

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report Sept 11<sup>th</sup> 1924 When handed in at Local Office Sept 11<sup>th</sup> 1924 Port of NEWCASTLE-ON-TYNE  
 No. in Survey held at Newcastle Date, First Survey Feb 24<sup>th</sup> 1924 Last Survey Sept 7<sup>th</sup> 1924  
 Reg. Book. 90676 on the Steel Sc. SHEAF CREST. (Number of Visits 39)  
 Built at Blyth By whom built Blyth Ld. & D. Co. Ld. Yard No. 231 Tons { Gross 2728  
 Engines made at Newcastle By whom made North Eastern Marine Eng. Co. Ld. Engine No. 2570 when made 1924  
 Boilers made at Newcastle By whom made North Eastern Marine Eng. Co. Ld. Boiler No. 2570 when made 1924  
 Registered Horse Power 305 Owners Sheaf Steam Shipping Co. Ld. Port belonging to Newcastle  
 Nom. Horse Power as per Rule 305 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted Yes

**ENGINES, &c.—Description of Engines** Inverted Triple Expansion  
 Dia. of Cylinders 23 1/2" x 38" x 64" Length of Stroke 42" Revs. per minute 120 No. of Cylinders 3 No. of Cranks 3  
 Dia. of Crank shaft journals as per rule 12.19" Dia. of Crank pin 12 1/2" Crank webs Mid. length breadth 2 1/2" Thickness parallel to axis 7 1/2"  
as fitted 12 1/2" Mid. length thickness 7 1/2" Thickness around eye-hole 6 1/2"  
 Diameter of Thrust shaft under collars as per rule 12.19" Diameter of Tunnel shaft as per rule 11.6" Diameter of Screw shaft as per rule 13.06" Is the Screw shaft  
as fitted 12 1/2" as fitted 11 7/8" as fitted 13 3/8"  
 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 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 appliance fitted at the after end of the shaft to permit  
 of its being efficiently lubricated no Length of Stern Bush 56 1/2" Diameter of Propeller 16'0"  
 Pitch of Propeller 18'0" No. of Blades Jan State whether Moveable no Total Surface 80 square feet.  
 No. of Feed Pumps fitted to the Main Engines 2 Diameter of ditto 3 1/2" Stroke 21" 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 1/2" Stroke 21" Can one be overhauled while the other is at work Yes  
 Total number and size of power driven Feed and Bilge Auxiliary Pumps Three, 2 Feed 6'x4'x6", 1 Ballast 9'x11'x10"  
 No. and size of Pumps connected to the Main Bilge Line Two Main Engine and 1 Ballast  
 No. and size of Ballast Pumps One 9'x11'x10" No. and size of Lubricating Oil Pumps, including Spare Pump no  
 Are two independent means arranged for circulating water through the Oil Cooler Yes No. and size of suction connected to both Main Bilge Pumps and Auxiliary  
 Bilge Pumps:—In Engine and Boiler Room 3-3" and in Holds, &c. no. 1 Hold 2-3" No. 2 Hold 2-3"  
no. 3 Hold 2-3 1/2" Tunnel well 1-3"  
 No. and size of Main Water Circulating Pump Bilge Suctions One 8" No. and size of Donkey Pump Direct Suctions  
 to the Engine Room Bilges 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 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 Both  
 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 Forward Bilge Suctions How are they protected Wooden casings  
 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 Yes Is it fitted with a watertight door Yes worked from upper platform

**MAIN BOILERS, &c.—** (Letter for record 5) Total Heating Surface of Boilers 4930 sq ft  
 Is Forced Draft fitted no No. and Description of Boilers Two Single End Cyl. 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? no  
 PLANS. Are approved plans forwarded herewith for Shafting no Main Boilers Yes Auxiliary Boilers none Donkey Boilers none  
 (If not state date of approval) no Oil fuel Burning Piping Arrangements none  
 General Pumping Arrangements no

**SPARE GEAR.** State the articles supplied:— one cast iron propeller. 2 top + 2 bottom end bolts  
+ nuts. 2 main bearing bolts + nuts. 6 coupling bolts + nuts. 1/2 set of coach  
springs for LP cylinder piston. 2 feed + 2 bilge pump valves. 2 cut of iron  
plate. 1 cut of iron bars. 50 bolts + nuts assorted.

The foregoing is a correct description

THE NORTH EASTERN MARINE ENGINEERING Co., LTD.

*G. J. Harrison*  
Secretary.

Manufacturer.



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Lloyd's Register  
Foundation

Whh9-0266

1924. Feb 27. May 9. 19. 29. June 5. 11. 16. 17. 18. 20. July 1. 4. 9. 15. 16. 18. 22. 23. 24. 25. 29. 30. 31.  
 During progress of work in shops -- 11 Aug 2. 5. 6. 8. 11. 15. 22. 25  
 Dates of Survey while building } During erection on board vessel --- }  
 1924 Aug 26. 27. 28. 29. Sept 2. 3. 8. 9. Oct. 17.  
 Total No. of visits 59

Dates of Examination of principal parts - Cylinders	2. 8. 24	Slides	25. 8. 24
Covers	9. 5. 24	Pistons	25. 8. 24
Connecting rods	27. 2. 24	Crank shaft	1. 7. 24
Tunnel shafts	15. 7. 24	Screw shaft	15 + 23. 7. 24
Stern tube	9. 7. 24	Engine and boiler seatings	26. 8. 24
Engines holding down bolts	29. 8. 24		
Completion of pumping arrangements	9. 9. 24	Boilers fixed	9. 9. 24
Engines tried under steam	9. 9. 24		
Completion of fitting sea connections	31. 7. 24	Stern tube	31. 7. 24
Screw shaft and propeller	26. 8. 24		
Main boiler safety valves adjusted	9. 9. 24	Thickness of adjusting washers	P = 3/32 S = 7/16 P = 1/2 S = 3/16 P = 1/2 S = 1/2
Material of Crank shaft	S. M. Ingot Steel	Identification Mark on Do.	6708N
Material of Thrust shaft	S. M. Ingot Steel	Identification Mark on Do.	6708N
Material of Tunnel shafts	S. M. Ingot Steel	Identification Marks on Do.	6708N
Material of Screw shafts	S. M. Ingot Steel	Identification Marks on Do.	6708N
Material of Steam Pipes	Solid Drawn Steel	Test pressure	540 lbs
Date of Test	27. 8. 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 surveyed during construction, and the materials and workmanship are good and in accordance with the approved plan and the requirements of the Rules.  
 On completion it was tried under steam + the safety valves adjusted with satisfactory results.  
 It is therefore eligible in our opinion to be classed, with the notation of + LMC 10. 24 in the R. Book.

It is submitted that this vessel is eligible for THE RECORD. + LMC 10. 24. CL.

*[Signature]*  
 27/10/24

The amount of Entry Fee ... £ 5 : 0 :  
 Special ... £ 70 : 15 :  
 Donkey Boiler Fee ... £ : :  
 Travelling Expenses (if any) £ : :  
 When applied for, 23 OCT 1924  
 When received, 24 OCT 1924

*[Signature]*  
 Rhee Arner + Mamie Pitson  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES 28 OCT '924

Assigned + L.M.C. 10. 24  
 C.L.



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NEWCASTLE ON TYNE

Certificate to be sent to

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

CERTIFICATE WRITTEN