

REPORT ON MACHINERY.

No. 16439
SAT. 26 NOV 1904

Port of Hull

No. in Survey held at Hull Date, first Survey Aug 31st Last Survey Nov 17th 1904
 Reg. Book. 39 Sup. on the Sc. K. Manxman (Number of Visits 19)
 Master Selby Built at Selby By whom built Messrs Cochrane Sons When built 1904
 Engines made at Hull By whom made Messrs C. D. Holmes & Co when made 1904
 Boilers made at Hull By whom made Messrs C. D. Holmes & Co when made 1904
 Registered Horse Power 66 Owners W. H. Beeley Port belonging to Gumby
 Nom. Horse Power as per Section 28 66 Is Refrigerating Machinery fitted No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Tri Compound No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 12" - 21" - 34" Length of Stroke 24" Revs. per minute 109 Dia. of Screw shaft as per rule 7¹/₂" 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 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 31"
 Dia. of Thrust shaft as per rule 6³/₄" Dia. of Crank shaft journals as per rule 6⁵/₈" Dia. of Crank pin 6¹/₂" Size of Crank webs 13¹/₂" x 4⁷/₈" Dia. of thrust shaft under collars 6¹/₈" Dia. of screw 8" - 6" Pitch of screw 10" - 6" - 11" - 6" No. of blades 4 State whether moveable No Total surface 27¹/₂ sq ft
 No. of Feed pumps 1 Diameter of ditto 2¹/₂" Stroke 24" Can one be overhauled while the other is at work
 No. of Bilge pumps 1 Diameter of ditto 2¹/₂" Stroke 24" Can one be overhauled while the other is at work
 No. of Donkey Engines One Sizes of Pumps 2³/₄" x 5" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room Two 2" In Holds, &c. One 2" to hold, One 2" to Slush Well. Ejector suction from hold, Eng. Room bilge, discharge on deck
 No. of bilge injections 1 sizes 3" Connected to condenser, or to circulating pump pump Is a separate donkey suction fitted in Engine room & size Yes 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 None
 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 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 Hold suction How are they protected wood 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
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock before launching Is the screw shaft tunnel watertight None
 Is it fitted with a watertight door worked from

BOILERS, &c.— (Letter for record S.) Total Heating Surface of Boilers 1095 sq ft Is forced draft fitted No
 No. and Description of Boilers One Cyl. Multi. Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs
 Date of test 26.10.04 Can each boiler be worked separately Area of fire grate in each boiler 32 sq ft No. and Description of safety valves to each boiler Two Spring Area of each valve 3.98 sq in Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 6 Ex Mean dia. of boilers 12'-0" Length 10'-0" Material of shell plates Steel
 Thickness 1" Range of tensile strength 29-32 tons Are they welded or flanged Descrip. of riveting: cir. seams L. D. long. seams O. B. S. J. R.
 Diameter of rivet holes in long. seams 1¹/₂" Pitch of rivets 7" Lap of plates or width of butt straps 15"
 Per centages of strength of longitudinal joint rivets 89.25 Working pressure of shell by rules 186 lbs Size of manhole in shell 16" x 12" plate 85.26
 Size of compensating ring 7" x 1" No. and Description of Furnaces in each boiler Two plain Material Steel Outside diameter 3'-6"
 Length of plain part top 5'-70" Thickness of plates crown 3/4" Description of longitudinal joint welded No. of strengthening rings None bottom 3/4"
 Working pressure of furnace by the rules 205 lbs Combustion chamber plates: Material Steel Thickness: Sides 23/32" Back 11/16" Top 23/32" Bottom 23/32"
 Pitch of stays to ditto: Sides 9" x 8¹/₂" Back 9" x 8¹/₂" Top 8¹/₂" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 213 lbs
 Material of stays Steel Diameter at smallest part 1⁵/₈" Area supported by each stay 76¹/₂ sq in Working pressure by rules 243 lbs End plates in steam space: Material Steel Thickness 1¹/₂" Pitch of stays 16" x 16" How are stays secured O. N. W. Working pressure by rules 196 lbs Material of stays Steel
 Diameter at smallest part 2¹/₈" Area supported by each stay 256 sq in Working pressure by rules 225 lbs Material of Front plates at bottom Steel
 Thickness 2¹/₂" Material of Lower back plate Steel Thickness 1⁵/₁₆" Greatest pitch of stays 15" Working pressure of plate by rules 198 lbs
 Diameter of tubes 3¹/₄" Pitch of tubes 4⁵/₈" Material of tube plates Steel Thickness: Front 27/32" Back 1/8" Mean pitch of stays 9¹/₄"
 Pitch across wide water spaces 15" Working pressures by rules 188 lbs Girders to Chamber tops: Material Iron Depth and thickness of girder at centre 8³/₄" x 1³/₄" Length as per rule 2'-8" Distance apart 8" Number and pitch of Stays in each Three 8¹/₂"
 Working pressure by rules 196 lbs Superheater or Steam chest; how connected to boiler 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

