

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

-6 MAR 1925

Date of writing Report 19 When handed in at Local Office 5th March 1925 Port of *Sunderland*
 No. in Survey held at *Sunderland* Date, First Survey 26th March Last Survey 27th Feb 1925
 Reg. Book. on the *new steel* S. S. *SILVERMOOR* Number of Visits 52
 Built at *Sunderland* By whom built *J. Brown & Son Ltd.* Yard No. 144 Tons Gross 1906
 Engines made at *Sunderland* By whom made *N. E. Marine Eng Co Ltd* Engine No. 2568 when made 1925
 Boilers made at *Sunderland* By whom made *N. E. Marine Eng Co Ltd* Boiler No. 2568 when made 1925
 Registered Horse Power 216 Owners *More Line Ltd* Port belonging to *Newcastle*
 Nom. Horse Power as per Rule 216 Is Refrigerating Machinery fitted for cargo purposes *No* Is Electric Light fitted *Yes*

ENGINES, &c.—Description of Engines.

Triple expansion
 Dia. of Cylinders 20 1/2 - 33 - 54 Length of Stroke 39" Revs. per minute 75 No. of Cylinders 3 No. of Cranks 3
 Dia. of Crank shaft journals as per rule 10.833 as fitted 10.875 Dia. of Crank pin 10 1/8" Crank webs Mid. length breadth 15 1/2" Thickness parallel to axis 6 1/2" shrunk
 Diameter of Thrust shaft under collars as per rule 10.833 as fitted 10.78 Diameter of Tunnel shaft as per rule 10.378 as fitted 10.38 Diameter of Screw shaft as per rule 11.8 as fitted 11.78 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 *Yes* 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 *Yes* Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated *Yes* Length of Stern Bush 4'-0" Diameter of Propeller 14'-6" square feet.
 Pitch of Propeller 15 1/2" No. of Blades 4 State whether Moveable *Not moveable* Total Surface 66
 No. of Feed Pumps fitted to the Main Engines 2 Diameter of ditto 3" 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 *One 5 1/2 x 3 1/2 x 5*
 No. and size of Pumps connected to the Main Bilge Line *One Ballast Pump Connected to main bilge line*
 No. and size of Ballast Pumps *One 4 x 9 x 9* No. and size of Lubricating Oil Pumps, including Spare Pump *Yes*
 Are two independent means arranged for circulating water through the Oil Cooler *Yes* No. and size of suctions connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room *3 @ 2 1/2* and in Holds, &c. *Forward Hold 2 @ 3*
 Aft hold 4 @ 2 3/4

No. and size of Main Water Circulating Pump Bilge Suctions *One @ 5 1/2* No. and size of Donkey Pump Direct Suctions *Yes*
 to the Engine Room Bilges *One @ 3 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 *Main Injection Tank* Are they Valves or Cocks *Both* main Discharge
 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 *Other 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 *Yes*
 What Pipes are carried through the bunkers *Forward Hold Suction* How are they protected *Limber 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 *Yes* Is it fitted with a watertight door *Yes* worked from *Top platform*

MAIN BOILERS, &c.—(Letter for record (S)) Total Heating Surface of Boilers 3594 *2.58* Working Pressure 180 lbs
 Is Forced Draft fitted *No* No. and Description of Boilers *Two Cylindrical Single ended marine type*

IS A REPORT ON MAIN BOILERS NOW FORWARDED? *Yes*IS A DONKEY BOILER FITTED? *No* If so, is a report now forwarded? *Yes*

PLANS. Are approved plans forwarded herewith for Shafting *Yes* Main Boilers *Yes* Auxiliary Boilers *Yes* Donkey Boilers *Yes*
 (If not state date of approval)

General Pumping Arrangements *Yes* Oil fuel Burning Piping Arrangements *Yes*

SPARE GEAR. State the articles supplied:—

2 Top End Bolts and Nuts *Yes*
 2 Connecting and Bottom End Bolts and Nuts *Yes*
 2 Main Bearing Bolts and Nuts *Yes*
 6 Coupling Bolts and Nuts *Yes*
 2 Feed Pump Valves *Yes*
 2 Bilge Pump Valves *Yes*
 1 Set of Air Pump Valves *Yes*
 50 Assorted Bolts & Nuts *Yes*
 1/2 cwt Assorted Iron Plates *Yes*
 1/2 cwt " Iron Bars *Yes*
 1 Cast Iron Propeller *Yes*

The foregoing is a correct description,

THE NORTH EASTERN MARINE ENGINEERING CO. LTD.

C. T. Adams

Manufacturer.



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1924 May 26 June 6 July 7 23 29 Aug 7 11 19 21 22 26 Sep 4 18 22 25 Oct 10 23 29
During progress of work in shops - - Nov 2 26 Dec 1 29 1925 Jan 4 Feb 4
Dates of Survey while building During erection on board vessel - - Feb 10 12 16 17 18 19 20 27
Total No. of visits 32

Dates of Examination of principal parts - Cylinders 4-1-25 Slides 4-9-24
Covers 4-9-24 Pistons 4-9-24 Rods 26-8-24
Connecting rods 23-7-24 Crank shaft 29-10-24 Thrust shaft 29-10-24
Tunnel shafts 29-10-24 Screw shaft 29-12-24 Propeller 25-9-24
Stern tube 29-12-24 Engine and boiler seatings 4-2-25 Engines holding down bolts 18-2-25
Completion of pumping arrangements 18-2-25 Boilers fixed 16-2-25 Engines tried under steam 19-2-25
Completion of fitting sea connections 4-2-25 Stern tube 4-2-25 Screw shaft and propeller 10-2-25
Main boiler safety valves adjusted 19-2-25 Thickness of adjusting washers Pt BL 2 3 5 1/2 BL 4 5 6 7 8
Material of Crank shaft Ingot Steel Identification Mark on Do. LLOYDS No 6912 GA 29-10-24
Material of Thrust shaft Ingot Steel Identification Mark on Do. LLOYDS No 6912 GA 29-10-24
Material of Tunnel shafts Ingot Steel Identification Marks on Do. LLOYDS No 6912 GA 29-10-24
Material of Screw shafts Ingot Steel Identification Marks on Do. LLOYDS No 6912 GA 29-12-24
Material of Steam Pipes Lap welded wrought iron Test pressure 540 lbs Date of Test 18/9/24 (Blaydon) 16/2/25
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 Yes If so, state name of vessel S. S. "ROYALMOOR"

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 is eligible in my opinion for classification and
the record of + L.M.C. 2-25

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 2. 25. CL.

W.D. P.M.
6/3/25

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

The amount of Entry Fee ... £ 4 : - : When applied for.
Special ... £ 6-4 : - : 2nd Mar 1925
Donkey Boiler Fee ... £ - : - :
Travelling Expenses (if any) £ - : - : 13/3/25

Committee's Minute THES. 10 MAR 1925
Assigned + L.M.C. 2. 25
C.L.

SUNDERLAND

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



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Foundation

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Date of writing Re
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