

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

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Date of writing Report 10 OCT. 1927 When handed in at Local Office 10 OCT. 1927 Port of Sunderland  
 No. in Survey held at Sunderland Date, First Survey 27<sup>th</sup> Apr. '27 Last Survey 6<sup>th</sup> Oct. 1927  
 Reg. Book. on the "LADY OLGA" (Number of Visits At...)  
 Built at Sunderland By whom built J. P. Austin & Co. Ltd Yard No. 312 Tons Gross 1266  
Net 683  
 Engines made at Sunderland By whom made George Rank Ltd. Engine No. 1153 when made 1927  
 Boilers made at do By whom made do Boiler No. 1153 when made 1927  
 Registered Horse Power 156 Owners Gas Light & Coke Co Port belonging to London  
 Nom. Horse Power as per Rule 156 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

**ENGINES, &c.**—Description of Engines Triple expansion  
 Dia. of Cylinders 18-30-49 Length of Stroke 33" Revs. per minute 72 No. of Cylinders 3 No. of Cranks 3  
 Dia. of Crank shaft journals as per rule 9.345" Dia. of Crank pin 9 3/8" Crank webs Mid. length breadth - 14 3/8" Thickness parallel to axis 6"  
as fitted 9 3/8" Mid. length thickness - 6" shrunk Thickness around eye-hole 4 1/2"  
 Diameter of Thrust shaft under collars as per rule 9.345" Diameter of Tunnel shaft as fitted - Diameter of Screw shaft as per rule 9.983" Is the Screw shaft  
as fitted 9 3/8" as fitted - as fitted 10 5/8"  
 fitted with a continuous liner the whole length of the stern tube Yes 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 joints burned No If the liner does not fit tightly at the part  
 between the bearings in the stern tube, is the space charged with plastic material insoluble in water and non-corrosive No  
 If two liners are fitted, is the shaft lapped or protected between the liners No Is an approved appliance fitted at the after end of the shaft to permit  
 of it being efficiently lubricated Yes Length of Stern Bush 3' 4 3/4" Diameter of Propeller 13-0"  
 Pitch of Propeller 13-9" No. of Blades 4 State whether Moveable No Total Surface 53 square feet.  
 No. of Feed Pumps fitted to the Main Engines 2 Diameter of ditto 2 3/4" Stroke 18" Can one be overhauled while the other is at work Yes  
 No. of Bilge Pumps fitted to the Main Engines 2 Diameter of ditto 2 3/4" Stroke 18" Can one be overhauled while the other is at work Yes  
 Total number and size of power driven Feed and Bilge Auxiliary Pumps 1 @ 5 1/2" x 3 1/2" x 5"  
 No. and size of Pumps connected to the Main Bilge Line 1 @ 9" x 11" x 10"  
 No. and size of Ballast Pumps 1 @ 9" x 11" x 10" No. and size of Lubricating Oil Pumps, including Spare Pump -  
 Are two independent means arranged for circulating water through the Oil Cooler No No. and size of suctions connected to both Main Bilge Pumps and Auxiliary  
 Bilge Pumps;—In Engine and Boiler Room 1 @ 2 1/2", 1 @ 3 1/2", 1 @ 5 1/2" diameter and in Holds, &c. 2 @ 2 1/2" No 1, 2 @ 2 1/2" No 2

No. and size of Main Water Circulating Pump Bilge Suctions 1 @ 5" No. and size of Donkey Pump Direct Suctions  
 to the Engine Room Bilges 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 connections with the sea direct on the skin of the ship Yes Are they 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 Discharge Pipes 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 are carried through the bunkers None How are they protected 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 Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door worked from

**MAIN BOILERS, &c.**—(Letter for record S) Total Heating Surface of Boilers 2490 sq  
 Is Forced Draft fitted No No. and Description of Boilers One of 1200 H.P. Working Pressure 180  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes  
 IS A DONKEY BOILER FITTED? Yes If so, is a report now forwarded? Yes  
 PLANS. Are approved plans forwarded herewith for Shafting 28/3/27 Main Boilers Yes Auxiliary Boilers Yes Donkey Boilers Yes  
 (If not state date of approval)  
 General Pumping Arrangements Yes Oil fuel Burning Piping Arrangements Yes

**SPARE GEAR.** State the articles supplied:—2 Connecting Rod Top End & 2 Connecting Rod Bottom End  
bolts & nuts, 2 main bearing bolts, 1 set of coupling bolts, 1 set of feet &  
bilge pump valves. A quantity of assorted bolts & nuts & washers of various  
sizes, 1 C.I. Propeller, 1 set main pump valves, 1 set ballast pump valves,  
1 set feed donkey pump valves, 3 condenser tubes, 6 boiler tubes,  
1 Safety Valve spring, 1 Ring for HP piston, 1 ring for MP piston.

The foregoing is a correct description,  
FOR GEORGE CLARK LIMITED.

W. G. MULL Manufacturer.



1927. Apr. 27, 28. May 2, 9, 12, 13, 17, 20, 23, 27. June 1, 7, 9, 16, 20, 24, 28, 30. July 11, 19, 22, 27.  
 During progress of work in shops --  
 29 Aug. 3, 4, 5, 8, 9, 10, 12, 22, 23, 24. Sep. 1, 6, 12.  
 During erection on board vessel ---  
 Sep. 20, 22, 23, 26, 27, 30. Oct. 6.  
 Total No. of visits 44

Dates of Examination of principal parts - Cylinders 2/5/27 Slides 29/7/27  
 Covers 28/4/27 Pistons 23/5/27 Rods 27/4/27  
 Connecting rods 23/5/27 Crank shaft 20/6/27 Thrust shaft 17/5/27  
 Tunnel shafts ✓ Screw shaft 27/7/27 Propeller 13/5/27  
 Stern tube 13/5/27 Engine and boiler seatings 19/7/27 Engines holding down bolts 23/9/27  
 Completion of pumping arrangements 27/9/27 Boilers fixed 20/9/27 Engines tried under steam 27/9/27  
 Completion of fitting sea connections 12/9/27 Stern tube 12/9/27 Screw shaft and propeller 20/9/27  
 Main boiler safety valves adjusted 27/9/27 Thickness of adjusting washers 9 3/8" 5 5/8"  
 Material of Crank shaft I. STEEL Identification Mark on Do. 2715 J.H.  
 Material of Thrust shaft I. STEEL Identification Mark on Do. 2717 J.H.  
 Material of Tunnel shafts ✓ Identification Marks on Do. ✓  
 Material of Screw shafts I. STEEL Identification Marks on Do. 7570 J.H.  
 Material of Steam Pipes L.W. STEEL Test pressure 540 LBS. ✓ Date of Test 19/6/27 ✓  
 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 S.S. "HOMEFIRE"

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 and workmanship are good. On completion the machinery was tried under a full head of steam after fitting in the vessel. The machinery throughout is now in a good & efficient condition & eligible in my opinion to have the notation ELMC-10-27 marked in Red in the Society's Register Book.

It is submitted that this vessel is eligible for THE RECORD. + LMC 10.27. CL

J.W.D.  
 11/10/27  
 P.

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

The amount of Entry Fee ... £ 3-0-0 When applied for, 8 OCT. 1927  
 Special ... £ 39-0-0  
 Donkey Boiler Fee ... £ : :  
 Travelling Expenses (if any) £ : : 12-10-27

Committee's Minute FRI. 14 OCT 1927  
 Assigned Thurs 10, 27 CL

Certificate to be sent to SUNDERLAND

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

