

REPORT ON MACHINERY.

No. 32416

Received at London Office FRI. 28 JAN. 1921

Date of writing Report 17/1/21 When handed in at Local Office 17/1/21 Port of Hull.
 No. in Survey held at Hull. Date, First Survey 5/5/20 Last Survey 15/1/1921
 Reg. Book. on the S.S. MARGARET LOCKINGTON. (Number of Visits 50) Tons } Gross 460
 Net 179
 Master Built at Selby By whom built Lockington & Co. Ltd. When built 1921
 Engines made at Hull. By whom made Thos. & John D. Ltd. when made 1921
 Boilers made at do By whom made do when made 1921
 Registered Horse Power Owners Lockington S.S. Co. Ltd. Port belonging to Jundalk.
 Nom. Horse Power as per Section 28 112 Is Refrigerating Machinery fitted for cargo purposes - Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple expansion. No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 14 1/2 - 24 - 40 Length of Stroke 27 Revs. per minute 112 Dia. of Screw shaft 8 1/2 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 - If two
 liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 3-4
 Dia. of Tunnel shaft 7 5/8 Dia. of Crank shaft journals 7 9/16 Dia. of Crank pin 8 1/4 Size of Crank webs 15 1/2 x 5 1/2 Dia. of thrust shaft under
 collars 8 1/4 Dia. of screw 10-6 Pitch of Screw 11-1 1/2 No. of Blades 4 State whether moveable No Total surface 38 sq
 No. of Feed pumps 2 Diameter of ditto 2 1/2 Stroke 15 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 2 1/2 Stroke 15 Can one be overhauled while the other is at work Yes
 No. of Donkey Engines Two Sizes of Pumps 1 x 4 1/2 x 6 & 1 x 6 x 6 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 4 @ 2 1/2 In Holds, &c. 2 @ 2 1/2
 No. of Bilge Injections 1 sizes 4 Connected to condenser, or to circulating pump Yes 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 Bilge & ballast suction How are they protected Strong casing
 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 -

BOILERS, &c.—(Letter for record 5) Manufacturers of Steel J. Spencer & Sons.
 Total Heating Surface of Boilers 1940 Is Forced Draft fitted No No. and Description of Boilers One cyl mult S.E.
 Working Pressure 200 Tested by hydraulic pressure to 400 Date of test 22/12/20 No. of Certificate 3488
 Can each boiler be worked separately Yes Area of fire grate in each boiler 55.6 sq No. and Description of Safety Valves to
 each boiler 2 spring loaded Area of each valve 5.94 Pressure to which they are adjusted 205 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 14 1/2 Mean dia. of boilers 11-0 Length 11-0 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 DRL
 long. seams TRDAS Diameter of rivet holes in long. seams 1 5/16 Pitch of rivets 8 3/4 Lap of plates or width of butt straps 18 5/8
 Per centages of strength of longitudinal joint rivets 88% Working pressure of shell by rules 201 lbs Size of manhole in shell 16 x 12
 plate 8 5/16
 Size of compensating ring 1 1/2 x 7 No. and Description of Furnaces in each boiler 3 Plain Material Steel Outside diameter 3-6
 Length of plain part 8-2 1/2 Thickness of plates 3 1/8 Description of longitudinal joint Welded No. of strengthening rings -
 Working pressure of furnace by the rules 255 Combustion chamber plates: Material Steel Thickness: Sides 3/4 Back 3/4 Top 3/4 Bottom 3/4
 Pitch of stays to ditto: Sides 9 1/2 x 10 Back 9 1/4 x 9 1/4 Top 9 x 10 If stays are fitted with nuts or riveted heads No Working pressure by rules 200 lbs
 Material of stays Steel Area at smallest part 2.07 Area supported by each stay 85 Working pressure by rules 218 End plates in steam space:
 Material Steel Thickness 1 1/8 Pitch of stays 1 1/2 x 10 1/2 How are stays secured DN & W Working pressure by rules 206 lbs Material of stays Steel
 Area at smallest part 6.38 Area supported by each stay 324 Working pressure by rules 205 Material of Front plates at bottom Steel
 Thickness 1 1/8 Material of Lower back plate Steel Thickness 3/4 Greatest pitch of stays 14 1/2 x 9 1/2 Working pressure of plate by rules 211
 Diameter of tubes 3 1/2 Pitch of tubes 4 1/2 x 4 1/2 Material of tube plates Steel Thickness: Front 1 1/8 Back 1 1/8 Mean pitch of stays 10.6
 Pitch across wide water spaces 15 1/2 Working pressures by rules 353 lbs Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 9 x 1 1/2 Length as per rule 2-9 1/8 Distance apart 9 Number and pitch of stays in each 2 @ 10
 Working pressure by rules 213 lbs 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 2021
 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 -

