

## REPORT ON MACHINERY.

No. 18288

Received at London Office

17 Sep 1924

Date of writing Report 5-9-1924 When handed in at Local Office 11-9-1924 Port of Greenock  
 No. in Survey held at Greenock Date, First Survey 3rd April, 1924. Last Survey 6th September 1924  
 Reg. Book. on the S/S Forestgate (Number of Visits 38)  
 Master Built at Glasgow By whom built Barclay Curle & Co. Ltd. Tons { Gross 1600  
 Engines made at Greenock By whom made John & Macauld & Co. Ltd. (615) when made 1924 Net 887  
 Boilers made at ditto By whom made ditto (615) when made 1924  
 Registered Horse Power Owners Mann, Macneil & Co. Port belonging to London  
 Nom. Horse Power as per Section 28 169 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3  
 Dia. of Cylinders 18" 20" 30" Length of Stroke 33 Revs. per minute 80 Dia. of Screw shaft 10.01" 9.98" Material of S  
 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 — 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 41 1/2"  
 Dia. of Tunnel shaft 9.08" 9.03" Dia. of Crank shaft journals 9 1/2" 9.48" Dia. of Crank pin 9 3/4" Size of Crank webs 18.6" Dia. of thrust shaft under  
 collars 9 3/4" Dia. of screw 12.0" Pitch of Screw 13.0" No. of Blades 4 State whether moveable No Total surface 48.5 sq ft  
 No. of Feed pumps 2 Diameter of ditto 3" Stroke 18" Can one be overhauled while the other is at work Yes  
 No. of Bilge pumps 2 Diameter of ditto 3" Stroke 18" Can one be overhauled while the other is at work Yes  
 No. of Donkey Engines 2 Sizes of Pumps Ballant 6.7 1/2, 6.4 5/8, 2.1 3/4, 5" No. and size of Suctions connected to both Bilge and Donkey pumps  
 In Engine Room 3. 2 3/4" Tunnel Well 1. 2 1/2" In Holds, &c. 2. 2 3/4" in each. aft Hold Well 1. 2 3/4"

No. of Bilge Injections 1 sizes 5" Connected to condenser or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 2 3/4"  
 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 Bilge Suctions How are they protected Good 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 U.F.R. Platform  
 BOILERS, &c.—(Letter for record S) Manufacturers of Steel James Watson & Steel Co. of Scotland  
 Total Heating Surface of Boilers 2790 sq ft Is Forced Draft fitted No No. and Description of Boilers 2 Single Ended  
 Working Pressure 180 Tested by hydraulic pressure to 320 Date of test 6.6.24 No. of Certificate 1655  
 Can each boiler be worked separately Yes Area of fire grate in each boiler 46.58 sq ft No. and Description of Safety Valves to  
 each boiler Double Spring Area of each valve 4.91 sq ft Pressure to which they are adjusted 185 Are they fitted with easing gear Yes  
 Smallest distance between boilers or uptakes and bunkers or woodwork 24" Mean dia. of boilers 13.0" Length 10.6" Material of shell plates S  
 Thickness 1 1/16" Range of tensile strength 28-32 Are the shell plates welded or flanged — Descrip. of riveting: cir. seams DR  
 long. seams TR. DBS Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 8" Lap of plates or width of butt straps 16 7/8"  
 Per centages of strength of longitudinal joint rivets 90 Working pressure of shell by rules 182 Size of manhole in shell 16 1/2"  
 Size of compensating ring 20 1/4 x 13 1/2 No. and Description of Furnaces in each boiler 3 corrugated Material S Outside diameter 3.5 1/4"  
 Length of plain part top 1 1/2" Thickness of plates crown 1 1/2" Description of longitudinal joint weld No. of strengthening rings —  
 Working pressure of furnace by the rules 189 Combustion chamber plates: Material S Thickness: Sides 2 1/32" Back 5/8" Top 2 1/32" Bottom 2 1/32"  
 Pitch of stays to ditto: Sides 9 5/8 x 5/8" Back 8 7/8 x 5/8" Top 9 5/8 x 5/8" If stays are fitted with nuts or riveted heads Both Working pressure by rules 184  
 Material of stays S Area at smallest part 1.73 sq ft Area supported by each stay 83.9 sq ft Working pressure by rules 207 End plates in steam space:  
 Material S Thickness 1 1/32" Pitch of stays 9 1/2 x 1 1/2" How are stays secured DN Working pressure by rules 186 Material of stays S  
 Area at smallest part 6.56 sq ft Area supported by each stay 332 sq ft Working pressure by rules 183 Material of Front plates at bottom S  
 Thickness 1" Material of Lower back plate S Thickness 25/32" Greatest pitch of stays 13/2" Working pressure of plate by rules 187  
 Diameter of tubes 3 1/4" Pitch of tubes 4 3/8 x 4 1/2" Material of tube plates S Thickness: Front 1" Back 3/4" Mean pitch of stays 10 3/16"  
 Pitch across wide water spaces 14" Working pressures by rules 187 Girders to Chamber tops: Material S Depth and  
 thickness of girder at centre 8 1/2 x 5/8 (2) Length as per rule 30.625 Distance apart 8 5/8" Number and pitch of stays in each 2 at 9 1/2"

