

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

AUG. 3 1937

Date of writing Report 19 When handed in at Local Office 26 July 37 Port of **SUNDERLAND**
 No. in Survey held at **Sunderland** Date, First Survey 3 Dec 36 Last Survey 20 July 1937
 Reg. Book. on the **CORFIELD** (Number of Visits 69)
 Built at **Burntisland** By whom built **Burntisland S.B. Co. Ltd.** Yard No. **214** Tons { Gross
 Engines made at **Sunderland** By whom made **N.E. Marine Eng. Co. Ltd.** Engine No. **2873** When made **1937**
 Boilers made at **Sunderland** By whom made **N.E. Marine Eng. Co. Ltd.** Boiler No. **2873** When made **1937**
 Registered Horse Power Owners **Leary & Collier, Ltd.** Port belonging to **London**
 Nom. Horse Power as per Rule **176** Is Refrigerating Machinery fitted for cargo purposes **no** Is Electric Light fitted **yes**
 Trade for which Vessel is intended **Coal.**

ENGINES, &c.—Description of Engines **Triple Expansion with poppet valves H.P.** Revs. per minute
 Dia. of Cylinders **16" 45" 25"** Length of Stroke **33"** No. of Cylinders **3** No. of Cranks **3**
 Crank shaft, dia. of journals as per Rule **appt.** Crank pin dia. **9 3/4"** Crank webs Mid. length breadth **—** Thickness parallel to axis **6"**
 as fitted **9 1/2"** Mid. length thickness **—** shrunk Thickness around eye-hole **5" shaft 4 7/8" pin.**
 Intermediate Shafts, diameter as per Rule **—** Thrust shaft, diameter at collars as per Rule **appt.** as fitted **9 1/2"**
 Tube Shafts, diameter as per Rule **—** Screw Shaft, diameter as per Rule **appt.** Is the { tube } shaft fitted with a continuous liner { **yes**
 as fitted **—** as fitted **10 1/4"** { screw }
 Bronze Liners, thickness in way of bushes as per Rule **appt.** Thickness between bushes as per Rule **appt.** Is the after end of the liner made watertight in the
 as fitted **5/8"** as fitted **9/16"**
 propeller boss **yes** 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 **—** If so, state type **Hubark** Length of Bearing in Stern Bush next to and supporting propeller **3'-5"**
 Propeller, dia. **13'-6"** Pitch **14'-6"** No. of Blades **4** Material **C. IRON** whether Moveable **not** Total Developed Surface **67.5** sq. feet
 Feed Pumps worked from the Main Engines, No. **2** Diameter **2 3/4"** Stroke **16 1/2"** Can one be overhauled while the other is at work **yes**
 Bilge Pumps worked from the Main Engines, No. **2** Diameter **2 3/4"** Stroke **16 1/2"** Can one be overhauled while the other is at work **yes**
 Feed Pumps { No. and size **Two, 8 1/2" x 6" x 15"** Pumps connected to the { No. and size **Two, one 9 1/2" x 11" x 18", one 9" x 10" x 18"**
 How driven **Steam** Main Bilge Line How driven **Steam**
 Ballast Pumps, No. and size **Two, 9 1/2" x 11" x 18" & 9" x 10" x 18"** Lubricating Oil Pumps, including Spare Pump, No. and size **—**
 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 **Engine Room with one 8 1/2" dia. Boiler Room with two 8 1/2" dia.**
 In Pump Room **—** In Holds, &c. **no. 2 Hold two 8 3/4" dia. no. 4 Hold two 8 3/4" dia.**

Main Water Circulating Pump Direct Bilge Suctions, No. and size **one, 4" dia** **Independent Power Pump Direct Suctions to the Engine Room Bilges,**
 No. and size **one, 4" 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 Sea Connections fitted direct on the skin of the ship **yes** Are they fitted with Valves or Cocks **yes**
 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 **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 pass through the bunkers **Wood bilge suction** How are they protected **heavy timber**
 What pipes pass through the deep tanks **please see Link Rpt.** Have they been tested as per Rule **—**
 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 **—** Is it fitted with a watertight door **—** worked from **—**

