

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 12 AUG 1925

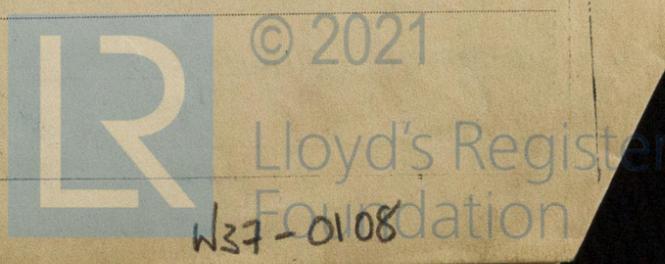
Date of writing Report 10 When handed in at Local Office -7 AUG. 1925 Port of Sunderland  
 No. in Survey held at Sunderland Date, First Survey 25 Feb Last Survey 4<sup>th</sup> Aug 1926  
 Reg. Book. 39009 on the New steel S.S. "FIREGLOW" (Number of Visits 25) Tons { Gross 1260.90  
 in S.S. Built at Sunderland By whom built J. P. Austin & Son Ltd. Yard No. 309 When built 1925  
 Engines made at Sunderland By whom made N. E. Marine Eng Co Ltd Engine No. 2609 when made 1925  
 Boilers made at Sunderland By whom made N. E. Marine Eng Co Ltd Boiler No. 2609 when made 1925  
 Registered Horse Power \_\_\_\_\_ Owners Gas, Light & Coke Co Port belonging to London  
 Nom. Horse Power as per Rule 158 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

**ENGINES, &c.**—Description of Engines Triple Expansion  
 Dia. of Cylinders 18"-30"-49" Length of Stroke 33" Revs. per minute 79 No. of Cylinders 3 No. of Cranks 3  
 Dia. of Crank shaft journals 9.46" as per rule 9.46" Dia. of Crank pin 9.2" Crank webs Mid. length breadth 15.34" Thickness parallel to axis 4.34"  
 as fitted 9.2" Mid. length thickness 5.15" shrunk Thickness around eye-hole 5"  
 Diameter of Thrust shaft under collars 9.46" as per rule 9.46" Diameter of Tunnel shaft 9.013" as per rule 9.013" Diameter of Screw shaft 10.58" as fitted 10.58" Is the Screw shaft  
 as fitted 9.2" Is the after end of the liner made watertight in the propeller boss Yes  
 fitted with a continuous liner the whole length of the stern tube Yes If the liner does not fit tightly at the part  
 If the liner is in more than one length are the joints burned \_\_\_\_\_  
 between the bearings in the stern tube, is the space charged with 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 appliance fitted at the after end of the shaft to permit  
 of it being efficiently lubricated \_\_\_\_\_ Length of Stern Bush 42.2" Diameter of Propeller 15.3"  
 Pitch of Propeller 13'-3" No. of Blades 4 State whether Moveable No Total Surface 55 square feet.  
 No. of Feed Pumps fitted to the Main Engines 2 Diameter of ditto 3" Stroke 15" Can one be overhauled while the other is at work Yes  
 No. of Bilge Pumps fitted to the Main Engines 2 Diameter of ditto 3.5" Stroke 15" Can one be overhauled while the other is at work Yes  
 Total number and size of power driven Feed and Bilge Auxiliary Pumps One 5.5" x 3.5" x 5"  
 No. and size of Pumps connected to the Main Bilge Line One Ballast Pump 9" x 11" x 10"  
 No. and size of Ballast Pumps One 9" x 11" x 10" 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 suctions connected to both Main Bilge Pumps and Auxiliary  
 Bilge Pumps;—In Engine and Boiler Room 2 @ 2.5" dia and in Holds, &c. For Hold 2 @ 2.5" dia  
Aft Hold 2 @ 2.5" dia  
 No. and size of Main Water Circulating Pump Bilge Suctions one @ 5" dia No. and size of Donkey Pump Direct Suctions \_\_\_\_\_  
 to the Engine Room Bilges one @ 3.5" dia 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 Main below other above  
 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 \_\_\_\_\_  
 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 Hold Suctions How are they protected Limbs Boards  
 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 not fitted Is it fitted with a watertight door \_\_\_\_\_ worked from \_\_\_\_\_

