

REPORT ON MACHINERY.

No. 2400
9 1921

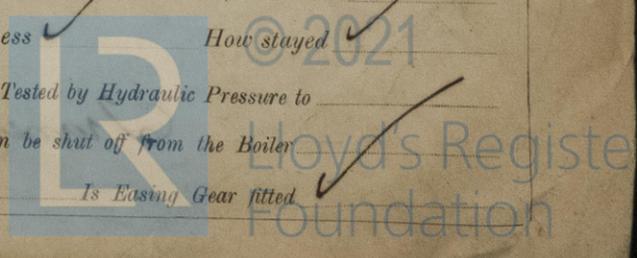
Received at London Office

Date of writing Report 19 When handed in at Local Office - 7 JUL 19 1921 Port of Liverpool
 No. in Survey held at Lytham Date, First Survey Oct 27 1920 Last Survey June 27 1921
 Reg. Book. on the vessel No. 3. S/S STEVENSTONE (Number of Visits 11)
 Master Built at Biddeford By whom built Hansen S.B. Co. Tons Gross 873 Net 437 When built 1921
 Engines made at Lytham By whom made Lytham S.B. & Eng. Co. when made 1921
 Boilers made at B By whom made B when made 1921
 Registered Horse Power Owners Hansens Shipping Co. Port belonging to London
 Nom. Horse Power as per Section 28 107 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines. Vertical Triple No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 15+25+41 Length of Stroke 27 Revs. per minute 105 Dia. of Screw shaft as per rule 7-94 8-14 Material of screw shaft M. 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 V If the liner is in more than one length are the joints burned V 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 V If two liners are fitted, is the shaft lapped or protected between the liners V Length of stern bush 3-3
 Dia. of Tunnel shaft as per rule 7-48 Dia. of Crank shaft journals as per rule 6-9 7-86 Dia. of Crank pin 8 1/4 Size of Crank webs 12x5 1/4 Dia. of thrust shaft under collars 8 Dia. of screw 10-3 Pitch of Screw 11-3 No. of Blades 4 State whether moveable No Total surface 380'
 No. of Feed pumps 2 Diameter of ditto 2 1/2 Stroke 12 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 2 1/2 Stroke 12 Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 2 Sizes of Pumps fed 6x4x6; ballast 9x9x10 No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room 2-2 1/2 wings 1-2 1/2 under 1-2 1/2 aft 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
 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 Hold suction How are they protected Wood 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 V Is it fitted with a watertight door worked from V

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Messrs Beardmore & Co.
 Total Heating Surface of Boilers 1824 Is Forced Draft fitted No No. and Description of Boilers 2, cylindrical 2179, 2180
 Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 27.6.21 No. of Certificate 2179, 2180
 Can each boiler be worked separately Yes Area of fire grate in each boiler 300 No. and Description of Safety Valves to each boiler 2, spring loaded Area of each valve 3.14 sq. Pressure to which they are adjusted Are they fitted with easing gear
 Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers 10'-6" Length 10' Material of shell plates M.S.
 Thickness 29/32 Range of tensile strength 28-32 Are the shell plates welded or flanged no Descrip. of riveting: long seams triple butt
 rivet seams D.R. lap Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 7/8 Lap of plates or width of butt straps 15 3/4
 Per centages of strength of longitudinal joint rivets 102 plate 85.1 Working pressure of shell by rules 186 Size of manhole in shell 16x12
 Size of compensating ring 7x3x7/8 No. and Description of Furnaces in each boiler 2, corrugated Material M.S. Outside diameter 3-4 1/2
 Length of plain part top bottom Thickness of plates crown 3/2" bottom Description of longitudinal joint weld No. of strengthening rings
 Working pressure of furnace by the rules 187 Combustion chamber plates: Material M.S. Thickness: Sides 5/8 Back 5/8 Top 5/8 Bottom 1/16
 Pitch of stays to ditto: Sides 9x8 Back 9x8 1/4 Top 9x8 If stays are fitted with nuts on riveted heads Yes Working pressure by rules 181
 Material of stays M.S. Area at smallest part 1.79 Area supported by each stay 74.53 Working pressure by rules 217 End plates in steam space: Material M.S. Thickness 3/32 Pitch of stays 15x14 How are stays secured 2 nuts, 6 washers Working pressure by rules 195 Material of stays M.S.
 Area at smallest part 3.67 Area supported by each stay 210 Working pressure by rules 181 Material of Front plates at bottom M.S.
 Thickness 3/32 Material of Lower back plate M.S. Thickness 1/2 + 1/16 Greatest pitch of stays as per plan Working pressure of plate by rules 180
 Diameter of tubes 3 1/2 Pitch of tubes 4 1/4 x 4 5/8 Material of tube plates M.S. Thickness: Front 3/32 Back 3/4 Mean pitch of stays 9 1/2 x 9 1/4
 Pitch across wide water spaces 15 Working pressures by rules 236 Girders to Chamber tops: Material M.S. Depth and thickness of girder at centre 7 1/2 x 3/4 Length as per rule 30" Distance apart 8" Number and pitch of stays in each 2, 9"
 Working pressure by rules 190 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



