

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 25 SEP 1926

Date of writing Report 19 When handed in at Local Office 24/9/1926 Port of NEWCASTLE-ON-TYNE.

No. in Survey held at Newcastle-on-Tyne Date, First Survey 22nd March Last Survey 16th Sept 1926
 Reg. Book. on the New Steel S.S. Greathope (Number of Visits)

Built at Burntisland By whom built Burntisland Shipb. Co. Ltd. Yard No. 137 When built 1926
 Engines made at Newcastle By whom made North Eastern Mar. Eng. Co. Ltd. Engine No. 2622 when made 1926
 Boilers made at Newcastle By whom made North Eastern Mar. Eng. Co. Ltd. Boiler No. 2622 when made 1926
 Registered Horse Power 300 Owners Newbiggin Steam Shipping Co. Ltd. Port belonging to
 Nom. Horse Power as per Rule 300 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which Vessel is intended Ocean. going

ENGINES, &c.—Description of Engines Inverted Triple Expansion Revs. per minute 77
 Dia. of Cylinders 22^{1/2}"-37"-61" Length of Stroke 42" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 11.744" Crank pin dia. 12^{3/8}" Crank webs Mid. length breadth 20^{3/4}" Thickness parallel to axis 7^{3/8}"
 as fitted 12^{3/8}" Crank pin dia. 12^{3/8}" Mid. length thickness 7^{3/8}" shrunk Thickness around eye-hole 6^{5/8}"
 Intermediate Shafts, diameter as per Rule 11.185" Thrust shaft, diameter at collars as per Rule 11.744"
 as fitted 11^{3/8}" as fitted 12^{3/8}"
 Tube Shafts, diameter as per Rule 11.97" Screw Shaft, diameter as per Rule 13" Is the screw shaft fitted with a continuous liner Yes
 as fitted 11^{3/8}" as fitted 13"
 Bronze Liners, thickness in way of bushes as per Rule 1/16" Thickness between bushes as per Rule 1/32" Is the after end of the liner made watertight in the propeller boss Yes
 as fitted 1/16" as fitted 1/32"
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner
 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 Oil Gland or other appliance fitted at the after end of the tube shaft
 Propeller, dia. 15'-3" Pitch 16'-0" No. of Blades 4 Material Cast Iron whether Moveable No. Total Developed Surface 75 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 3 1/2" Stroke 21" Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 3 1/2" Stroke 21" Can one be overhauled while the other is at work Yes
 Feed Pumps No. and size One 8 1/2" x 6" x 18" One 4 1/2" x 2 1/4" x 24" Pumps connected to the Main Bilge Line No. and size Two 8" x 10" x 10"
 How driven Steam How driven Steam
 Ballast Pumps, No. and size Two 8" x 10" x 10" Lubricating Oil Pumps, including Spare Pump, No. and size none
 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 3 @ 9 1/2" dia
 In Holds, &c. 3 @ 3" dia aft hold, 2 @ 3" dia fwd hold

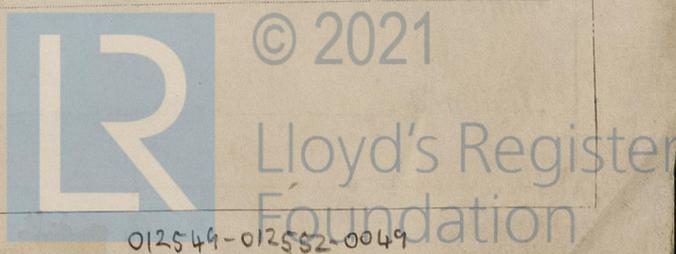
Main Water Circulating Pump Direct Bilge Suctions, No. and size One 8" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One 4"
 Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes
 Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes
 Are all 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 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 Bilge pipes How are they protected Wood casings
 What pipes pass through the deep tanks none Have they been tested as per Rule Yes
 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 yes Is it fitted with a watertight door yes worked from top platform

MAIN BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 5210 sq. ft.
 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 yes Donkey Boilers yes
 (If not state date of approval)
 Superheaters Standard General Pumping Arrangements Oil fuel Burning Piping Arrangements

SPARE GEAR. State the articles supplied:— Two each bolts & nuts for top & bottom ends and main bearings, one set coupling bolts, one set feed slide pump valves, 2 safety valve springs, several condenser tubes, ferrules & hole tubes, quantity of assorted bolts nuts & rivets.

The foregoing is a correct description,
THE NORTH EASTERN MARINE ENGINEERING CO. LTD.

Secretary, Manufacturer.



25008

1926
 During progress of work in shops - - Mar 22, 30. Apr 23. May 3, 7, 10, 14, 25, 26, 27, 31. June 3, 4, 10, 15, 21. July 1, 2, 5, 8, 14, 21, 22
 26. Aug. 4, 6, 10, 11, 12, 13, 23, 25, 27. Sept. 1, 2, 6, 9, 13, 14, 16.
 Dates of Survey while building
 Total No. of visits 40.

Dates of Examination of principal parts—Cylinders 26-4-26 Slides 6-8-26 Covers 26-7-26
 Pistons 21-6-26 Piston Rods 21-6-26 Connecting rods 15-6-26
 Crank shaft 10-6-26 Thrust shaft 26-5-26 Intermediate shafts 2-7-26
 Tube shaft ✓ Screw shaft 21-7-26 Propeller 21-7-26
 Stern tube 5-7-26 Engine and boiler seatings ✓ Engines holding down bolts 6-9-26
 Completion of pumping arrangements 13-9-26 Boilers fixed 9-9-26 Engines tried under steam 13-9-26
 Main boiler safety valves adjusted 13-9-26 Thickness of adjusting washers P.B. P+S 1/16 S.B. P 13/32 S 3/8 P+S 1/8 Superheater
 Crank shaft material Ingot Steel Identification Mark 6637 R.L.A. Thrust shaft material I Steel Identification Mark 1054 R.L.A.
 Intermediate shafts, material I Steel Identification Marks 6481, 6652, 6651, 1056 all stamped R.L.A. Tube shaft, material ✓ Identification Mark ✓
 Screw shaft, material I Steel Identification Mark 1437 R.L.A. Steam Pipes, material Steel ✓ Test pressure 540 Date of Test 22-7-26
 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 built under Special Survey. Materials & Workmanship good. Hydraulic tests satisfactory. The machinery is satisfactorily installed & fixed in the vessel and has been tried under steam and is in good & safe working condition and eligible in my opinion to be classed and have records + LMC 9-26. Tail Shaft continuous lines. Electric Light in the Register Books.

It is submitted that this vessel is eligible for THE RECORD. + LMC 9.26. CL.

W.D.
 28/9/26.

William Dales & R. L. Annear (per W.D.)
 Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 5 : 0 : 0
 Special ... £ 40 : 6 : 0
 Donkey Boiler Fee ... £ ✓ : :
 Travelling Expenses (if any) £ ✓ : :
 When applied for 24. SEP 1926
 When received, 23.10.26

Committee's Minute TUES. 28 SEP 1926
 Assigned -/- Lmc 9.26
 CL



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