

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

1 JAN 1943

Date of writing Report 14 Dec 1942 When handed in at Local Office 14 Dec 1942 Port of SUNDERLAND.
 No. in Survey held at SUNDERLAND. Date, First Survey July 2 Last Survey Dec 8 1942
 Reg. Book. on the 1/2 " Shistlemuir " (Number of Visits 68) Tons { Gross 7237
 Net 4293
 Built at Sunderland By whom built J. L. Thompson & Sons, Ltd. Yard No. 622 When built 1942
 Engines made at do By whom made N. E. Mas. Eng. Co. (1938), Ltd Engine No. 4028 When made do
 Boilers made at do By whom made do Boiler No. do When made do
 Registered Horse Power 509 Owners Allen, Black & Co. Port belonging to Sunderland
 Nom. Horse Power as per Rule 510 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes
 Trade for which Vessel is intended General

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute
 Dia. of Cylinders 24 1/2", 39", 70" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 14.0" Crank pin dia. 14 3/4" Crank webs Mid. length breadth shrunk Thickness parallel to axis 9 7/8" & 8 3/4"
 as fitted 14 1/4" Mid. length thickness shrunk Thickness around eye-hole 6 9/16" & 6 3/8"
 Intermediate Shafts, diameter as per Rule 13.34" Thrust shaft, diameter at collars as per Rule 14"
 as fitted 13 5/8" as fitted 14 1/4"
 Tube Shafts, diameter as per Rule 14.83" Screw Shaft, diameter as per Rule 15 1/4" Is the { tube } shaft filled with a continuous liner { yes
 as fitted 14.83" as fitted 15 1/4" { screw }
 Bronze Liners, thickness in way of bushes as per Rule 24.18/32" Thickness between bushes as per Rule 18.12/32" Is the after end of the liner made watertight in the
 as fitted 25/32", 26/32" as fitted 21/32" 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 no If so, state type — Length of Bearing in Stern Bush next to and supporting propeller 5' 1"
 Propeller, dia. 18' 0" Pitch 15' 9" No. of Blades 4 Material C.I. whether Moveable not Total Developed Surface 117 sq. feet
 Feed Pumps worked from the Main Engines, No. — Diameter — Stroke — Can one be overhauled while the other is at work —
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 4" Stroke 27" Can one be overhauled while the other is at work yes
 Feed Pumps { No. and size 2, 9 1/2" x 7" x 21" Pumps connected to the { No. and size 1, 9 1/2" x 7" x 21" & 1, 10 1/2" x 13" x 24"
 { How driven Steam Main Bilge Line { How driven Steam
 Ballast Pumps, No. and size 1, 10 1/2" x 13" x 24" 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 Eng. Rm. 3 @ 3" dia. Boiler Rm. none Thrust room 1 @ 1 1/2" dia
 In Pump Room — In Holds, &c. 2 @ 3" dia. in each of holds nos. 1, 2, 3, 4, 5
Nos. 1 @ 4" dia; Tunnel 1 @ 2 1/2" dia.; Cross bunker 2 @ 3" dia.; Deep tank 2 @ 3" dia.
 Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 9" dia Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 1 @ 5" dia. & 1 @ 3" dia. port 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 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 pass through the bunkers ford bilge suction How are they protected bilge ladders
 What pipes pass through the deep tanks — 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 yes Is it fitted with a watertight door no worked from —

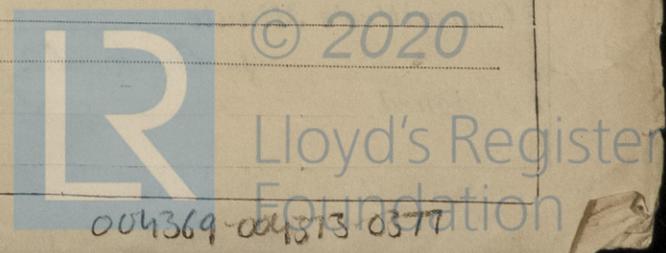
MAIN BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 7248 ft²
 Which Boilers are fitted with Forced Draft all Which Boilers are fitted with Superheaters none
 No. and Description of Boilers 3 S.E. Cylindrical Working Pressure 220 lb.
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes
 IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? —
 Can the donkey boiler be used for domestic purposes only —
PLANS. Are approved plans forwarded herewith for Shafting 3/7/42 Main Boilers 20/3/42 Auxiliary Boilers — Donkey Boilers —
 (If not state date of approval)
 Superheaters — General Pumping Arrangements 20/4/42 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 —

The foregoing is a correct description.
 THE NORTH EASTERN MARINE ENGINEERING CO. (1938) LTD.

J. M. Hubert
 RESIDENT MANAGER.

Manufacturer.



1942. July. 2, 3, 8, 9, 13, 15, 16, 20, 21, 23. Aug. 4, 5, 6, 7, 8, 10, 12, 13, 17, 19, 20, 24, 25, 27
 28, 31. Sep. 1, 2, 3, 4, 7, 9, 11, 14, 15, 16, 17, 18, 21, 22, 23, 24, 25, 28, 29, 30. Oct. 3, 5, 8, 10, 12, 19, 21, 22,
 23, 24, 26, 27, 28, 30. Nov. 2, 9, 10, 18. Dec. 4, 8

Dates of Survey while building
 During progress of work in shops --
 During erection on board vessel --
 Total No. of visits 68

Dates of Examination of principal parts—Cylinders 4, 9 & 11/9/42. Slides 29/9/42. Covers 11/9/42.
 Pistons 16/9/42. Piston Rods 16/9/42. Connecting rods 22/9/42.
 Crank shaft 14/9/42. Thrust shaft 14/9/42. Intermediate shafts 23/10/42.
 Tube shaft —. Screw shaft 3/10/42. Propeller 5/10/42.
 Stern tube 3/10/42. Engine and boiler seatings 21/9/42. Engines holding down bolts 9/11/42.
 Completion of fitting sea connections 30/9/42.
 Completion of pumping arrangements 4/12/42. Boilers fixed 18/11/42. Engines tried under steam 18/11/42 & 8/12/42.
 Main boiler safety valves adjusted 18/11/42. Thickness of adjusting washers Port 3/8". Centre 3/8" dia. 13/32" port. Stbd 13/32".
 Crank shaft material Steel Identification Mark Single 8411. Double 8409. Thrust shaft material Steel Identification Mark 8321.
 Intermediate shafts, material Steel Identification Marks 8323, 4, 5, 6, 7, 8, 9. Tube shaft, material — Identification Mark —
 Screw shaft, material Steel Identification Mark 8322. Steam Pipes, material Steel Test pressure 660 lb Date of Test 22/10/42 to 3/11/42
 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 Not required.
 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 are good.

The machinery has been efficiently fitted on board and tried under working conditions with satisfactory results and is eligible, in my opinion, for the

NOTATION + L.M.C. 12.42, C.L., 3.S.B. 220 lb. F.D.

L.R. Home

The amount of Entry Fee ... £ 6 : 0 :
 Special ... £ 100 : 9 :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 4 DEC 1942
 When received, 19

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FEB. 8 JAN 1943
 Assigned + L.M.C. 12.42
 J.D., L.



Certificate to be sent to SUNDERLAND.

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