - 1.10.23  
 Connecting rods 17.10.23 - 28.1.24 Crank shaft 3.5.23 - 1.10.23 Thrust shaft 23.7.23 - 26.10.23  
 Tunnel shafts 20.8.23 - 26.10.23 21.2.24 Screw shaft 3.9.23 - 21.2.24 Propeller 24.10.23  
 Stern tube 19.2.24 Engine and boiler seatings 19.2.24 Sld. 5.3.24 Hpl. Engines holding down bolts 10.3.24  
 Completion of pumping arrangements 14.3.24 Boilers fixed 12.3.24 Engines tried under steam 13.3.24  
 Completion of fitting sea connections 19.2.24 Sld. Stern tube 3.3.24 Screw shaft and propeller 5.3.24  
 Main boiler safety valves adjusted 13.3.24 Thickness of adjusting washers P.P. 5/8" S full SP 1/2" full S 5/16"  
 Material of Crank shaft S.M. Ingot Steel Identification Mark on Do. N° 6508 A.O.  
 Material of Thrust shaft ditto Identification Mark on Do. N° 6640 CK.  
 Material of Tunnel shafts ditto Identification Marks on Do. N°s 6636-7-8-9 A.O. 6643-4 CK  
 Material of Screw shafts Working & Spare ditto Identification Marks on Do. N°s 6640-2 CK  
 Material of Steam Pipes Lap welded steel Test pressure 540 lbs Date of Test 12.3.24  
 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. 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 working conditions under full steam and found satisfactory, and will be eligible to have the notation  $\boxplus$  L.M.C with date, on completion of the survey. To complete the machinery survey the securing of steam pipes is to be completed, the pumping connections in holds and tunnel are to be completed and the spare gear examined on board. This will be done at Sunderland. Sunderland Surveyors advised.

Steam pipes now secured as recommended. Pumping arrangements in holds and tunnel completed, spare gear put on board and examined. The machinery is eligible in my opinion to have record of  $\boxplus$  L.M.C. 4.24

It is submitted that this vessel is eligible for THE RECORD.  $\boxplus$  L.M.C. 4.24. CL. *W.D. 10/4/24*

*W.D.* 10/4/24  
 R.D. Shilstone, R.D.M.  
 Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 5 : 0 :  
 Special ... £ 76 : 15 :  
 Donkey Boiler Fee ... £ : :  
 Travelling Expenses (if any) £ : :  
 When applied for, 19 Mar 1924  
 When received, 31 Mar 1924

Committee's Minute TUE. 15 APR. 1924  
 Assigned L.M.C. 4.24. C.L.

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