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 bearings
one set of coupling bolts & nuts, One set air, feed, & bilge pump
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 D. HOLMES & Co. LTD.

J. Cooper

Manufacturer.

Dates of Survey while building: During progress of work in shops - 1920: - May 5, 12, 18, 25, 28, Jun 14, 24, July 2, 7, Aug 2, 11, 19, 25, 30, Sept 7, 10, 14, 15, 23
During erection on board vessel - Oct 6, 7, 11, 13, 14, 19, 20, 28, Nov 2, 12, 18, 19, 22, 23, 29, Dec 20, 8, 9, 10, 14, 15, 20
Total No. of visits 50

Is the approved plan of main boiler forwarded herewith

Yes

Dates of Examination of principal parts - Cylinders 29/11/20 Slides 14/12/20 Covers 29/11/20 Pistons 14/12/20 Rods 23/11/20
Connecting rods 29/11/20 Crank shaft 12/11/20 Thrust shaft 12/11/20 Tunnel shafts - Screw shaft 7/9/20 Propeller 7/9/20
Stern tube 14/9/20 Steam pipes tested 6/1/21 Engine and boiler seatings 5/1/21 Engines holding down bolts 5/1/21
Completion of pumping arrangements 14/1/21 Boilers fixed 5/1/21 Engines tried under steam 14/1/21
Completion of fitting sea connections 23/9/20 Stern tube 23/9/20 Screw shaft and propeller 23/9/20
Main boiler safety valves adjusted 13/1/21 Thickness of adjusting washers 5 5/16" 2 3/8"
Material of Crank shaft Steel Identification Mark on Do. 2518 Material of Thrust shaft Steel Identification Mark on Do. 2517
Material of Tunnel shafts - Identification Marks on Do. - Material of Screw shafts Steel Identification Marks on Do. 2496
Material of Steam Pipes Copper Test pressure 400 lbs

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 Easy well with satisfactory results.

The machinery of this vessel is now in a good & efficient condition & eligible in my opinion to have the record of L.M.C. - 1 - 21. marked in Red in the Register's Register Book.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 1.21.

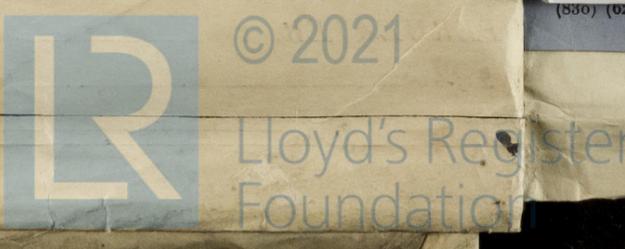
Bell 31/1/21 JPK

The amount of Entry Fee ... £ 3-0-0 When applied for 27.1.1921
Special Electric Installation ... £ 28-0-0
Donkey Boiler Fee ... £ 2-10-0
Travelling Expenses (if any) £ : : When received 2-3-21

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

Committee's Minute TUE. FEB 9 1921
Assigned + L.M.C. 1.21

CERTIFICATE WRITTEN



Certificate (if required) to be sent to Hull

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

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(530) (02910)