

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 24 JUN 1925

Date of writing Report 5th June 1925 When handed in at Local Office 5th June 1925 Port of Sunderland
 No. in Survey held at Sunderland Date, First Survey 2nd Sep. 24 Last Survey 12th June 1925
 Reg. Book. on the SS "SANDSEND" (Number of Visits 40)
 Built at Sunderland By whom built W. Pickerspill & Sons Ltd Yard No. 214 Tons { Gross 3612.19
 Engines made at Sunderland By whom made G. Clark Ltd Engine No. 1141 when made 1925
 Boilers made at Sunderland By whom made G. Clark Ltd Boiler No. 1141 when made 1925
 Registered Horse Power _____ Owners Roland & Marwood's S.S. Co Ltd Port belonging to Whitley
 Nom. Horse Power as per Rule 315 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES

ENGINES, &c.—Description of Engines Triple
 Dia. of Cylinders 24, 40, 66" Length of Stroke 45" Revs. per minute 60 No. of Cylinders 3 No. of Cranks 3
 Dia. of Crank shaft journals as per rule 12.57" Dia. of Crank pin 13" Crank webs as per rule 19" Mid. length breadth 19" Thickness parallel to axis 7¹⁵/_{16"}
 as fitted 13" Mid. length thickness 7¹⁵/_{16"} shrunk Thickness around eye-hole 5¹/_{2"}
 Diameter of Thrust shaft under collars as per rule 12.57" Diameter of Tunnel shaft as per rule 11.97" Diameter of Screw shaft as per rule 13.38" Is the Screw shaft
 as fitted 13" as fitted 12¹/_{4"} as fitted 14"
 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
 of it being efficiently lubricated ✓ Length of Stern Bush 4-8¹/_{4"} Diameter of Propeller 17-0"

Pitch of Propeller 17-3" No. of Blades 4 State whether Moveable No Total Surface 94.69 square feet.
 No. of Feed Pumps fitted to the Main Engines 2 Diameter of ditto 3" Stroke 26" Can one be overhauled while the other is at work YES
 No. of Bilge Pumps fitted to the Main Engines 2 Diameter of ditto 3¹/_{2"} Stroke 26" Can one be overhauled while the other is at work YES
 Total number and size of power driven Feed and Bilge Auxiliary Pumps 2, 6x8¹/₂x13, 7¹/₂x5x6"
 No. and size of Pumps connected to the Main Bilge Line 1, 9x10x10"
 No. and size of Ballast Pumps 1, 9x10x10" 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 3 @ 2¹/_{2"} and in Holds, &c. No. 1. 2 @ 2³/_{4"}, No. 2. 2 @ 3¹/<sub>4"
No. 3. 2 @ 2³/_{4"}, No. 4. 2 @ 2³/_{4", Tunnel well 1 @ 2¹/_{2"}}</sub>

No. and size of Main Water Circulating Pump Bilge Suctions 1 @ 5¹/_{2"} No. and size of Donkey Pump Direct Suctions
 to the Engine Room Bilges 1 @ 4¹/_{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 ✓
 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 YES worked from Upper Platform

MAIN BOILERS, &c.—(Letter for record (S)) Total Heating Surface of Boilers 4834 f.
 Is Forced Draft fitted No No. and Description of Boilers Two single ended 2SB Working Pressure 150 lbs
IS A REPORT ON MAIN BOILERS NOW FORWARDED?
IS A DONKEY BOILER FITTED? YES If so, is a report now forwarded? YES
PLANS. Are approved plans forwarded herewith for Shafting YES Main Boilers YES Auxiliary Boilers ✓ Donkey Boilers
 (If not state date of approval) YES Oil fuel Burning Piping Arrangements ✓
 General Pumping Arrangements ✓

SPARE GEAR. State the articles supplied:—
Two top end & two bottom end connecting rod bolts and nuts, two main bearing bolts,
 one set connecting bolts, one set fuel and bilge pump valves, assorted bolts & nuts
 Iron, various sizes, spare propeller shaft.

The foregoing is a correct description,

Manufacturer. W. S. Pease



W79-0180

1924. Sep. 2, 11, 25. Oct. 14. Nov. 7, 19, 21. Dec. 3, 15, 23. 1925. Jan. 5, 9, 14, 20, 22, 29.

During progress of work in shops -- Feb. 2, 14, 23. Mar. 3, 11, 16, 26, 30. Apr. 16, 21, 23, 28, 30. May 6.

During erection on board vessel --- May 12, 14, 18, 20, 25, 26, 28. June 9, 11, 12.

Total No. of visits 40

Dates of Examination of principal parts -- Cylinders 16.3.25 Slides 2.2.25

Covers 28.1.25 Pistons 16.3.25 Rods 16.3.25

Connecting rods 26.3.25 Crank shaft 30.3.25 Thrust shaft 14.1.25

Tunnel shafts 14.1.25 Screw shaft 23.12.24 Propeller 30.3.25

Stern tube 21.4.25 Engine and boiler seatings 14.5.25 Engines holding down bolts 14.5.25

Completion of pumping arrangements 14.5.25 Boilers fixed 14.5.25 Engines tried under steam 20.5.25

Completion of fitting sea connections 6.5.25 Stern tube 6.5.25 Screw shaft and propeller 12.5.25

Main boiler safety valves adjusted 20.5.25 Thickness of adjusting washers Pt Blk 7/32" Star Blk 1/4"

Material of Crank shaft Steel Identification Mark on Do. 1141 GAH

Material of Thrust shaft Steel Identification Mark on Do. 1141 GAH

Material of Tunnel shafts Steel Identification Marks on Do. 1141 GAH

Material of Screw shafts Steel Identification Marks on Do. 1141 GAH

Material of Steam Pipes Lap welded steel Test pressure 540 lb/sq" Date of Test 30.4.25 & 18.5.25

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 materials and workmanship are good. The machinery has been constructed under special survey & is eligible in our opinion for classification and the record of + L.M.C 6-25.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C 6.25. CL.

[Signature]
25/6/25

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

The amount of Entry Fee ... £ 5 : - : When applied for, 15 JUNE 1925

Special ... £ 42 : 5 : When received, 19 JUNE 1925

Donkey Boiler Fee ... £ : :

Travelling Expenses (if any) £ : :

Committee's Minute

Assigned + L.M.C 6.25
C.L.

SUNDERLAND.

Certificate to be sent to