

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 3 MAY 1928

Date of writing Report 2. 5. 1928 When handed in at Local Office 2. 5. 1928 Port of MIDDLESBROUGH.
 No. in Survey held at STOCKTON. Date, First Survey 24. 2. 1927 Last Survey 28. 4. 1928
 Reg. Book. 654 on the se. "LLANDILO" (Number of Visits 35)
 Built at Sunderland. By whom built Bartlam & Sons Ltd. Yard No. 262. Tons ^{Gross} _{Net} When built 1928.
 Engines made at Stockton By whom made Blair Co. (1926) Ltd Engine No. 1969. when made 1928.
 Boilers made at do. By whom made do. Boiler No. 1969. when made 1928.
 Registered Horse Power Owners Gwenllian S.S. Co. Ltd. Port belonging to London.
 Nom. Horse Power as per Rule 460.4. Is Refrigerating Machinery fitted for cargo purposes no. Is Electric Light fitted Yes.
 Trade for which Vessel is intended

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute 62.
 Dia. of Cylinders 27. 44 1/2. 73. Length of Stroke 48. No. of Cylinders 3. No. of Cranks 3.
 Crank shaft, dia. of journals as per Rule 13.86. Crank pin dia. 15. Crank webs Mid. length breadth 2. 0 1/2. Thickness parallel to axis 9 1/2.
as fitted 14 1/2. Mid. length thickness 9 1/4. Thickness around eye-hole 6 3/8.
 Intermediate Shafts, diameter as per Rule 13.2. Thrust shaft, diameter at collars as per Rule 13.86.
as fitted 14. as fitted 15.
 Tube Shafts, diameter as per Rule 14.7. Screw Shaft, diameter as per Rule 14.7. Is the tube shaft fitted with a continuous liner Yes.
as fitted 14 1/4. as fitted 16 1/4. screw
 Bronze Liners, thickness in way of bushes as per Rule 3/4. Thickness between bushes as per Rule 3/16. Is the after end of the liner made watertight in the
as fitted 3/4. as fitted 3/16. 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 Yes.
 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 Yes.
 If two liners are fitted, is the shaft lapped or protected between the liners Yes. Is an approved Oil Gland or other appliance fitted at the after
 end of the tube shaft no. Length of Bearing in Stern Bush next to and supporting propeller 5'-6" ✓
 Propeller, dia. 18'-0" ✓ Pitch 18'-0" ✓ No. of Blades 4 Material Bronze whether Movable no. Total Developed Surface 102. sq. feet
 Feed Pumps worked from the Main Engines, No. 2 ✓ Diameter 3 1/2" ✓ Stroke 34" ✓ Can one be overhauled while the other is at work Yes ✓
 Bilge Pumps worked from the Main Engines, No. 2 ✓ Diameter 5" ✓ Stroke 34" ✓ Can one be overhauled while the other is at work Yes ✓
 Feed Pumps { No. and size 2-7 1/2" x 5 1/2" x 8" Mumpford Duplex Pumps connected to the { No. and size 1-8" x 9" x 8" Laymont Duplex
 { How driven 1-6" x 4" x 6" Steam Main Bilge Line { How driven Steam
 Ballast Pumps, No. and size 1-10" x 12" x 12" ✓ 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 3-3" ✓ 1-2 1/4" ✓ in Tunnel well.
 In Holds, &c. Nº 1: 2-3" ✓ Nº 2: 2-3 1/2" ✓ Nº 3: 2-3" ✓ Nº 4: 2-3" ✓

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-8" ✓ Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 1-4 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 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 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 Forward Bilge Suctions ✓ How are they protected wood casings ✓
 What pipes pass through the deep tanks 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 E.R. Top Platform ✓

