

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 19 When handed in at Local Office - 7 MAY 1928 Port of Sunderland 8 MAY 1928

No. in Survey held at Sunderland Date, First Survey 4 May 27 Last Survey 1st May 1928
Reg. Book. (Number of Visits 49)

on the S.S. "CEDARTREE" Tons { Gross 1557 Net 824

Built at Sunderland By whom built J. Brown Yard No. 180 When built 1928

Engines made at do By whom made George Rank Ltd. Engine No. 1152 when made 1928

Boilers made at do By whom made do Boiler No. 1152 when made 1928

Registered Horse Power Owners The Tree Steamship Co. Ltd. Port belonging to Sunderland

Nom. Horse Power as per Rule 193 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 71

Dia. of Cylinders 19"-31"-51" Length of Stroke 36" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals as per Rule 9.95" Crank pin dia. 10" Crank webs Mid. length breadth 15" Thickness parallel to axis 6 3/8"
as fitted 15" Mid. length thickness 6 3/8" shrunk Thickness around eye-hole 4 5/8"

Intermediate Shafts, diameter as per Rule 9.477" Thrust shaft, diameter at collars as per Rule 9.95"
as fitted 9 1/2" as fitted 10"

Tube Shafts, diameter as per Rule 10.643" Is the tube shaft fitted with a continuous liner Yes
as fitted 10 1/8" as fitted 10 1/8" Is the screw shaft fitted with a continuous liner Yes

Bronze Liners, thickness in way of bushes as per Rule 32" Thickness between bushes as per Rule 32" Is the after end of the liner made watertight in the propeller boss Yes
as fitted 32" as fitted 32" 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 Yes

Propeller, dia. 13'-9" Pitch 14'-6" No. of Blades 4 Material Cast Iron whether Moveable No Total Developed Surface 58 sq. feet

Feed Pumps worked from the Main Engines, No. 2 Diameter 2 3/4" Stroke 22" 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 22" Can one be overhauled while the other is at work Yes

Feed Pumps { No. and size Two 5 1/4" x 3 1/2" x 5" Pumps connected to the { No. and size Two 7" x 8" x 8"
How driven Steam Main Bilge Line How driven Steam

Ballast Pumps, No. and size Two 7" x 8" x 8" Lubricating Oil Pumps, including Spare Pump, No. and size —

Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 3 @ 2 1/2" & 1 @ 3 1/2" @ 1 @ 2 1/2" TUNNEL WELL

In Holds, &c. FORE HOLD 2 @ 2 1/4" AFT HOLD 3 @ 2 1/2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 4" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 3 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 None How are they protected —

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 Eng. Rm. gratings

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 32684

Is Forced Draft fitted No No. and Description of Boilers Two Cyl. Mult. S.E. 2SB Working Pressure 180 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 12/4/27 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 top end & 2 bottom end bolts & nuts, 2 main bearings bolts & nuts, 1 set coupling bolts & nuts, 2 valves for feed & 2 for bilge pumps, 3 condenser tubes & 3 boiler tubes, 2 safety valve springs, a quantity of assorted bolts & nuts & iron of various sizes, 1 main & 1 aux. check valve, 1 set metallic packing for each piston rod and one C. propeller.

The foregoing is a correct description,

FOR GEORGE CLARK LIMITED.

W.S. Spence Manufacturer.



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1927. May. 4. 13. 20. June. 1. 9. July. 14. 22. 27. Aug. 17. 25. Sep. 1. 8. 9. 15. 26. 30. Oct. 5. 7. 10. 13.
 During progress of work in shops - - 18. 24. 25. Nov. 15. 22. Dec. 2. 14. 16. 29. 1928. Jan. 14. 19. 24. Feb. 9. 10. 23. Mar. 2. 7. 9. 22. 29. 30.
 Dates of Survey while building During erection on board vessel - - - 5. 12. 13. 14. 16. 18. May. 1.
 Total No. of visits 49

Dates of Examination of principal parts—Cylinders 9/9/27 Slides 27/7/27 Covers 18/10/27
 Pistons 25/8/27 Piston Rods 1/9/27 Connecting rods 8/9/27
 Crank shaft 30/9/27 Thrust shaft 26/9/27 Intermediate shafts 25/10/27
 Tube shaft - Screw shaft 8/9/27 Propeller 7/10/27
 Stern tube 7/10/27 Engine and boiler seatings 13/4/28 Engines holding down bolts 16/4/28
 Completion of fitting sea connections 29/3/28
 Completion of pumping arrangements 18/4/28 Boilers fixed 13/4/28 Engines tried under steam 18/4/28
 Main boiler safety valves adjusted 18/4/28 Thickness of adjusting washers 7 3/8 5 3/8 7 3/8 5 3/8
 Crank shaft material I. STEEL Identification Mark 1137 Thrust shaft material I. STEEL Identification Mark 8598.
 Intermediate shafts, material I. STEEL Identification Marks 8600, 8593 Tube shaft, material - Identification Mark -
 Screw shaft, material I. STEEL Identification Mark 8594 Steam Pipes, material L.W. STEEL Test pressure 540 LBS Date of Test 16/4/28

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 No ✓ If so, state name of vessel -

General Remarks (State quality of workmanship, opinions as to class, &c. The engines & boilers of this vessel have been built under special survey & the materials & workmanship are good. On completion the machinery was tried under full working conditions with satisfactory results. The machinery throughout is now in a good & efficient condition & eligible in my opinion to have the notation **ELMC 5-28** marked in Red in the Society's Register Book. & T.S.C.L.

It is submitted that this vessel is eligible for THE RECORD. + LMC 5. 28. CL.

J.W.D.
 10/5/28

J. G. G. G.
 Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 3-0-0 When applied for, 7 MAY 1928
 Special ... £ 48-5-0
 Donkey Boiler Fee ... £ : : When received, 10.5.28
 Travelling Expenses (if any) £ : :

Committee's Minute FRI. 11 MAY 1928 ✓
 Assigned + L.M.C. 5.28 CL



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