

REPORT ON MACHINERY.

No. 32915
WFD. 21 SEP. 1921

Received at London Office

Date of writing Report 14/9/21 When handed in at Local Office 14/9/21 Port of Hull.
 No. in Survey held at Hull Date, First Survey 16. 12 - 20. Last Survey 12 - 9. 1921.
 Reg. Book. Hull (Number of Vols. 51)
 on the S.S. "REDESME"RE Tons { Gross 345
 Net 133
 Master Beverley Built at Beverley By whom built Book Wether & Gemmell When built 1921.
 Engines made at Hull By whom made Chas J. Holmes & Co. Ltd. when made 1921
 Boilers made at Hull. By whom made Do. when made 1921
 Registered Horse Power 73 Owners Northwick San Co. Ltd. Port belonging to Liverpool
 Nom. Horse Power as per Section 28 73 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple expansion. No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 12-21-34 Length of Stroke 24 Revs. per minute 118 Dia. of Screw shaft 7 1/8 Material of screw shaft Steel
 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 water tight in the propeller boss Yes
 If the liner is in more than one length are the joints burned 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 Length of stern bush 30 1/2
 Dia. of Tunnel shaft 6 1/8 Dia. of Crank shaft journals 6 5/8 Dia. of Crank pin 6 7/8 Size of Crank webs 13 1/2 x 4 1/8 Dia. of thrust shaft under collars 6 7/8 Dia. of screw 9-0 Pitch of Screw 10-0 No. of Blades 4 State whether moveable No Total surface 31 1/2
 No. of Feed pumps 1 Diameter of ditto 2 1/2 Stroke 14 1/4 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 1 Diameter of ditto 2 1/2 Stroke 14 1/4 Can one be overhauled while the other is at work Yes
 No. of Donkey Engines one Sizes of Pumps 6 x 1 1/2 x 6 DUPLEX No. and size of Suctions connected to both Bilge and Donkey pumps 2 1/2
 In Engine Room 4 1/2 In Holds, &c. 2 1/2

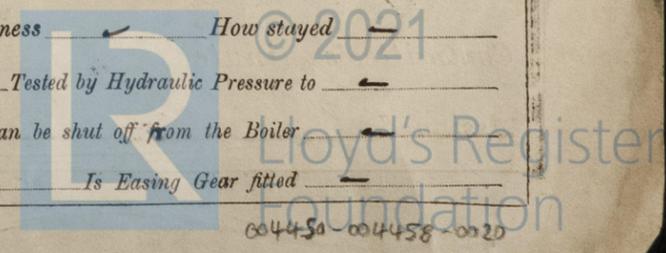
No. of Bilge Injections one sizes 3" Connected to condenser, or to circulating pump C. Pump Is a separate Donkey Suction fitted in Engine room & size Yes 2 1/2"
 Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible 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 rod motion How are they protected stap caps
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
 Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Yes

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel J. Tolville & Northwell
 Total Heating Surface of Boilers 1271 Is Forced Draft fitted No No. and Description of Boilers one cyl. with S.E.
 Working Pressure 180 Tested by hydraulic pressure to 360 lbs Date of test 14/4/21 No. of Certificate 3480
 Can each boiler be worked separately Yes Area of fire grate in each boiler 34.5 sq No. and Description of Safety Valves to each boiler 2 spring loaded
 Area of each valve 3.976 Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 3-0 Mean dia. of boilers 12-6 Length 10-3 Material of shell plates Steel
 Thickness 1 1/8 Range of tensile strength 28 to 32 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams D.R.L.
 long. seams TROBS. Diameter of rivet holes in long. seams 1 1/8 Pitch of rivets 6 7/8 Lap of plates or width of butt straps 15 1/2
 Per centages of strength of longitudinal joint rivets 92% Working pressure of shell by rules 185 lbs Size of manhole in shell 16 x 12
 plate 84.5%
 Size of compensating ring 7 x 1 1/8 No. and Description of Furnaces in each boiler 2 Plain Material Steel Outside diameter 3-7
 Length of plain part 36-6 Thickness of plates 3 5/8 Description of longitudinal joint welded No. of strengthening rings —
 Working pressure of furnace by the rules 180 Combustion chamber plates: Material Steel Thickness: Sides 3/32 Back 3/32 Top 1/8 Bottom 3/32
 Pitch of stays to ditto: Sides 9 1/2 x 10 Back 9 1/8 x 8 1/2 Top 10 x 8 1/2 stays are fitted with nuts or riveted heads Nuts Working pressure by rules 180 lbs
 Material of stays Steel Area at smallest part 2.07 Area supported by each stay 90 Working pressure by rules 196 End plates in steam space: Material Steel Thickness 1 1/8 Pitch of stays 17 x 18 How are stays secured D.R.W. Working pressure by rules 196 Material of stays Steel
 Area at smallest part 5.79 Area supported by each stay 306 Working pressure by rules 196 Material of Front plates at bottom Steel Thickness 1 1/2 Material of Lower back plate Steel Thickness 2 1/2 Greatest pitch of stays 15 x 8 1/2 Working pressure of plate by rules 216
 Diameter of tubes 3 1/2 Pitch of tubes 4 1/4 Material of tube plates Steel Thickness: Front 1 1/2 Back 7/8 Mean pitch of stays 11.575
 Pitch across wide water spaces 15 Working pressures by rules 181 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8 x 1 1/2 Length as per rule 2-9 3/8 Distance apart 8 1/2 Number and pitch of stays in each 2 @ 10
 Working pressure by rules 180 Steam dome: description of joint to shell — % of strength of joint —
 Diameter — Thickness of shell plates — Material — Description of longitudinal joint — Diam. of rivet holes —
 Pitch of rivets — Working pressure of shell by rules — Crown plates — Thickness — How stayed —