MAIN BOILERS, &c.—(Letter for record S.) Total Heating Surface of Boilers 7917 1/2 ✓
 Is Forced Draft fitted no. No. and Description of Boilers 3 S.B. ✓ Working Pressure 180lbs. ✓
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes ✓
 IS A DONKEY BOILER FITTED? Yes ✓ If so, is a report now forwarded? Already sent by Sunderland ✓
 PLANS. Are approved plans forwarded herewith for Shafting Yes ✓ Sent with Ind. Rpt. 0217. Auxiliary Boilers Donkey Boilers do. ✓
 (If not state date of approval) General Pumping Arrangements 1.6.27. ✓ Oil fuel Burning Piping Arrangements

SPARE GEAR. State the articles supplied:— As per Rules + 1 tail shaft, 1 propeller, 4 main check valves, 4 donkey check valves, 5 air pump valves, 2 feed donkey pump valves, 1 impeller & shaft for circulating pump, 9 piston bolts and nuts, quantity glands & cover studs & nuts, boiler and condenser tubes, condenser ferrules, firebars and furnace door baffle. ✓

IF THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THE MARGIN.

The foregoing is a correct description,
For BLAIR & CO. (1926) LIMITED.

H. J. Chambers
SECRETARY.

Manufacturer.



© 2019
Lloyd's Register
Foundation

1927. Dec 24. Apr 8. Jul 20. Oct 10. 14. 17. 19. 26. 28. Nov 25. Dec 20. 23. 29. 30. 1928. Jan 4. 10. 11. 18. 24. 30. 31.

During progress of work in shops - - - Dec 6. 10. 16. 22. 24. 25. Mar 1. 7. 15. 16. 17. 20. 21. Apr 28.

Dates of Survey while building

During erection on board vessel - - -

Total No. of visits. 35.

Dates of Examination of principal parts—Cylinders 18. 1. 28. Slides 18. 1. 28. Covers 18. 1. 28.

Pistons 18. 1. 28. Piston Rods 4. 1. 28. Connecting rods 4. 1. 28.

Crank shaft 31. 1. 28. Thrust shaft 31. 1. 28. Intermediate shafts 22. 2. 28.

Tube shaft ✓ Screw shaft 22. 2. 28. Propeller 22. 2. 28.

Stern tube 4. 2. 28. Engine and boiler seatings 4. 2. 28. Engines holding down bolts 15. 3. 28.

Completion of fitting sea connections 4. 2. 28.

Completion of pumping arrangements 21. 3. 28. Boilers fixed 15. 3. 28. Engines tried under steam 28. 4. 28.

Main boiler safety valves adjusted 21. 3. 28. Thickness of adjusting washers Port $\frac{1}{4}$ p. $\frac{9}{32}$ S; Centre bolt $\frac{5}{16}$; Star $\frac{1}{4}$ p. $\frac{3}{8}$ S.

Crank shaft material Steel Identification Mark LLOYDS No 5454 31. 1. 28 PTB. Thrust shaft material Steel Identification Mark LLOYDS No 5454 31. 1. 28 PTB.

Intermediate shafts, material Steel Identification Marks LLOYDS No 5322 22. 2. 28 PTB. Tube shaft, material ✓ Identification Mark ✓

Screw shaft, material Iron Identification Mark LLOYDS No 7484 M. 22. 2. 28 PTB. Steam Pipes, material Copper. Test pressure 360 lbs. Date of Test 16. 3. 28.

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 'LLANOVER' Thal. Rpt 13217.

General Remarks (State quality of workmanship, opinions as to class, &c.)

The materials and workmanship are good.

This machinery has been built under special survey in accordance with the Rules and Approved Plans, securely fitted aboard and tested with satisfactory results under working conditions and is, in my opinion, suitable for classification with Recd + L.M.C. H. 28.

It is submitted that this vessel is eligible for THE RECORD. + LMC 4.28 Ct.

P.M. 5/5/28.
P.

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 ... £ 5-0-0 When applied for,
Special ... £ 94-0-0 2. 5. 1928.
Donkey Boiler Fee ... £ See Separate Rpt. When received,
Travelling Expenses (if any) £ 4-5-28

P. J. Man.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
Assigned
TUES. 8 MAY 1928
+ L.M.C. 4:28 Ct.