

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

14 JUN 1929

Date of writing Report 1st June 1929 When handed in at Local Office 11.6.1929 Port of West Hartlepool
 No. in Survey held at West Hartlepool Date, First Survey 26th June 1928 Last Survey 6th June 1929
 Reg. Book. 89602 on the S.S. "CITY OF DIEPPE" (Number of Visits 153.)
 Built at West Hartlepool By whom built Wm Gray & Co Ltd Yard No. 1000 Tons { Gross 1445
 Engines made at West Hartlepool By whom made Central Marine Engine No. 1000 when made 1929
 Boilers made at ditto By whom made Engine Works Boiler No. 1000 when made 1929
 Registered Horse Power 1088. Owners Ellerman Lines Ltd Port belonging to Glasgow
 Nom. Horse Power as per Rule 1088. Is Refrigerating Machinery fitted for cargo purposes Yes Is Electric Light fitted Yes
 Trade for which Vessel is intended Ocean going

ENGINES, &c.—Description of Engines. Quadruple expansion & exhaust turbine Revs. per minute 90
 Dia. of Cylinders 26 1/2 - 38 1/2 - 54 1/2 - 79 1/2 Length of Stroke 54" No. of Cylinders 4 No. of Cranks 4
 Crank shaft, dia. of journals as per Rule 16 1/2" Crank pin dia. 16 1/2" Crank webs Mid. length breadth 25" Thickness parallel to axis 10 1/8"
 as fitted 16 1/2" Mid. length thickness 10 1/8" shrunk Thickness around eye-hole 7 1/2"
 Intermediate Shafts, diameter as per Rule 16 7/8" Thrust shaft, diameter at collars as per Rule 16.13
 as fitted 16 7/8" as fitted 16.77 (426 mm)
 Tube Shafts, diameter as per Rule 18.02" Is the tube shaft fitted with a continuous liner Yes
 as fitted 18 1/4" as fitted 18 1/4"
 Bronze Liners, thickness in way of bushes as per Rule .851 Thickness between bushes as per Rule .64"
 as fitted 3/8" as fitted 3/4" 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 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 6'-4"
 Propeller dia. 19'-0" Pitch 16'-9" No. of Blades 4 Material Bronze whether Moveable Yes Total Developed Surface 135 sq. feet
 Feed Pumps worked from the Main Engines, No. 1 Diameter 5 1/4" Stroke 27" Can one be overhauled while the other is at work yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 5 1/4" Stroke 27" Can one be overhauled while the other is at work yes
 Feed Pumps { No. and size 2 10 1/2 x 13 1/2 x 24 1/2 1 9 1/2 x 7 x 21 Pumps connected to the { No. and size 2 5 1/4 x 27" 1 9 x 10 1/2 x 10 duplex
 How driven Steam 1 duplex 10 1/2 x 10 Main Bilge Line (How driven Steam)
 Ballast Pumps, No. and size 1 9 1/2 x 10 1/2 duplex Lubricating Oil Pumps, including Spare Pump, No. and size 2 9 1/2 x 11 1/2 x 21"
 Are two independent means arranged for circulating water through the Oil Cooler no Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room 6 of 3" dia. 2 of 2" in oil wells. Tunnel 1 of 2 1/2"
 In Holds, &c. No 1 2 of 3" dia. No 2 2 of 4" No 3 2 of 4" No 4 2 of 3" No 5 2 of 3" dia
Lower deep tanks 2 of 3". Upper deep tanks 2 of 3"
 Main Water Circulating Pump Direct Bilge Suctions, No. and size one 1 1/4" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size one 5 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 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 none How are they protected ✓
 What pipes pass through the deep tanks none 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 yes worked from upper deck

MAIN BOILERS, &c.—(Letter for record S.) Total Heating Surface of Boilers 12792 sq. ft
 Is Forced Draft fitted yes No. and Description of Boilers 4 single ended Working Pressure 255 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)
 Superheaters ✓ General Pumping Arrangements yes Oil fuel Burning Piping Arrangements yes

SPARE GEAR. State the articles supplied:—2 bolts & nuts for Con. rods top ends. 2 ditto bottom ends.
2 ditto main bearings 1 set coupling bolts & nuts. 1 set feed & bilge pump valves & seats.
1 H.P. piston rod & rings. 1 set packing ring for 1 1/2 & 2 1/2 M.P. & L.P. pistons. 1 main valve spindle.
1 gland & neck bush for piston rod. 1 ditto for valve spindle. 1 pair crank pin bearings.
1 pair ahead eccentric straps. 2 valves & spindles for main & aux. feed checks. 1 ditto for
seams blow down. 1 ditto main & aux. stop valves. 1 S.V. spring for each boiler. 1 set valves
& seats for hotwell pump, general service pump, harbour feed. ballast & transfer pumps.
For L.P. turbine, 2 pair bearings. 1 set thrust pads. For gearing, 5 pairs of bearings 28 2nd red.
pinion thrust pads. 6 main thrust pads. Springs for turbine closing valve & gear. governor &
safety valve. Cent. circul. pump 1 piston rod. H.P. & L.P. valve spindles. 1 impeller shaft.
1 set crank pin brasses. Various spare parts for fan engine & oil fuel installation.
Bolts, nuts & studs assorted & iron &c.
2 cast iron propeller blades.

