

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 13 SEP 1924

Date of writing Report 10 When handed in at Local Office 13/8/24 Port of NEWCASTLE-ON-TYNE

No. in Survey held at Newcastle-on-Tyne Date, First Survey 30/4/24 Last Survey 13/8/24
 Reg. Book. 89606 on the steel sc. LETCWORTH (Number of Visits 21)

Built at Newcastle By whom built Wood Skinner & Co. Ltd. Yard No. 235 Tons { Gross 1325
 Net 717
 When built 1924

Engines made at Newcastle By whom made North Eastern Marine Eng. Co. Ltd. Engine No. 2576 when made 1924

Boilers made at Newcastle By whom made North Eastern Marine Eng. Co. Ltd. Boiler No. 2576 when made 1924

Registered Horse Power _____ Owners _____ Port belonging to Newcastle

Nom. Horse Power as per Rule 179 ✓ Is Refrigerating Machinery fitted for cargo purposes No ✓ Is Electric Light fitted Yes ✓

ENGINES, &c.—Description of Engines

Inverted Triple Expansion ✓

Dia. of Cylinders 18"-30"-49" Length of Stroke 33" Revs. per minute _____ No. of Cylinders 3 No. of Cranks 3

Dia. of Crank shaft journals as per rule 9.45" ✓ as fitted 9.5" ✓ Dia. of Crank pin 9.5" ✓ Crank webs Mid. length breadth 16" ✓ Thickness parallel to axis 5 7/8" ✓
 as fitted 9.5" ✓ Mid. length thickness 5 7/8" ✓ shrunk Thickness around eye-hole 4 1/16" ✓

Diameter of Thrust shaft under collars as per rule 9.45" ✓ as fitted 9.5" ✓ Diameter of Tunnel shaft as per rule 9.01" ✓ as fitted none ✓ Diameter of Screw shaft as per rule 9.9" ✓ as fitted 10 3/8" ✓ 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 a 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 its being efficiently lubricated No ✓ Length of Stern Bush 42" ✓ Diameter of Propeller 13'3" ✓

Pitch of Propeller 13'3" No. of Blades 4 State whether Moveable No Total Surface 53 square feet.

No. of Feed Pumps fitted to the Main Engines 2 Diameter of ditto 3" Stroke 16 1/2" 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" Stroke 16 1/2" Can one be overhauled while the other is at work Yes

Total number and size of power driven Feed and Bilge Auxiliary Pumps 3- 2 feed 6"x4"x6" - Ballast 8"x10"x10"

No. and size of Pumps connected to the Main Bilge Line Two Bilge Rams & Ballast Pump

No. and size of Ballast Pumps One 8"x10"x10" ✓ No. and size of Lubricating Oil Pumps, including Spare Pump None ✓

Are two independent means arranged for circulating water through the Oil Cooler _____ No. and size of suction connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room One-3" one-2 1/2" ✓ and in Holds, &c. No. 1 Hold 2-2 1/2" No. 2 Hold 2-2 1/2" ✓

No. and size of Main Water Circulating Pump Bilge Suctions One 5" ✓ No. and size of Donkey Pump Direct Suctions to the Engine Room Bilges One 3 1/4" ✓

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 _____

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 Wood Cased ✓

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 None ✓ Is it fitted with a watertight door _____ worked from _____

MAIN BOILERS, &c.—(Letter for record S ✓)

Total Heating Surface of Boilers 3150 sq ft ✓

Forced Draft fitted No ✓ No. and Description of Boilers 2 Single-Ended 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? _____

PLANS. Are approved plans forwarded herewith for Shafting _____ Main Boilers Yes ✓ Auxiliary Boilers _____ Donkey Boilers _____

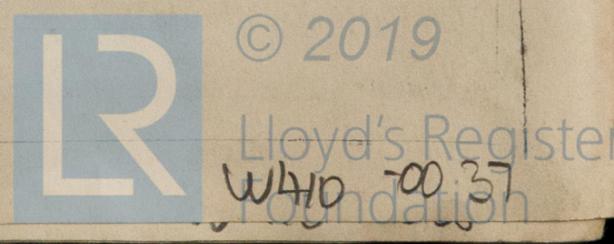
(If not state date of approval)