W717-0124

IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— *Two top & two bottom end bolts & nuts
two main bearing bolts & nuts, one set of coupling bolts & nuts
one set of valves for all pumps; one set of fund nut bolts & nuts
one set of HP rings, assorted bolts & nuts, consumer tubes and
boiler tubes*

The foregoing is a correct description,

THE LYTHAM SHIPBUILDING
ENGINEERING COMPANY, LIMITED.

J. J. Linsley

Manufacturer.

Dates of Survey while building
During progress of work in shops: *1920 Oct 27, Nov 12, 1921 Feb 3, Mar 4, 23, Apr 7, May 3, 12, 24, June 1, 27.*
During erection on board vessel: *June 3, July 14, Aug 11, 23, 24, Sept 1.*
Total No. of visits: *11.*

Is the approved plan of main boiler forwarded herewith? *Yes*

Is the approved plan of donkey boiler forwarded herewith? *Yes*

Dates of Examination of principal parts—Cylinders *3.5.21* Slides *3.5.21* Covers *3.5.21* Pistons *3.5.21* Rods *4.3.21*
Connecting rods *3.5.21* Crank shaft *3.2.21* Thrust shaft *12.11.20* Tunnel shafts *✓* Screw shaft *3.2.21* Propeller *3.2.21*
Stern tube *3.2.21* Steam pipes tested *12.5.21* Engine and boiler seatings *14.7.21* Engines holding down bolts *11.8.21*
Completion of pumping arrangements *1.9.21* Boilers fixed *23.8.21* Engines tried under steam *24.8.21*
Completion of fitting sea connections *3.6.21* Stern tube *3.6.21* Screw shaft and propeller *11.8.21*
Main boiler safety valves adjusted *24.8.21* Thickness of adjusting washers *P 2/32 S 1/32 P 2/32 S 5/16*
Material of Crank shaft *M.S.* Identification Mark on Do. *1362* Material of Thrust shaft *M.S.* Identification Mark on Do. *1480*
Material of Tunnel shafts *✓* Identification Marks on Do. *✓* Material of Screw shafts Identification Marks on Do. *1475*
Material of Steam Pipes *solid drawn copper* Test pressure *360 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? *Yes* If so, state name of vessel *S.S. 'Monkstone'*

General Remarks (State quality of workmanship, opinions as to class, &c.) *The machinery of this vessel has been built under Special Survey. The materials & workmanship are good. After erection in the shop, the engines & boilers have been forwarded to Ridesford to be fitted on board, and will then be eligible for record of L.M.C. with date.*

The machinery & boiler of this vessel have now been fitted and secured on board. Tried under full working conditions & the safety valves adjusted & are now eligible in my opinion for record of L.M.C. 9.21

The amount of Entry Fee ... £ *3* : 0 : 0
Special *4/5* hrs. aft £ *21* : 8 : 0
Donkey Boiler Fee *1/2* hrs. aft £ *5* : 7 : 0
Travelling Expenses (if any) £ *3* : 2 : 0
Hotel
Breakfast *9. 14. 3*

John W. Gwynne

S. Younand & Sydney J. Johnson
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute LIVERPOOL - 8 JUL 1921

Assigned *Transmit to London J.W.G.*
Liverpool

FRI. 16 SEP. 1921
+ *L.M.C. 9.21*
Lloyd's Register Foundation
MACHINERY DEPT
WRITER

Certificate (if required) to be sent to
The Surveyors are requested not to write on or below the space for Committee's Minute.