

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

No. 30637

15 MAY 1931

Date of writing Report 19 When handed in at Local Office 14 MAY 1931 Port of Funderland.
 No. in Survey held at Funderland. Date, First Survey 12 Dec '30 Last Survey 4 May 1931
 Reg. Book. (Number of Visits 63)
 on the S.S. BENEFICENT
 Built at Funderland By whom built Wm Pickensill & Sons Yard No. 231 Tons { Gross 2944
 Engines made at Funderland By whom made George Rank Ltd Engine No. 1192 when made 1931 Net 1674
 Boilers made at Funderland By whom made do Boiler No. 1192 when made 1931
 Registered Horse Power _____ Owners Westall Steamship Co Ltd. Port belonging to Funderland.
 Nom. Horse Power as per Rule 277 1/2 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 Revs. per minute 70
 Dia. of Cylinders 22 1/2, 37, 61 Length of Stroke 47 No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 11.739 Crank pin dia. 12 1/2 Crank webs Mid. length breadth 18 1/2 Thickness parallel to axis 7 3/8
 as fitted 12 1/4 Mid. length thickness 7 3/8 shrunk Thickness around eye-hole 5 7/8
 Intermediate Shafts, diameter as per Rule 11.18 Thrust shaft, diameter at collars as per Rule 11.739
 as fitted 12 1/4 as fitted 12 1/4
 Tube Shafts, diameter as per Rule _____ Screw Shaft, diameter as per Rule 12.503 Is the tube shaft fitted with a continuous liner { Yes }
 as fitted _____ as fitted 12 1/8 Is the screw shaft fitted with a continuous liner { _____ }
 Bronze Liners, thickness in way of bushes as per Rule _____ Thickness between bushes as per Rule _____ 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 Length of Bearing in Stern Bush next to and supporting propeller 4-2 1/2
 Propeller, dia 15-10 1/2 Pitch 15-6 No. of Blades 4 Material C. Iron whether Moveable No Total Developed Surface 79 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 3 Stroke 26 Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 3 Stroke 26 Can one be overhauled while the other is at work Yes
 Feed Pumps { No. and size One 7 1/2 x 5 x 6 Pumps connected to the Main Bilge Line { No. and size Two 9 x 10 x 10 }
 How driven Steam How driven Steam
 Ballast Pumps, No. and size Two 9 x 10 x 10 Lubricating Oil Pumps, including Spare Pump, No. and size None
 Are two independent means arranged for circulating water through the Oil Cooler None Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room Two 2 3/4
 In Holds, &c. No 1 2 @ 2 1/2, No 2, 2 @ 2 1/2 After Hold 2 @ 3

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 5 1/2 **Independent Power Pump Direct Suctions to the Engine Room Bilges,**
 No. and size 1 @ 4 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 None How are they protected _____
 What pipes pass through the deep tanks Lead suction 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 _____ Is it fitted with a watertight door _____ worked from _____

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 4488
 Is Forced Draft fitted No No. and Description of Boilers Two Bellmouth S.E. Working Pressure 180 lbs.
IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes 2SB
IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? _____

PLANS. Are approved plans forwarded herewith for Shafting 18/10/30 Main Boilers Yes Auxiliary Boilers _____ Donkey Boilers _____
 (If not state date of approval)
 Superheaters _____ General Pumping Arrangements Yes Oil fuel Burning Piping Arrangements _____

SPARE GEAR. State the articles supplied:—2 connecting Rod top end, Two connecting rod bottom end bolts & nuts, 2 main bearing bolts, 1 set coupling bolts, 1 set of feed & bilge pump valves, a quantity of assorted bolts & nuts & iron of various sizes, 1 C.I. Poppet, 6 junk iron bolts & nuts, 1 set each of valves for air circulation & ballast pumps, 6 condenser tubes & boiler tubes 2 safety valve springs, 1 main, 1 aux. Feed check valve.

The foregoing is a correct description,

George Clark

Manufacturer.



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Lloyd's Register Foundation

W342-0042

1930. Dec. 12, 19, 28, 31. 1931. Jan. 5, 7, 8, 12, 13, 14, 15, 16, 19, 20, 21, 22, 23, 24, 27, 30, Feb. 2, 3, 4, 5, 6, 9, 10, 12, 13, 16, 17, 18, 19, 20, 23, 24, 25, 27. Mar. 5, 9, 10, 12, 13, 16, 17, 18, 19, 23, 24. Apr. 1, 2, 9, 10, 14, 15, 16, 17, 20, 21, 22, 23, 24, 27, 28, 29, 30. May 1, 4

Dates of Surcey 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 17/2/31 Slides 13/1/31 Covers 22/1/31

Pistons 21/1/31 Piston Rods 8/1/31 Connecting rods 13/2/31

Crank shaft 7/1/31 Thrust shaft 9/4/31 Intermediate shafts 9/4/31

Tube shaft - Screw shaft 9/4/31 Propeller 13/3/31

Stern tube 18/3/31 Engine and boiler seatings 16/4/31 Engines holding down bolts 24/4/31

Completion of fitting sea connections 14/4/31

Completion of pumping arrangements 30/4/31 Boilers fixed 27/4/31 Engines tried under steam 28/4/31

Main boiler safety valves adjusted 28/4/31 Thickness of adjusting washers P 7/16 S 5/16 PART BOILER STD BOILER P 7/16 S 5/16

Crank shaft material I. STEEL Identification Mark 4994 Thrust shaft material I. STEEL Identification Mark 2682

Intermediate shafts, material I. STEEL Identification Marks 8174 Tube shaft, material - Identification Mark -

Screw shaft, material I. STEEL Identification Mark 5062 Steam Pipes, material S. D. STEEL Test pressure 540 Date of Test 20/4/31

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 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. The machinery of this vessel has been built under special survey & the workmanship & materials are good. On completion the engines & boilers were satisfactorily fitted in the vessel & tried under a full head of steam. The machinery throughout is now in a good & efficient condition & eligible in my opinion to have the notation LMC-5-31 marked in Red in the Society Register Book also Tail Shaft C.L.

Certificate to be sent to LLOYD'S REGISTER

The amount of Entry Fee ... £ 4 : : When applied for, 3 MAY 1931

Special ... £ 66-11-0 : : When received,

Donkey Boiler Fee ... £ : : 24.10.1931

Travelling Expenses (if any) £ : : C.L.

Charlotte
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute WED. 27 MAY 31 TUE. 20 OCT 1931

Assigned + L.M.C. 5, 31 C.L.

CERTIFICATE WRITTEN.