

REPORT ON MACHINERY.

No. 17327
WED. JUL. 10. 1918

Received at London Office

Date of writing Report 4 July 1918 When handed in at Local Office 4 July 1918 Port of Greenock
 No. in Survey held at Greenock Date, First Survey 30th Nov, 1917 Last Survey 5th July 1918
 Reg. Book. Greenock (Number of Visits 67)
 on the Steel Screw Steamer Messrs Messrs Messrs Tons 1576
 Built at Glasgow By whom built Lloyd Royal Belg When built 1918
 Lines made at Greenock By whom made John S Kincaid & Co when made 1918
 Masts made at Greenock By whom made John S Kincaid & Co when made 1918
 Registered Horse Power 549 Owners Glasgow Port belonging to Glasgow
 Is Refrigerating Machinery fitted for cargo purposes Yes Is Electric Light fitted Yes

GINES, &c.—Description of Engines Triple Compound No. of Cylinders Three No. of Cranks Three
 Dia. of Cylinders 27-45-75 Length of Stroke 48 Revs. per minute 75 Dia. of Screw shaft 15.02 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
 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 65
 Dia. of Tunnel shaft 13.4 Dia. of Crank shaft journals 14.05 Dia. of Crank pin 14.74 Size of Crank webs 21.9 Dia. of thrust shaft under
 bars 14.74 Dia. of screw 18.3 Pitch of Screw 17.6 No. of Blades 4 State whether moveable Yes Total surface 110 sq ft
 No. of Feed pumps Two Diameter of ditto 4 1/2 Stroke 25 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps Two Diameter of ditto 4 1/2 Stroke 28 Can one be overhauled while the other is at work Yes
 No. of Donkey Engines Two Sizes of Pumps 15.10 - 5.8 No. and size of Suctions connected to both Bilge and Donkey pumps
 in Engine Room Three 3/2 In Holds, &c. Three 3/2

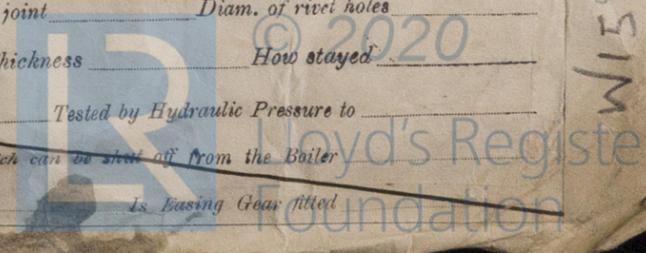
Circulating Pump Separate Engine
 No. of Bilge Injections Two sizes 8 Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size 2 1/2
 Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices 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 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
 What pipes are carried through the bunkers None How are they protected None
 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 1st Deck

BOILERS, &c.—(Letter for record S) Manufacturers of Steel White Iron & Hardware Co. Glasgow
 Total Heating Surface of Boilers 5151 sq ft Is Forced Draft fitted Yes No. and Description of Boiler Three Single Ended
 Working Pressure 180 lb Tested by hydraulic pressure to 360 lb Date of test 2-8-9/5/18 No. of Certificate 1329.1340
 Can each boiler be worked separately Yes Area of fire grate in each boiler 62 sq ft No. and Description of Safety Valves to
 each boiler Two Opening Area of each valve 9.62 Pressure to which they are adjusted 185 lb Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 9 Mean dia. of boilers 15.6 Length 12.0 Material of shell plates Steel
 Thickness 1 1/2 Range of tensile strength 28-32 Are the shell plates welded or flanged Yes Descrip. of riveting: cir. seams Yes
 long. seams Double lap 3/4 Diameter of rivet holes in long. seams 15/16 Pitch of rivets 9 1/2 Lap of plates or width of butt straps 19 1/2
 Per centages of strength of longitudinal joint 88-2 Working pressure of shell by rules 182 lb Size of manhole in shell 16 x 12
 Size of compensating ring None No. and Description of Furnaces in each boiler 3 Brighton Material Steel Outside diameter 49 1/2
 Length of plain part 19 1/2 Thickness of plates 37/64 Description of longitudinal joint Welded No. of strengthening rings None
 Working pressure of furnace by the rules 180 lb Combustion chamber plates: Material Steel Thickness: Sides 10/16 Back 10/16 Top 10/16 Bottom 12/16
 Pitch of stays to ditto: Sides 9 1/4 Back 9 1/2 Top 9 1/4 Bottom 9 1/4 If stays are fitted with nuts or riveted heads Yes Working pressure by rules 180 lb
 Material of stays Steel Area at smallest part 1.79 Area supported by each stay 68.4 Working pressure by rules 181 lb End plates in steam space:
 Material Steel Thickness 19/16 Pitch of stays 2 1/4 How are stays secured All nut Working pressure by rules 150 lb Material of stays Steel
 Area at smallest part 8.29 Area supported by each stay 452 Working pressure by rules 190 lb Material of Front plates at bottom Steel
 Thickness 15/16 Material of Lower back plate Steel Thickness 13/16 Greatest pitch of stays 13 Working pressure of plate by rules 183 lb
 Diameter of tubes 2 1/2 Pitch of tubes 3 1/4 Material of tube plates Steel Thickness: Front 15/16 Back 1 1/16 Mean pitch of stays 9.51
 Pitch across wide water spaces 13 Working pressures by rules 187 lb Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 10 1/2 Length as per rule 24.6 Distance apart 9 1/4 Number and pitch of stays in each Three 7 1/4
 Working pressure by rules 183 lb Steam dome: description of joint to shell None % of strength of joint None
 Diameter None Thickness of shell plates None Material None Description of longitudinal joint None Diam. of rivet holes None
 Pitch of rivets None Working pressure of shell by rules None Crown plates None Thickness None How stayed None