SUPERHEATER. Type — Date of Approval of Plan — Tested by Hydraulic Pressure to —
 Date of Test — Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler —
 diameter of Safety Valve — Pressure to which each is adjusted — Is Easing Gear fitted —

If not, state whether, and when, one will be sent

Is a Report also sent on the Hull of the Ship?



IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:

Two top end, two bottom end, two main bearing & one set coupling bolts & nuts. One set air, feed, & bilge pumps valves, one main & one donkey check valve, a quantity of assorted bolts & nuts & iron of various sizes.

The foregoing is a correct description,

FOR CHARLES B. HOLMES & Co. LTD.

J. S. Cooper

Manufacturer.

Dates of Survey while building: During progress of work in shops - 1920: Dec. 16, 20, 30. 1921: Jan. 10, 14, 20, 21, 26, 31. Feb. 2, 7, 10, 14, 17, 22, 24. March 2. During erection on board vessel - 8, 9, 14, 15, 16, 18, 21, 24, 31. Apr. 1, 4, 6, 7, 14, 25. May 11, 24, 25, 30. June 1, 3, 6, 9, 20, 21, 22. Total No. of visits: July 12, 26, 31. Aug. 19, 30. Sept. 6, 8, 9, 12. Is the approved plan of main boiler forwarded herewith? Yes

Dates of Examination of principal parts: Cylinders 9/3/21, Slides 16/3/21, Covers 9/3/21, Pistons 16/3/21, Rods 10/1/21, Connecting rods 10/1/21, Crank shaft 31/1/21, Thrust shaft 10/3/21, Tunnel shafts ✓, Screw shaft 31/1/21, Propeller 31/1/21, Stern tube 31/1/21, Steam pipes tested 6/6/21, Engine and boiler seatings 3/6/21, Engines holding down bolts 3/6/21, Completion of pumping arrangements 9/9/21, Boilers fixed 9/9/21, Engines tried under steam 9/9/21, Completion of fitting sea connections 16/2/21, Stern tube 16/2/21, Screw shaft and propeller 16/2/21, Main boiler safety valves adjusted 9/9/21, Thickness of adjusting washers P 5/2" S 5/2", Material of Crank shaft Steel, Identification Mark on Do. 2541, Material of Thrust shaft Steel, Identification Mark on Do. 2544, Material of Tunnel shafts ✓, Identification Marks on Do. ✓, Material of Screw shafts Steel, Identification Marks on Do. 2542, Material of Steam Pipes Copper, Test pressure 400 lbs. sq. in., 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 Section 49 of the Rules 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 & boiler of this vessel have been built under special survey & the materials & workmanship are good.

On completion the machinery was tried under full working conditions while moved to the Quay wall with satisfactory results.

The machinery of this vessel is now in a good & efficient condition & eligible in my opinion to have the record L.M.C.-9-21 marked in Red in the British Register Book.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 9.21. CL

Roell 21/9/21

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

The amount of Entry Fee ... £ 2-0-0, Special ... £ 18-5-0, Donkey Boiler Fee ... £ : : , Travelling Expenses (if any) £ : : . When applied for, 20/9/1921. When received, 6/10/21.

Committee's Minute Assigned + L.M.C. 9.21 C.L.

MACHINERY CERTIFICATE WRITTEN



Steel

Certificate (if required) to be sent to

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