

REPORT ON MACHINERY.

No. 14327.

Port of

GREENOCK

JUN. 27 JUN 1905

Received at London Office

No. in Survey held at Greenock Date, first Survey 2nd Nov 1904 Last Survey 7th June 1905
 Reg. Book. on the Paddle Steamer "Caxton" (Number of Visits 93)
 Master Built at Goker By whom built Kapier & Miller Ltd When built 1905
 Engines made at Greenock By whom made Scott's & Co. Eng. Co. Ltd when made 1905
 Boilers made at Greenock By whom made Scott's & Co. Eng. Co. Ltd when made 1905
 Registered Horse Power Owners The London County Council Port belonging to London
 Nom. Horse Power as per Section 28 53 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Compound Surface Condensing No. of Cylinders Two No. of Cranks Two
 Dia. of Cylinders 16" - 31" Length of Stroke 36" Revs. per minute 55 Dia. of propeller shaft 6.8" Material of Steel screw shaft
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube ✓ Is the after end of the liner made water tight in the propeller boss ✓
 If the liner is in more than one length are the joints burned ✓ 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 ✓ Length of stern bush
 Dia. of Tunnel shaft as per rule Dia. of Crank shaft journals as fitted 6.5" Dia. of Crank pin 6.3" Size of Crank webs 4x4 1/2" Dia. of thrust shaft under collars as fitted 8.6" Pitch of screw No. of blades 4 State whether moveable Yes Total surface 10 Sq. ft. per float
 No. of Feed pumps 2 Diameter of ditto 2 3/4" Stroke 8" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps Diameter of ditto Stroke Can one be overhauled while the other is at work
 No. of Donkey Engines one Sizes of Pumps 3 1/2" x 8" Stroke No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room only one suction from donkey pump In Holds, &c. Forward: one - 2" dia. Aft: one - 2" dia.
 No. of bilge injections 1 sizes 3" Connected to condenser, or to circulating pump C. P. Is a separate donkey suction fitted in Engine room & size Yes: 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 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 None How are they protected
 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
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock Nov 1904 Is the screw shaft tunnel watertight ✓
 Is it fitted with a watertight door worked from

BOILERS, &c.— (Letter for record £) Total Heating Surface of Boilers 730 Sq. ft. Is forced draft fitted Yes
 No. and Description of Boilers One: cylinder - Multi-Surface Indent Working Pressure 109 lbs. Tested by hydraulic pressure to 218 lbs.
 Date of test 8/4/05 Can each boiler be worked separately ✓ Area of fire grate in each boiler 25 Sq. ft. No. and Description of safety valves to each boiler 2: Direct Spring Area of each valve 4.06" Pressure to which they are adjusted 110 lbs. Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork About 9" Mean dia. of boilers 9'0" Length 9'3" Material of shell plates Steel
 Thickness 3/16" Range of tensile strength 28-32 tons Are they welded or flanged No Descrip. of riveting: cir. seams Lap Double long. seams Double
 Diameter of rivet holes in long. seams 3/4" Pitch of rivets 4 1/2" Lap of plates or width of butt straps 4 7/8"
 Per centages of strength of longitudinal joint 86 Working pressure of shell by rules 115 lbs. Size of manhole in shell 16" x 11"
 Size of compensating ring Flanged Ring No. and Description of Furnaces in each boiler 2: plain Material Steel Outside diameter 34.6
 Length of plain part 6'4" Thickness of plates 3/16" Description of longitudinal joint Weld No. of strengthening rings None
 Working pressure of furnace by the rules 118 lbs. Combustion chamber plates: Material Steel Thickness: Sides 15/32" Back 15/32" Top 15/32" Bottom 5/8"
 Pitch of stays to ditto: Sides 8 5/8" x 6 3/4" Back 8 5/8" x 7/8" Top 8 1/2" x 7/4" stays are fitted with nuts or riveted heads Nuts Working pressure by rules 109 lbs.
 Material of stays Steel Diameter at smallest part 1 1/8" Area supported by each stay 6 1/2" Working pressure by rules 125 lbs. End plates in steam space: Material Steel Thickness 2 1/32" Pitch of stays 14" x 12 3/8" How are stays secured Double Nuts & Riveted washers Working pressure by rules 116 lbs. Material of stays Steel
 Diameter at smallest part 1 7/8" Area supported by each stay 210 Sq. in. Working pressure by rules 131 lbs. Material of Front plates at bottom Steel
 Thickness 2 1/32" Material of Lower back plate Steel Thickness 2 1/32" Greatest pitch of stays 8 3/8" Working pressure of plate by rules 183 lbs.
 Diameter of tubes 2 1/2" Pitch of tubes 3 1/2" x 3 1/2" Material of tube plates Steel Thickness: Front 2 1/32" Back 2 1/32" Mean pitch of stays 13 1/2"
 Pitch across wide water spaces 12 1/2" Working pressures by rules 102 lbs. 109 lbs. Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 5 1/2" x 1 1/2" Length as per rule 26" Distance apart 8 1/2" Number and pitch of Stays in each 2: 7 1/2"
 Working pressure by rules 111 lbs. Superheater or Steam chest; how connected to boiler None Can the superheater be shut off and the boiler worked separately
 Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
 If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed
 Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

