

REPORT ON MACHINERY

No. 26453

TUES. 14 APR 1908

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Date of writing Report 9th April 1908 When handed in at Local Office 9th April 1908 Port of Glasgow
 No. in Survey held at Troon Date, First Survey 17th May 1907 Last Survey 1st April 1908
 Reg. Book. 593 on the S.S. Drake (Number of Visits)
 Master Troon Built at Troon By whom built Ailsa S B C Co Tons { Gross
 Engines made at Troon By whom made Ailsa S B C Co when made 1908 Net
 Boilers made at Glasgow By whom made Dunsmuir & Jackson Ltd when made 1908
 Registered Horse Power 301 Owners General Steam Navigation Co Ltd Port belonging to London
 Nom. Horse Power as per Section 28 301 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders Three No. of Cranks 3
 Dia. of Cylinders 23 37 1/2 x 62 Length of Stroke 39 Revs. per minute 80 Dia. of Screw shaft 12 9/32 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 ✓ 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 68"
 Dia. of Tunnel shaft 10 9/16 Dia. of Crank shaft journals 11 5/8 Dia. of Crank pin 11 7/8 Size of Crank webs 20 1/2 x 7 1/2 Dia. of thrust shaft under
 collars 11 9/8 Dia. of screw 14 3/4 Pitch of Screw 15 9/16 No. of Blades 4 State whether moveable No Total surface 66 sq ft
 No. of Feed pumps 2 Diameter of ditto 4" Stroke 19 1/2 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 4" Stroke 19 1/2 Can one be overhauled while the other is at work Yes
 No. of Donkey Engines Five Sizes of Pumps 2 1/2 x 7 1/2 double, 5 x 6 x 8 duplex and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room Four 2 3/4" In Holds, &c. Two 2 3/4" in each hold and one 2" in tunnel well.
 No. of Bilge Injections 2 sizes 6 3/4" Connected to condenser, or to circulating pump Pump Is a separate Donkey Suction fitted in Engine room & size one 3"
 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 opening 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 Some bilge How are they protected Wood boxing
 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
 Dates of examination of completion of fitting of Sea Connections 13/12/07 of Stern Tube 6/3/08 Screw shaft and Propeller 10/3/08
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Engine room top platform.

BOILERS, &c.—(Letter for record ✓) Manufacturers of Steel Wm. Single Ended
 Total Heating Surface of Boilers 5320 sq ft Forced Draft fitted No No. and Description of Boiler Two, Single Ended
 Working Pressure 170 lb per sq in Tested by hydraulic pressure to ✓ Date of test ✓ No. of Certificate ✓
 Can each boiler be worked separately ✓ Area of fire grate in each boiler ✓ No. and Description of Safety Valves to
 each boiler No, direct spring Area of each valve 8 3/4" Pressure to which they are adjusted 175 lb per sq in Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 4 ft Mean dia. of boilers ✓ Length ✓ Material of shell plates ✓
 Thickness ✓ Range of tensile strength ✓ Are the shell plates welded or flanged ✓ Descrip. of riveting: cir. seams ✓
 long. seams ✓ Diameter of rivet holes in long. seams ✓ Pitch of rivets ✓ Lap of plates or width of butt straps ✓
 Per centages of strength of longitudinal joint ✓ Working pressure of shell by rules ✓ Size of manhole in shell ✓
 Size of compensating ring ✓ No. and Description of Furnaces in each boiler ✓ Material ✓ Outside diameter ✓
 Length of plain part top Thickness of plates bottom Description of longitudinal joint ✓ No. of strengthening rings ✓
 Working pressure of furnace by the rules ✓ Combustion chamber plates: Material ✓ Thickness: Sides ✓ Back ✓ Top ✓ Bottom ✓
 Pitch of stays to ditto: Sides ✓ Back ✓ Top ✓ If stays are fitted with nuts or riveted heads ✓ Working pressure by rules ✓ End plates in steam space: ✓
 Material of stays ✓ Diameter at smallest part ✓ Area supported by each stay ✓ Working pressure by rules ✓ Material of stays ✓
 Material ✓ Thickness ✓ Pitch of stays ✓ How are stays secured ✓ Working pressure by rules ✓ Material of Front plates at bottom ✓
 Diameter at smallest part ✓ Area supported by each stay ✓ Working pressure by rules ✓ Material of Front plates at bottom ✓
 Thickness ✓ Material of Lower back plate ✓ Thickness ✓ Greatest pitch of stays ✓ Working pressure of plate by rules ✓
 Diameter of tubes ✓ Pitch of tubes ✓ Material of tube plates ✓ Thickness: Front ✓ Back ✓ Mean pitch of stays ✓
 Pitch across wide water spaces ✓ Working pressures by rules ✓ Girders to Chamber tops: Material ✓ Depth and
 thickness of girder at centre ✓ Length as per rule ✓ Distance apart ✓ Number and pitch of stays in each ✓
 Working pressure by rules ✓ 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 ✓

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