

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 3 MAY 1926

Date of writing Report 15th May 1926, When handed in at Local Office 15th May 1926 Port of Sunderland
 No. in Survey held at Sunderland Date, First Survey 14 Decr. '25 Last Survey 24 Apr. 1926
 Reg. Book. on the S.S. "ZAPARA" (Number of Visits 26)
 Built at Newcastle By whom built Palmer & Co. Ltd. Yard No. 960 Tons } Gross
 Engines made at Sunderland By whom made MacColl & Pollock Engine No. 349 when made 1926 } Net
 Boilers made at Sunderland By whom made MacColl & Pollock Boiler No. 349 when made 1926
 Registered Horse Power _____ Owners Gulf Refining Co. Port belonging to _____
 Nom. Horse Power as per Rule 192 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Expansion
 Dia. of Cylinders 19"-30"-49" Length of Stroke 36 Revs. per minute 87 No. of Cylinders 3 No. of Cranks 3
 Dia. of Crank shaft journals as per rule 9.892 as fitted 10" Dia. of Crank pin 10" Crank webs Mid. length breadth 14 1/2" Thickness parallel to axis 6 1/2"
 Mid. length thickness 6 1/2" shrunk Thickness around eye-hole 4 1/2"
 Diameter of Thrust shaft under collars as per rule 9.892 as fitted 10" Diameter of Tunnel shaft as per rule 9.42 as fitted 10 1/2" Diameter of Screw shaft as per rule 10.46 as fitted 10 3/4" Is the Screw shaft
 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 _____ 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 _____
 If two liners are fitted, is the shaft lapped or protected between the liners _____ Is an approved appliance fitted at the after end of the shaft to permit
 it being efficiently lubricated _____ Length of Stern Bush 43" Diameter of Propeller 12'-6"
 Pitch of Propeller 12'-4 1/2" No. of Blades 4 State whether Moveable Yes Total Surface 58 square feet.
 No. of Feed Pumps fitted to the Main Engines 2 Diameter of ditto 2 1/4" Stroke 21" 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 1/4" Stroke 21" Can one be overhauled while the other is at work Yes
 Total number and size of power driven Feed and Bilge Auxiliary Pumps Two - 4 1/2" x 5" x 8" Duplex Feed Pumps - One 6" x 4" x 12 1/2" Ballast Pump (Fore)
One 9" x 10" x 10 3/4" Ballast Pump (Aft)
 No. and size of Pumps connected to the Main Bilge Line Fore - One - 6" x 4" x 12 1/2" Bilge and Ballast Pump Aft - One - 9" x 10" x 10 3/4" Bilge & Ballast Pump
 No. and size of Ballast Pumps Aft - One - 9" x 10" x 10 3/4" No. and size of Lubricating Oil Pumps, including Spare Pump _____
 Are two independent means arranged for circulating water through the Oil Cooler _____ No. and size of suction connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room 4 @ 2 3/4" and in Holds, &c. One hold 2 @ 2 1/4"

No. and size of Main Water Circulating Pump Bilge Suctions One @ 5" No. and size of Donkey Pump Direct Suctions _____
 the Engine Room Bilges One @ 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 Below
 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 (None)
 How are they protected _____
 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 Aft Is it fitted with a watertight door _____ worked from _____

MAIN BOILERS, &c.—(Letter for record S.V.) Total Heating Surface of Boilers 3452.8 sq. ft.
 Forced Draft fitted No. No. and Description of Boilers Two - Single Ended Working Pressure 180 lbs. sq. in.
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)
 General Pumping Arrangements Yes - with Newcastle Ship report Oil fuel Burning Piping Arrangements Yes

SPARE GEAR. State the articles supplied:—
 2 Top end bolts and nuts
 2 Bottom end bolts and nuts
 2 Main bearing bolts and nuts
 One set of Coupling bolts
 One set of Feed Pump valves and seats
 One set of Bilge Pump valves and seats.
 Assorted bolts and nuts
 Lot of various sizes
 One set of Piston rings
 1 Spare screw shaft, 2 Propeller blades
 One pair of bottom end brasses
 One piston rod, One eccentric strap
 One feed pump ram, One air pump rod
 One slide rod, One impeller shaft.

The foregoing is a correct description,
PER PRO MACCOLL & POLLOCK LTD

J.H. Pelleng

Manufacturer.



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Lloyd's Register
Foundation

W1641-0214

1925. Dec. 14, 18, 29. 1926. Jan. 7, 19, 29. Feb. 14, 8, 15, 19, 23, 25, 26, 27. March 24, 13, 19
 During progress of work in shops - - -
 Dates of Survey while building
 During erection on board vessel - - -
 Total No. of visits 26

Dates of Examination of principal parts - Cylinders 1-2-26 Slides 19-2-26
 Covers 19-1-26 Pistons 1-2-26 Rods 4-2-26
 Connecting rods 23-2-26 Crank shaft 22-12-25 (Leitch) Thrust shaft 8-2-26
 Tunnel shafts Not so fitted Screw shafts Working 19-2-26 Spare 19-3-26 Propeller 19-3-26
 Stern tube 2-3-26 Engine and boiler seatings 15-4-26 Engines holding down bolts 20-4-26
 Completion of pumping arrangements 20-4-26 Boilers fixed 15-4-26 Engines tried under steam 23-4-26
 Completion of fitting sea connections 29-3-26 (New) Stern tube 12-4-26 Screw shaft and propeller 12-4-26
 Main boiler safety valves adjusted 23-4-26 Thickness of adjusting washers Port Blk $\frac{7}{16}$ " $\frac{9}{16}$ " Star Blk $\frac{3}{8}$ " $\frac{1}{2}$ "
 Material of Crank shaft Ingot Steel Identification Mark on Do. LLOYDS No 1294 A.T.T 22-12-25
 Material of Thrust shaft Ingot Steel Identification Mark on Do. LLOYDS No 1288 G.A 8-2-26
 Material of Tunnel shafts Not so fitted. Identification Marks on Do. WORKING: LLOYDS No 1289 G.A. 19-2-26
 Material of Screw shafts Ingot Steel Identification Marks on Do. SPARE: LLOYDS No 1290 G.A. 19-3-26
 Material of Steam Pipes Solid drawn Copper Test pressure 360 lbs sq. in. Date of Test 25-2-26 & 26-2-26
 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 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 materials and workmanship are good
 The machinery has been constructed under special survey and is eligible in my opinion for classification and the record of +L.M.C 4-26
 Fitted for oil fuel 4-26 F.P. above 150°F. ✓

Machinery has been tried under working conditions and the vessel has returned to Messrs Palmer's yard for completion

It is submitted that this vessel is eligible for THE RECORD, +L.M.C 4-26. C.L.

Fitted for oil fuel 4-26. F.P. above 150°F.

19/5/26
 [Signature]

SUNDERLAND

The amount of Entry Fee ... £ 3 : 0 :
 Special ... £ 48 : 0 :
 Donkey Boiler Fee ... £ : ✓ :
 Travelling Expenses (if any) £ : ✓ :
 When applied for, -1 MAY 1926
 When received, 11.5.26

[Signature] George Anderson
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

+L.M.C 4:26 C.L.
 Fitted for Oil Fuel 4:26 F.P. above 150°F



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