

W1138-0112

Rpt. 4. REPORT ON MACHINERY. No. 17344

Received at London Office

Date of writing Report 27 Aug 1918 When handed in at Local Office 24/8/18 19 1918 Port of Greenock
 No. in Survey held at Greenock Date, First Survey 12th March, 1914; Last Survey 31 Aug 1918
 Reg. Book. on the Steel Steamer "War Briton" (Number of Visits 102)
 Master Harrison Built at Greenock By whom built Greenock Steamship Co Ltd When built 1918
 Engines made at Greenock By whom made John S Kincaid & Co Ltd when made 1918
 Boilers made at Blangou By whom made D Rowan & Co Ltd when made 1918
 Registered Horse Power 490 Owners Shipping Controller Port belonging to London
 Nom. Horse Power as per Section 28 490 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

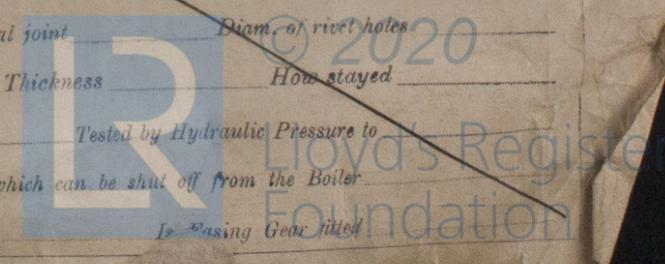
ENGINES, &c.—Description of Engines Triple Compound No. of Cylinders Three No. of Cranks Three
 Dia. of Cylinders 27-44-73 Length of Stroke 48 Revs. per minute 77 Dia. of Screw shaft 14.6 Material of screw shaft Steel
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube 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 No 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 No If two liners are fitted, is the shaft lapped or protected between the liners No Length of stern bush 60 1/2
 Dia. of Tunnel shaft 13 3/4 as per rule 13 3/4 Dia. of Crank shaft journals 13 9/16 as per rule 13 9/16 Dia. of Crank pin 14 Size of Crank web 21.5 1/2 Dia. of thrust shaft under collars 14 1/4 Dia. of screw 17.6 Pitch of Screw 16:6 No. of Blades 4 State whether moveable No Total surface 98 1/2
 No. of Feed pumps Two Diameter of ditto 4 Stroke 27 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps Two Diameter of ditto 4 Stroke 27 Can one be overhauled while the other is at work Yes
 No. of Donkey Engines Two Sizes of Pumps 7-15 - 14-24 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room Two 3 1/2 In Holds, &c. Two 3 1/2 Bunkers, Two 3 1/2 aft hold.
 Circulating pump separate engine. Standard one 3
 No. of Bilge Injections Yes sizes 8 Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 3 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 Yes
 What pipes are carried through the bunkers No How are they protected No
 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 No worked from Yes

BOILERS, &c.—(Letter for record S) Manufacturers of Steel As per Glasgow Report attached hereto
 Total Heating Surface of Boilers 7020 Is Forced Draft fitted Yes No. and Description of Boilers Three single ended
 Working Pressure 180 lb Tested by hydraulic pressure to 360 lb Date of test 12 March 1918 No. of Certificate 14161
 Can each boiler be worked separately Yes Area of fire grate in each boiler 63 3/4 No. and Description of Safety Valves to each boiler Two Spring Area of each valve 9.625 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 26 Mean dia. of boilers 36 Length 12 Material of shell plates Steel
 Thickness 3/16 Range of tensile strength 45,000 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams No
 long. seams Yes Diameter of rivet holes in long. seams 3/16 Pitch of rivets 2 1/2 Lap of plates or width of butt straps 1 1/2
 Per centages of strength of longitudinal joint 85 Working pressure of shell by rules 185 Size of manhole in shell 18
 Size of compensating ring 18 No. and Description of Furnaces in each boiler One Material Steel Outside diameter 36
 Length of plain part 12 Thickness of plates 3/16 Description of longitudinal joint Butt No. of strengthening rings None
 Working pressure of furnace by the rules 185 Combustion chamber plates: Material Steel Thickness: Sides 3/16 Back 3/16 Top 3/16 Bottom 3/16
 Pitch of stays to ditto: Sides 12 Back 12 Top 12 If stays are fitted with nuts or riveted heads No Working pressure by rules 185
 Material of stays Steel Area at smallest part 1.5 Area supported by each stay 1.5 Working pressure by rules 185 End plates in steam space: None
 Material Steel Thickness 3/16 Pitch of stays 12 How are stays secured By nuts Working pressure by rules 185 Material of stays Steel
 Area at smallest part 1.5 Area supported by each stay 1.5 Working pressure by rules 185 Material of Front plates at bottom Steel
 Thickness 3/16 Material of Lower back plate Steel Thickness 3/16 Greatest pitch of stays 12 Working pressure of plate by rules 185
 Diameter of tubes 2 1/2 Pitch of tubes 12 Material of tube plates Steel Thickness: Front 3/16 Back 3/16 Mean pitch of stays 12
 Pitch across wide water spaces 12 Working pressures by rules 185 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 12 Length as per rule 12 Distance apart 12 Number and pitch of stays in each 12
 Working pressure by rules 185 Steam dome: description of joint to shell Butt % of strength of joint 85
 Diameter 18 Thickness of shell plates 3/16 Material Steel Description of longitudinal joint Butt Diam. of rivet holes 3/16
 Pitch of rivets 2 1/2 Working pressure of shell by rules 185 Crown plates None Thickness 3/16 How stayed By nuts