**MAIN BOILERS, &c.**—(Letter for record (S) ✓) Total Heating Surface of Boilers 2550 Working Pressure 180 lbs  
 Is Forced Draft fitted No No. and Description of Boilers One - Single ended  
**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  
 (If not state date of approval) \_\_\_\_\_ Oil fuel Burning Piping Arrangements \_\_\_\_\_  
 General Pumping Arrangements Yes

**SPARE GEAR.** State the articles supplied:—  
 1. Cast Iron propeller, 2 Bottom end bolts and nuts, 2 Top end bolts and nuts.  
 2 Main bearing bolts and nuts, 6 Coupling bolts and nuts, 2 Feed pump  
 valves, 2 Bilge pump valves, Assorted Holes and nuts, plates & bars,  
 1 Safety valve spring, 6 Boiler Tubes ✓

The foregoing is a correct description,  
 FOR THE NORTH EASTERN MARINE ENGINEERING CO. L.  
C. T. Adams Manufacturer.  
 Manager.



1925. Feb. 25. Mar. 10. Apr. 2. 17. 22. 29. May. 4. 6. 11. 14. 20. 26. 27. June 3. 10. 11. 12.

Dates of Survey while building

During progress of work in shops - - 25.16

During erection on board vessel - - - June 23. 26. July. 1. 2. 3. 6. 10. 17. 20. Aug. 4.

Total No. of visits 29

Dates of Examination of principal parts - Cylinders 14-5-25 Slides 14-5-25

Covers 14-4-25 Pistons 3-6-25 Rods 26-5-25

Connecting rods 3-6-25 Crank shaft 14-5-25 Thrust shaft 14-5-25

Tunnel shafts none fitted Screw shaft 11-6-25 Propeller 3-6-25

Stern tube 11-6-25 Engine and boiler seatings 1-4-25 Engines holding down bolts 1-4-25

Completion of pumping arrangements 3-4-25 Boilers fixed 2-4-25 Engines tried under steam 3-4-25

Completion of fitting sea connections 12-6-25 Stern tube 12-6-25 Screw shaft and propeller 23-6-25

Main boiler safety valves adjusted 3-4-25 Thickness of adjusting washers For  $\frac{1}{2}$ " Aft  $\frac{7}{16}$ "

Material of Crank shaft Ingot Steel Identification Mark on Do. LLOYDS N° 488N G.A. 14-5-25

Material of Thrust shaft Ingot Steel Identification Mark on Do. LLOYDS NO. 4242 G.A. 14-5-25

Material of Tunnel shafts Identification Marks on Do. ✓

Material of Screw shafts Ingot Steel Identification Marks on Do. LLOYDS NO 4242 G.A. 11-6-25

Material of Steam Pipes Lap welded steel Test pressure 540 lbs ✓ Date of Test 1-4-25 & (Feb) 18-8-25

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.)

The materials and workmanship are good. The machinery has been constructed under special survey and tried under working conditions and is eligible in my opinion for Classification and the record of +L.M.C. 4-25.

It is submitted that this vessel is eligible for THE RECORD. +L.M.C. 8.25 C.L.

*Handwritten signature and date*  
13.8.25

SUNDERLAND

The amount of Entry Fee ... £ 3 : 0 :  
 Special ... £ 39 : 10 :  
 Donkey Boiler Fee ... £ : :  
 Travelling Expenses (if any) £ : :

When applied for, 29 July 1925  
 When received, 13.8.25

*Handwritten signature*  
George Anderson  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute  
 Assigned

FRI. 14 AUG 1925  
 + L.M.C. 8.25  
 C.L.