Working pressure by rules 192 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

W1308-0095



No ✓

*If so, is a report now forwarded?*

SPARE GEAR. State the articles supplied:— 2 Connecting Rod bolts each for top and, ditto for bottom, 2 Main Bearing bolts, 1 Set of Coupling bolts, 1 Set of Feed & Pulge Pump nuts, a quantity of assorted bolts, nuts & washers of various sizes.

FOR JOHN G. KINCAID & CO.,

Manufacturer.

1924. Apr 3-24-27-28-30. May 9-14-19-21-23-29-30. June 3-4-6-17-19-24-26-30. July 1-15-18-22-24-25-30-31.  
Aug 4-8-13-18-19-22-25-28. Sep 1-6.

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

Is the approved plan of main boiler forwarded herewith

“ ” “ donkey ” ” ”

Connecting rods 19. 6. 24 Crank shaft 1- 7. 24 Thrust shaft 15. 7. 24 Tunnel shafts 25. 7. 24 Screw shaft 25. 7. 24 Propeller 22. 7. 24

Stern tube 4- 6- 24 Steam pipes tested 22. 8. 24 Engine and boiler seatings see 4th Rpt Engines holding down bolts 13- 8- 24

Completion of pumping arrangements 28. 8. 24 Boilers fixed 13- 8. 24 Engines tried under steam 6- 9. 24

Completion of fitting sea connections see 4th Rept Stern tube see 4th Rept Screw shaft and propeller see 4th Rept

Main boiler safety valves adjusted 28. 8. 24 Thickness of adjusting washers  $S \frac{3}{8} F P \frac{1}{8} F P \frac{3}{8} F S \frac{3}{8} " P \frac{23}{32} S \frac{5}{16}$   
28. 8. 24

Material of Crank shaft S Identification Mark on Do. WGM Material of Thrust shaft S Identification Mark on Do. WGM

Material of Tunnel shafts \$ Identification Marks on Do. 79914807093 Material of Screw shafts \$ Identification Marks on Do. 1350 WGM

Material of Steam Pipes Copper (SD) ✓ Test pressure 4000 lb<sup>sq</sup> ✓

Is an installation fitted for burning oil fuel ☒ 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 ny

General Remarks (State quality of workmanship, opinions as to class, &c. These Inquis + Boston have

low bulk in the classical sense in <sup>of</sup> accordance with

All these under garden away the vegetable room  
 2. out the house the big small room

the approved plans & the workmanship, & the value of

good quality & they have been severely filled on board

Fred Underwood, found satisfaction

The Motion is eligible in my opinion for the record of  $\times$  L M C

9-24

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

It is submitted that  
this vessel is suitable for

THE RECORD. + LMC. 9.24. CL.

25 26 27 28 29 30

2 37 100

1879/24

100

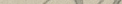

The amount of Entry Fee ... £ 3 : - : ✓ When applied for, 21922

Special ... 42: 5: 11: 19: 24: *U = Gordon-Muscle*

Donkey Boiler Fee ... £ : : When received, Engineer Surveyor to Lloyd's Register of Shipping.

Travelling Expenses (if any) £ : : 16/10-24

Traveling Expenses (if any) \$

Committee's Minute GLASGOW 16 SEP 1924   © 2021

Assigned + LMC 924

17.9.07