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 Pressure to which each is adjusted None Is Easing Gear fitted None

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

Lloyd's Register



IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied: - *Two top end bolts. Two bottom end bolts. Two main bearing bolts. One set coupling bolts. One set dead beam valves. One set bridge beam valves. One set check valve. Propeller bolts nuts &c. One dead escape valve. Three safety valve springs.*

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

Robert Green Manufacturer.

Dates of Survey while building
During progress of work in shops - - *21. Dec: 6. (1918). Jan. 15. 17. 21. 25. 30. Feb. 4. 14. 20. 22. 25. Mar. 1. 8. 12. 13. 15. 18. 21. 26. 28. Apr. 2. 3. 5. 11. 15. 14. 19. 22. 23. 24. 26. May 1. 3. 6. 7. 17. 23. 29. 30. June. 3. 4. 5. 7. 10. 11. 12. 14. 18. 19. 20. 21. 25. 26. 28. July. 17. 19. 22. 24. 25. 29. 31. Aug. 15. 19. 22. 27. 29. 31.*
During erection on board vessel - - -
Total No. of visits *102.*

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

Dates of Examination of principal parts - Cylinders *29/5/18* Slides *24/7/18* Covers *29/5/18* Pistons *29/5/18* Rods *29/5/18*
Connecting rods *29/5/18* Crank shaft *28/5/18* Thrust shaft *1/5/17* Tunnel shafts *25/7/18* Screw shaft *4/6/18* Propeller *29/5/18*
Stern tube *29/5/18* Steam pipes tested *15/8/18* Engine and boiler seatings *24/6/18* Engines holding down bolts *15/8/18*
Completion of pumping arrangements *15/8/18* Boilers fixed *15/8/18* Engines tried under steam *27/8/18*
Completion of fitting sea connections *26/6/18* Stern tube *19/6/18* Screw shaft and propeller *19/6/18*
Main boiler safety valves adjusted *22/8/18* Thickness of adjusting washers *9/16 5/16 - 9/16 5/16 - 9/16 5/16*

Material of Crank shaft *Steel* Identification Mark on Do. *4979* Material of Thrust shaft *Steel* Identification Mark on Do. *4408*
Material of Tunnel shafts *Steel* Identification Marks on Do. *633* Material of Screw shafts *Steel* Identification Marks on Do. *633*
Material of Steam Pipes *Steel* Test pressure *540 lbs. & over*

Is an installation fitted for burning oil fuel *Yes* Is the flash point of the oil to be used over 150° F. *Yes*

Have the requirements of Section 49 of the Rules been complied with *Yes*

Is this machinery duplicate of a previous case If so, state name of vessel

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

The machinery and fittings 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 the case is respectfully submitted for the satisfaction of L.M.C. 8.18. F.D. fitted to burn oil fuel above 150° F. (also to burn coal), in the Register Book.

This vessel is fitted to carry oil fuel above 150° F in oil tanks and double bottom in accordance with specification.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 8.18 F.D. FITTED FOR OIL FUEL 8.18 F.P. ABOVE 150° F

The amount of Entry Fee *£106.14.6* When applied for, *31st August, 1918.*
Special ... *£22.20*
Donkey Boiler Fee *£5.12/6* When received, *7-9-18*
Travelling Expenses (if any) £

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

Greenock

Certificate (if required) to be sent to
The Surveyor and Registrar not to write on or below the space for Committee's Minute.