SUPERHEATER. Type None Date of Approval of Plan None Tested by Hydraulic Pressure to None
 Date of Test None Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler None
 Diameter of Safety Valve None Is Easing Gear fitted None

Kincaid 452

W158-0066



IS A DONKEY BOILER FITTED? *Yes*

If so, is a report now forwarded? *-*

SPARE GEAR. State the articles supplied:— *The top end bolts. The bottom end bolts. The main bearing bolts. One set coupling bolts. One set feed pump & valve. One set bit pump & valve. One cylinder escape valve and spring cock eye. One safety valve opening. Submitter. Bolt nuts etc.*

The foregoing is a correct description,
FOR JOHN G. KINCAID & COY., LIMITED.

Robert Green.

Secretary

Manufacturer.

Dates of Survey while building: During progress of work in shops -- (1917) Nov. 30. Dec. 20. (1918) Jan. 9. 17. 21. 24. 25. 28. 29. 30. 31. Feb. 4. 6. 7. 8. 14. 18. 20. 22. 25. Mar. 1. 4. 6. 8. 12. 15. 19. 21. 26. 28. Apr. 4. 5. 9. 11. 16. 18. 19. 23. 24. 26. 29. May. 1. 2. 3. 6. 7. 8. 9. 15. 17. 20. 23. 27. 29. 31. June. 4. 5. 7. 12. 14. 19. 25. 28. July 5. Total No. of visits *67*

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

Dates of Examination of principal parts—Cylinders *19/4/18* Slides *26/4/18* Covers *19/4/18* Pistons *26/4/18* Rods *24/4/18*
Connecting rods *5/4/18* Crank shaft *19/4/18* Thrust shaft *19/4/18* Tunnel shafts *19/4/18* Screw shaft *19/4/18* Propeller *26/4/18*
Stern tube *9/4/18* Steam pipes tested *29/5/18* Engine and boiler seatings *3/5/18* Engines holding down bolts *27/5/18*
Completion of pumping arrangements *5/6/18* Boilers fixed *30/5/18* Engines tried under steam *7/6/18*
Completion of fitting sea connections *26/4/18* Stern tube *26/4/18* Screw shaft and propeller *7/5/18*
Main boiler safety valves adjusted *3/5/18* Thickness of adjusting washers *2 15/32 5 6/16 - 2 6/16 5 14/32 - 2 19/32 5 7/16*
Material of Crank shaft *Steel* Identification Mark on Do. *5831* Material of Thrust shaft *Steel* Identification Mark on Do. *5831*
Material of Tunnel shafts *Steel* Identification Marks on Do. *2907 N* Material of Screw shafts *Steel* Identification Marks on Do. *2907 N*
Material of Steam Pipes *Steel* Test pressure *600 lbs*
Is an installation fitted for burning oil fuel? *Yes* 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? *Yes*
Is this machinery duplicate of a previous case? *Yes* If so, state name of vessel *-*

General Remarks (State quality of workmanship, opinions as to class, &c. *Workmanship good.*

This vessel is fitted to carry fuel oil in double bottom above 150° F. The requirements have been complied with.

The machinery and boilers of this steamer have been constructed under special survey, and placed on board in accordance with the Society's Rules. They are now in our opinion in safe working condition and subject matter submitted for the certification + L.M.C. 7. 18 F. D. To carry fuel oil in double bottom above 150° F. in the Register Book.

It is submitted that
this vessel is eligible for
THE RECORD. + L.M.C. 7. 18. F.D.

Note

See damage report as regards Submitter attached hereto

J.W.D. 13/7/18

The amount of Entry Fee £ 3 : 0 :
Special Damages £ 47 : 9 :
Donkey Boiler Fee £ : :
Travelling Expenses (if any) £ : :
When applied for, *6/7/1918*
When received, *9.7.18*

James Jones.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 9 JUL 1918

Assigned + L.M.C. 7. 18.



© 2020

Lloyd's Register Foundation

Greenock

Certificate (if required) to be sent to

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