

REPORT ON MACHINERY.

No. 49382

Port of Newcastle

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No. in Survey held at Newcastle Date, first Survey March '03 Last Survey Sept 13 1904
 Reg. Book. WIN 515 Muritzburg "MENDOZA" (Number of Visits 31)
 Master V. Toca Built at Newcastle By whom built Armstrong Works Tons Gross 5874 Net 3687
 Engines made at Wallsend By whom made Wallsend Shipyard Eng'rs when made 1904
 Boilers made at " By whom made " when made 1903 & 4
 Registered Horse Power _____ Owners Lloyd Italiano Soc. de Navag. Port belonging to Genoa
 Nom. Horse Power as per Section 28 851 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Iron In C.P. No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 25" 41" 68" Length of Stroke 4 8 Revs. per minute 65 Dia. of Screw shaft 13.91 Material of 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 yes If two
 liners are fitted, is the shaft lapped or protected between the liners no Length of stern bush 5' 3"
 Dia. of Tunnel shaft 12.64 as per rule 13.3 Dia. of Crank shaft journals 13.3 as per rule 14" Dia. of Crank pin 14" Size of Crank webs 22x9 1/2 Dia. of thrust shaft under
 collars 14 1/2 Dia. of screw 16 6 Pitch of screw 19 ft. No. of blades 3 State whether moveable N Total surface 70 sq
 No. of Feed pumps 1 pair Diameter of ditto 4x10 1/2 Stroke 26 Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 Diameter of ditto 5 Stroke 24 Can one be overhauled while the other is at work yes
 No. of Donkey Engines 4 Sizes of Pumps Ballast 10x10x10 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 5 1/2 x 4 1/2 x 6 3 1/2 In Holds, &c. No. 1, 2, 3 Holds 2 of 3 1/2
No. 4 of 3 1/2 A Well 3 1/2
 No. of bilge injections 2 sizes 8" Connected to condenser, or to circulating pump C.P. Is a separate donkey suction fitted in Engine room & size 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 no
 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 Steam pipes How are they protected tunnel
 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 3. 9. 05 Is the screw shaft tunnel watertight yes
 Is it fitted with a watertight door yes worked from top platforms

BOILERS, &c.— (Letter for record A) Total Heating Surface of Boilers 12250 sq. ft. Is forced draft fitted yes
 No. and Description of Boilers 5 St. Marine type Working Pressure 180 lb Tested by hydraulic pressure to 360
 Date of test 31. 7. 03 Can each boiler be worked separately yes Area of fire grate in each boiler 52.3 sq. ft. No. and Description of safety valves to
 each boiler 2 Spring Area of each valve 8.29 Pressure to which they are adjusted 185 Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 20" Mean dia. of boilers 15 ft. Length 11' 6" Material of shell plates S
 Thickness 1 1/2 Range of tensile strength 32 Are they welded or flanged Ends Descrip. of riveting: cir. seams Lap 2. 1/2 long. seams 2. butt straps
 Diameter of rivet holes in long. seams 1 1/2 Pitch of rivets 9/8 Lap of plates or width of butt straps 20 1/16
 Per centages of strength of longitudinal joint 91.8 Working pressure of shell by rules 206 lb Size of manhole in shell 16 x 12"
 Size of compensating ring M. Keib No. and Description of Furnaces in each boiler 3 Morrison's Material S Outside diameter 49 1/2
 Length of plain part top 7 1/16 Thickness of plates bottom 7 1/16 Description of longitudinal joint weld No. of strengthening rings no
 Working pressure of furnace by the rules 202 Combustion chamber plates: Material S Thickness: Sides 1/6 Back 1/6 Top 1/6 Bottom 1 1/32
 Pitch of stays to ditto: Sides 10 x 5 1/2 Back 9 1/2 x 5 1/2 Top 10 x 7 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 189
 Material of stays iron Diameter at smallest part 1 1/3 Area supported by each stay 85 sq. in. Working pressure by rules 203 End plates in steam space:
 Material S Thickness 1 3/8 Pitch of stays 15 x 2 1/2 How are stays secured nuts Working pressure by rules 254 Material of stays S
 Diameter at smallest part 3.13 Area supported by each stay 25 sq. in. Working pressure by rules 229 Material of Front plates at bottom S
 Thickness 1" Material of Lower back plate S Thickness 1" Greatest pitch of stays 13 1/2 Working pressure of plate by rules 191
 Diameter of tubes 2 1/2 Pitch of tubes 3 1/4 x 3 1/8 Material of tube plates S Thickness: Front 1" Back 3/4" Mean pitch of stays 4 1/2
 Pitch across wide water spaces 19" Working pressures by rules 213 lb Girders to Chamber tops: Material S Depth and
 thickness of girder at centre 8 3/8 x 1 1/2 Length as per rule 30 1/2 Distance apart 10 Number and pitch of Stays in each 2- 9 1/2
 Working pressure by rules 300 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 _____