DONKEY BOILER— No. _____ Description _____

Made at _____ By whom made _____ When made _____ Where fixed _____

Working pressure tested by hydraulic pressure to _____ No. of Certificate _____ Fire grate area _____ Description of safety valves _____

No. of safety valves _____ Area of each _____ Pressure to which they are adjusted _____ If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____

Dia. of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____ Range of tensile strength _____

Descrip. of riveting long. seams _____ Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____

Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Thickness of shell crown plates _____ Radius of do. _____ No. of Stays to do. _____

Dia. of stays _____ Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of joint _____

Thickness of furnace crown plates _____ Stayed by _____ Working pressure of shell by rules _____

Working pressure of furnace by rules _____ Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____

SPARE GEAR. State the articles supplied:—

SCOTT'S SHIPBUILDING & ENGINEERING COMPANY, LIMITED.
The foregoing is a correct description,

Manufacturer.

Dates of Survey while building

During progress of work in shops—	1904. Nov 2. 8. Dec 7. 9. 12. 14. 16. 19. 23. 26. 28. 30. 1905. Jan 10. 11. 12. 16. 17. 18. 19. 20. 23. 24. 25. 26. 28. 30. 31.
During erection on board vessel—	Feb 1. 2. 3. 6. 7. 8. 9. 11. 13. 14. 15. 16. 17. 20. 22. 23. 24. 25. 27. 28. Mar 1. 2. 3. 7. 8. 9. 11. 13. 15. 16. 17. 18. 25. 28. 29. 30.
Total No. of visits	April 1. 3. 4. 5. 6. 8. 11. 12. 17. 18. 20. 22. 24. 26. 28. May 1. 5. 8. 10. 15. 16. 19. 22. 23. 26. 30. June 1. 5. 6. 7.

93. Is the approved plan of main boiler forwarded herewith _____

“ “ “ donkey “ “ “

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

The Engines and Boiler of this vessel have been built under special survey and the materials and workmanship are good. When completed they were examined under steam and found to work satisfactorily.

The machinery throughout is now in good and efficient condition and eligible in my opinion to have the record **LMC 6.05** marked in the Society's Register Book.

It is submitted that this vessel is eligible for THE RECORD **LMC 6.05** FD. ELEC. LIGHT.

Impd.
27. 6. 05.
J.M.

The amount of Entry Fee. £ 1 : : : When applied for, 9/6/1905

Special £ 8 : : : When received, 11. 7. 05

Donkey Boiler Fee £ : : :

Travelling Expenses (if any) £ : : :

Eng. J. A. Austin
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

Glasgow 26 JUN 1905

Assigned

+ L.M.C. 6.05.

Arrival

MACHINERY CERTIFICATE WRITTEN 27. 6. 05

When fee is paid



© 2021

Lloyd's Register Foundation

Greenock

Certificate (if required) to be sent to

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