

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

26 AUG 1924

Date of writing Report 10 When handed in at Local Office 22nd Aug 1924 Port of Middlesbrough
 No. in Survey held at South Bank Date, First Survey 17th April Last Survey 8th August 1924
 Reg. Book. on the SS STELLING (Number of Visits 43)
 Built at South Bank By whom built Smith's Dock Co Yard No. 796 When built
 Engines made at South Bank By whom made Smith's Dock Co Engine No. 262 when made
 Boilers made at Stockton on Tees By whom made Blair & Co SA Boiler No. A53 when made
 Registered Horse Power Owners Port belonging to
 Nom. Horse Power as per Rule 231 1/4 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines

3 triple expansion
 Dia. of Cylinders 20 1/2 - 33 - 54 Length of Stroke 39 Revs. per minute 73 No. of Cylinders 3 No. of Cranks 3
 Dia. of Crank shaft journals as per rule 10 3/4 as fitted 11 1/4 Dia. of Crank pin 11 1/4 Crank webs Mid. length breadth 17 1/4 Thickness parallel to axis 7
 as per rule 10 3/4 old Rules as per rule 10 3/4 as fitted 10 3/4 Diameter of Tunnel shaft as per rule 12 08 as fitted 12 1/2 Diameter of Screw shaft as per rule 12 08 as fitted 12 1/2 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 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 appliance fitted at the after end of the shaft to permit
 of it being efficiently lubricated — Length of Stern Bush 4 8 1/4 Diameter of Propeller 15 3
 Pitch of Propeller 15 9 No. of Blades 4 State whether Moveable No Total Surface 69 square feet.
 No. of Feed Pumps fitted to the Main Engines 2 Diameter of ditto 3 1/4 Stroke 20 Can one be overhauled while the other is at work Yes
 No. of Bilge Pumps fitted to the Main Engines 2 Diameter of ditto 3 1/4 Stroke 20 Can one be overhauled while the other is at work Yes
 Total number and size of power driven Feed and Bilge Auxiliary Pumps 3 - 1 @ 6x4x6 1 @ 8x5x8 9 1 @ 8x10x10
 No. and size of Pumps connected to the Main Bilge Line 1 - 1 @ 8x10x10
 No. and size of Ballast Pumps 1 Duplex 8x10x10 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 @ 3 and in Holds, &c. 2 @ 3 each hold
1 @ 3 Tunnel well

No. and size of Main Water Circulating Pump Bilge Suctions 1 @ 6 No. and size of Donkey Pump Direct Suctions
 to the Engine Room Bilges 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 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
 What Pipes are carried through the bunkers. Bilge suction to fore holds How are they protected Wood ceiling
 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 Deck

MAIN BOILERS, &c.—(Letter for record (S)) Total Heating Surface of Boilers 4023 sq ft
 Is Forced Draft fitted No No. and Description of Boilers 2 Single end 2SB Working Pressure 180 lbs
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes 100 Rpt No 11974
 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 Oil fuel Burning Piping Arrangements —

SPARE GEAR. State the articles supplied:— Two each of connecting rod top and bottom end and main bearing bolts and nuts
One set of coupling bolts and nuts. One set of feed pump and bilge pump valves and seals
100 assorted bolts and nuts Iron of various sizes
6 junk ring studs and nuts

Water Capa
Tons.
160
119

The foregoing is a correct description,
FOR SMITH'S DOCK COMPANY, L^{td}

P. Ostus

Manufacturer.

22/8/24
Engine Works Manager



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Lloyd's Register
Foundation

002119-002126-0065

2.17.17.20.

2.3.9.

Visits 52

1924, Apr. 17, 23, 28. May 5, 7, 14, 17, 23, 26, 28, 30. June 2, 4, 6, 12, 16, 19, 23, 25, 27, 30. July 3, 4, 5, 7, 8, 10, 14.
 15, 17, 18, 21, 22, 24, 25, 28, 31. Aug. 2, 4, 5, 6, 7, 8.

Dates of Survey while building
 During progress of work in shops --
 During erection on board vessel --
 Total No. of visits 43

Dates of Examination of principal parts - Cylinders 19-6-24 Slides 23-6-24
 Covers 12-6-24 Pistons 12-6-24 Rods 5-5-24
 Connecting rods 16-6-24 Crank shaft 13-5-24 Lth. Thrust shaft 13-5-24 Lth.
 Tunnel shafts 17-6-24 Screw shaft 13-5-24 Lth. Propeller 30-6-24
 Stern tube 19-6-24 Engine and boiler seatings 3-7-24 Engines holding down bolts 25-7-24
 Completion of pumping arrangements 5-8-24 Boilers fixed 25-7-24 Engines tried under steam 6-8-24
 Completion of fitting sea connections 3-7-24 Stern tube 4-7-24 Screw shaft and propeller 5-7-24
 Main boiler safety valves adjusted to 150 lbs 6-8-24 Thickness of adjusting washers 1/16 3/16 5/16 7/16
 Material of Crank shaft Ingot steel Identification Mark on Do. 816
 Material of Thrust shaft Ingot steel Identification Mark on Do. 817
 Material of Tunnel shafts Ingot steel Identification Marks on Do. 818
 Material of Screw shafts S. Steel continuous 1/2 M Lines Identification Marks on Do. 819
 Material of Steam Pipes Solid drawn lapped test pressure 400 lbs Date of Test 24-7-24
 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 machinery of this vessel has been built under special survey. The material and workmanship are sound and good. The engines, boilers, and auxiliaries were examined under steam and all found satisfactory. The machinery is now in a good and safe working condition and renders the vessel eligible in my opinion, to have the notation of L.M.C. 8.24 in the Register book.

Note: - This vessel is fitted with electric light and wireless.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 8.24. CL.

[Signature] 28/8/24
[Signature]

The amount of Entry Fee ... £ 4. 0. :
 Special ... £ 30. 19. :
 Donkey Boiler Fee ... £ — :
 Travelling Expenses (if any) £ — :
 When applied for, 25.8.1924
 When received, 24/8/24

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

Committee's Minute TUES. 2 SEP 1924
 Assigned L.M.C. 8.24
 C.L.

FRI, 24 OCT '24
 FRI, 12 DEC 1924



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Date of writing Report
 No. in Survey Reg. Book.
 on the
 Master
 Engines made at
 Boilers made at
 Nominal Horse Power
 MULTITUBULAR
 Manufacturers of
 Total Heating Surface
 No. and Description
 Tested by hydraulic
 Area of Firegrate
 Area of each set of
 In case of donkey boiler
 Smallest distance between
 Smallest distance between
 Largest internal diameter
 Thickness 1/2
 long, seams 8.19
 5 Riv
 Percentage of strength
 Percentage of strength
 Thickness of butt joint
 Material
 Length of plain part
 Dimensions of stiffeners
 End plates in steam chest
 How are stays secured
 Tube plates: Material
 Mean pitch of stay
 Girders to combustion
 at centre 8 3/4
 in each 2
 Tensile strength
 Pitch of stays to ditto
 Working pressure by
 Thickness 1/2
 Pitch of stays at water
 Working Pressure
 Diameter { At body of or Over threads
 Working pressure by
 Diameter { At turned off or Over threads