MAIN BOILERS, &c.—(Letter for record **S.**) Total Heating Surface of Boilers **2506 sq. ft.**
 Is Forced Draft fitted **yes** No. and Description of Boilers **two multi-tubular cylindrical** Working Pressure **220 lbs.**
IS A REPORT ON MAIN BOILERS NOW FORWARDED? **yes**
IS A DONKEY BOILER FITTED? **no** If so, is a report now forwarded? **—**
 Is the donkey boiler intended to be used for domestic purposes only **—** Retained for other vessel
PLANS. Are approved plans forwarded herewith for Shafting **18/4/36** Main Boilers. Auxiliary Boilers. Donkey Boilers.
 (If not state date of approval)
 Superheaters General Pumping Arrangements Oil fuel Burning Piping Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied **yes.**

State the principal additional spare gear supplied

one C.I. Propeller for this and sister vessel. (for this 9 sister vessel)

one bottom end bearing.

one top end bearing.

one set of valves for the ballast, the general service & the circulating pump.

one set of high pressure piston packing.

one valve of each size with spring rollers for poppet gear.

one spindle & nut for poppet gear.

one set air pump valves.

12 Bilge Tank stoppers.

The foregoing is a correct description,
FOR THE NORTH EASTERN MARINE ENGINEERING CO. LD.Archd. P. Perry.
MANAGER

Manufacturer.



© 2020

Lloyd's Register
Foundation

007722-007730-0016

Dates of Survey while building
During progress of work in shops - - 1936 Dec. 3, 16, 18, 1937 Feb. 12, 17, 18, 23, 24, 25, 31, Apr. 6, 8, 12, 14, 15, 16, 19, 21, 22, 23, 26, 27, 28, 29, 30, May. 4, 5, 6, 7, 10, 11, 13, 15, 18, 19, 20, 21, 24, 25, 27, 28, 31, June 1, 2, 3, 7, 8, 9, 11, 14, 15, 16, 18, 22, 25, 28, 30
During erection on board vessel - - July 1, 2, 5, 6, 7, 8, 9, 10, 12, 13, 15, 19, 20
Total No. of visits 69.

Dates of Examination of principal parts—Cylinders 17/5/37 Poppets 16/6/37 Slides 15/6/37 Covers 15/6/37
Pistons 7/6/37 Piston Rods 7/6/37 Connecting rods 20/5/37
Crank shaft 18/5/37 Thrust shaft 28/5/37 Intermediate shafts —
Tube shaft — Screw shaft 3/6/37 Propeller 22/6/37
Stern tube 3/6/37 Engine and boiler seatings 2/6/37 (Lift) Engines holding down bolts 7/7/37
Completion of fitting sea connections 10/6/37 (Lift)
Completion of pumping arrangements 13/7/37 Boilers fixed 2/7/37 Engines tried under steam 13/7/37
Main boiler safety valves adjusted 13/7/37 Thickness of adjusting washers Standard: 1/4", 5/16", 7/32"
Crank shaft material Steel Identification Mark 9245 Thrust shaft material Steel Identification Mark 9442
Intermediate shafts, material — Identification Marks — Tube shaft, material — Identification Mark —
Screw shaft, material Steel Identification Mark 9442 Steam Pipes, material Steel Test pressure 660 lbs Date of Test 25, 8/7/37
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 the use of oil as fuel been complied with ✓
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo No If so, have the requirements of the Rules been complied with ✓
If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with No
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 in accordance with the approved plans, Secretary's letters and the requirements of the Rules. Workmanship and materials. The machinery has been efficiently fitted on board and tried under working conditions in accordance with the requirements of the Rules and is eligible, in my opinion for

Notation: + L.M.C. 7.37, CL.

The amount of Entry Fee ... £ 3 : - : When applied for, 24 JULY 1937
Special ... £ 44 : - :
Donkey Boiler Fee ... £ : : When received, 31 JULY 1937
Travelling Expenses (if any) £ : :
L.R. Home

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute WED 4 AUG 1937

Assigned + LMC 7.37 Spt FD CH OG



© 2020

Lloyd's Register Foundation