The foregoing is a correct description,
 FOR THE CENTRAL MARINE ENGINE WORKS.

(W. Gray & Co. Ltd.)

Manufacturer.

MANAGING DIRECTOR C.M.E.W.

Lloyd's Register
 Foundation

002897-002906-0116

1928.
June 26.28. July 23.24.25.26.27.30. Aug. 1.2.3.12.15.16.17.20.21.23.24.27.28.29.31. Sept. 3.4.7.10.11.12.13.14.17.18.19.21.25.26.27.28. Oct. 1.2.4.5.8.9.10.
During progress of work in shops - - 12.15.16.17.18.19.22.23.24.26.29. Nov. 2.7.8.9.12.15.16.19.21.26.28.29.30. Dec. 3.4.5.6.7.8.11.12.13.17.20.27. Jan. 2.7.9.10.11.23.24.28.30. Feb. 4.6.8.11.12.
Dates of Survey while building During erection on board vessel - - 15.18.20.22.24.27.28. Mar. 1.4.5.7.8.11.12.14.15.18.19.20.21.22.25.26.27.28. Apr. 3.4.5.8.9.10.11.15.16.19.22.23.25.28.30. May. 7.8.10.11.13.14.15.
Total No. of visits 153.

Dates of Examination of principal parts—Cylinders 23.7.28—12.10.28 Slides 1.10.28—18.10.28 Covers 24.7.28—27.8.28.
Pistons 15.8.28—24.10.28 Piston Rods 24.7.28—10.9.28 Connecting rods 26.6.28—15.10.28
Crank shaft 24.7.28—28.9.28 Thrust shaft 11.1.29 (Newcastle) Intermediate shafts 4.10.28—11.12.28
Tube shaft ✓ Screw shaft 5.10.28—13.12.28 Propeller 2.11.28—16.1.29
Stern tube 17.12.28—18.2.29. Engine and boiler seatings 24.1.29—27.2.29 Engines holding down bolts 8.3.29—11.3.29.
Completion of fitting sea connections 10.10.28—24.1.29.
Completion of pumping arrangements 16.5.29 Boilers fixed 11.3.29 Engines tried under steam 6.6.29
Main boiler safety valves adjusted 25.5.29 Thickness of adjusting washers $F \frac{7}{16} S \frac{1}{4}$ $P \frac{5}{16} S \frac{5}{16}$ $C \frac{5}{16} S \frac{1}{2}$ $P \frac{5}{16} S \frac{1}{2}$ $S \frac{5}{16}$
Crank shaft material S.M. Ing. Steel Identification Mark 6437 H. Thrust shaft material S.M. S.S. Identification Mark 5910 D
Intermediate shafts, material S.M. S.S. Identification Marks 8217. 8218. 8219 Tube shaft, material ✓ Identification Mark L
Screw shaft, material S.M. S.S. Identification Mark 4838 MB Steam Pipes, material Steel Test pressure 765 lb Date of Test 29.11.28
Is an installation fitted for burning oil fuel yes Is the flash point of the oil to be used over 150°F. yes
Have the requirements of the Rules for the use of oil as fuel been complied with yes
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo yes If so, have the requirements of the Rules been complied with yes
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.)
A low pressure exhaust steam turbine has been fitted, for particulars see Newcastle report No 83770.

This vessel's machinery has been built and installed under Special Survey. The materials and workmanship are good and efficient.
On completion it was tried under full working condition at sea, and is now eligible to have the notation
L.M.C. 6.29.

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

The amount of Entry Fee ... £ 6 : 0 : 0 When applied for, 13.6.19
Special Charge at Newcastle ... £ 4 : 0 : 0 When received, 11.7.19
Donkey Boiler Fee ... £ : : :
Travelling Expenses (if any) £ : : :
Committee's Minute
Assigned
+ L.M.C. 6.29
R.D. Shilston & R. J. Mackintosh
Engineer Surveyor to Lloyd's Register of Shipping.
TUE 25 JUN 1929
Lloyd's Register Foundation