General Pumping Arrangements _____ Oil fuel Burning Piping Arrangements _____

SPARE GEAR. State the articles supplied:—One Cast Iron propeller, 2 Top End Bolts & Nuts, 2 Bottom End Bolts & Nuts, 2 Main Bearing Bolts & Nuts, 6 Coupling Bolts & Nuts, 2 Feed Pump Valves, 2 Bilge Pump Valves, Assorted Bolts Nuts & Iron, 6 tubes & 25 Condenser ferrules, One set Air pump valves, 2 Ballast Donkey valves, 2 main feed check valves, 2 Donkey check valves, 2 Safety valves Springs, 2 Escape valve Springs, One eccentric sheave & shaft complete, 2 piston studs & nuts, One spare H.P. piston valve. ✓

The foregoing is a correct description
 THE NORTH EASTERN MARINE ENGINEERING Co., LTD.
 J. J. Harrison
 Secretary.

Manufacturer.



1924
Apr. 30. May 7. 9. 26. 28. 29. June 3. 6. 11. 16. 17. 20. July 1. 8. 10. 16. 17. 18. 25. 29.

Dates of Survey while building
During progress of work in shops ---
During erection on board vessel ---
Total No. of visits

Aug 13

21.

Dates of Examination of principal parts - Cylinders 1.7.24 Slides 8.7.24
 Covers 1.7.24 Pistons 8.7.24 Rods 9.5.24
 Connecting rods 17.6.24 Crank shaft 29.5.24 Thrust shaft 17.6.24
 Tunnel shafts none Screw shaft 10.7.24 Propeller 16.7.24
 Stern tube 28.5.24 Engine and boiler seatings 16.7.24 Engines holding down bolts 29.7.24
 Completion of pumping arrangements 13.8.24 Boilers fixed 29.7.24 Engines tried under steam 13.8.24
 Completion of fitting sea connections 16.6.24 Stern tube 16.6.24 Screw shaft and propeller 17.7.24
 Main boiler safety valves adjusted 13.8.24 Thickness of adjusting washers Pat Boilers P 7/16 S 5/16 Max. Boiler P+S 7/16

Material of Crank shaft S. M. Ingot Steel Identification Mark on Do. 539 A.F. R.P.C.
 Material of Thrust shaft S. M. Ingot Steel Identification Mark on Do. 539 A.F. R.L.A.
 Material of Tunnel shafts none Identification Marks on Do. ✓
 Material of Screw shafts S. M. Ingot Steel Identification Marks on Do. 539 A.F. R.L.A.
 Material of Steam Pipes S.D. Steel ✓ Test pressure 540 lb. ✓ Date of Test 7.5.24 & 25.7.24
 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.)
 The machinery of this vessel has been constructed under special survey. The materials and workmanship are sound and good. It has been efficiently installed on board the Steel Co. "LETCWORTH" and tried out under steam at a moving trial. The Boilers' safety valves were adjusted under steam.
 In my opinion, this vessel is now eligible for notation in the Society's Register Book.
 + L.M.C. 8.24 C.L.

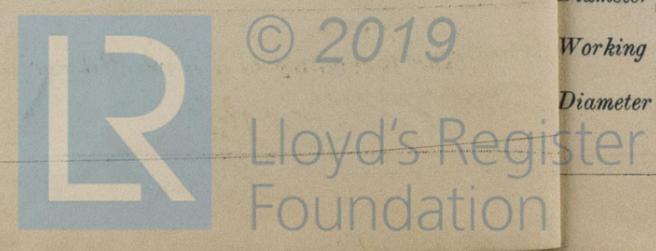
It is submitted that
 this vessel is eligible for
THE RECORD. + L.M.C. 8.24. C.L.

[Signature]
 16/9/24

The amount of Entry Fee ... £ 3 : - :
 Special ... £ 44 : 15 :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 2 SEP 1924
 When received, 17. 18. 24

[Signature]
 R. Lee Amess
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 16 SEP 1924.
 Assigned + L.M.C. 8.24 C.L.



Certificate to be sent to: Messrs. ...

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