

REPORT ON MACHINERY.

Port of LIVERPOOL

Received at London Office SAT. 7 MAY 1898

No. in Survey held at *Liverpool* Date, first Survey *Feb 10th 1897* Last Survey *May 1st 1898*
 eg. Book. on the *Stal Iron Screw Steamer "Mormouth"* (Number of Visits *76*)
 Tons { Gross
 Net
 aster Built at *Belfast* By whom built *Harland & Wolff Ltd* When built *1897 & 8*
 engines made at *Liverpool* By whom made *Jawett Preston & Co Ltd* when made " "
 boilers made at " By whom made " " when made " "
 Registered Horse Power Owners Port belonging to
 m. Horse Power as per Section 28 *478* Is Electric Light fitted *Yes - from Belfast*

GINES, &c. — Description of Engines *Vertical Triple Expansion* No. of Cylinders *3* No. of Cranks *3*
 Diameter of Cylinders (2nd) *19.52* Length of Stroke *42* Revolutions per minute *45* Diameter of Screw shaft as per rule *11.24*
 as fitted *12*
 Diameter of Tunnel shaft as fitted *10.2* Diameter of Crank shaft journals *12* Diameter of Crank pin *2* Size of Crank webs *15 1/2 x 8 1/2*
 Diameter of screw *14.9* Pitch of screw *18.3* No. of blades *3* State whether moveable *yes* Total surface *53.5 sq ft*
 No. of Feed pumps *2* Diameter of ditto *4 1/2* Stroke *24* Can one be overhauled while the other is at work *yes*
 No. of Bilge pumps *3* Diameter of ditto *5* Stroke *24* Can one be overhauled while the other is at work *yes*
 No. of Donkey Engines *(5)* Sizes of Pumps *1 Ballast Donkey 12 x 10 x 10 No. and size of Suctions connected to both Bilge and Donkey pumps*
 Engine Room *(4) 3 of 3 1/2 dia and one of 2 1/2 dia In Holds, &c (1) of 3 1/2 dia 1 Tunnel Wells (2) of 2 1/2 dia*
 Main Bilge & Donkey Pumps draw from Sea Tanks. Bilges of Engine Room & Holds. Not well & Condenser.
 No. of bilge injections *2* sizes *6" & 4"* Connected to condenser, or to circulating pump *yes* Is a separate donkey suction fitted in Engine room *yes* size *3 1/2" bore*
 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 *yes*
 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*
 Are all pipes carried through the bunkers *yes* How are they protected *yes*
 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 *yes* Is the screw shaft tunnel watertight *yes*
 Is it fitted with a watertight door *yes* worked from *Mid platform*

BOILERS, &c. — (Letter for record *5*) Total Heating Surface of Boilers *8359 sq ft* Is forced draft fitted *no*
 and Description of Boilers *(3) Cylindrical & Multitubular 2 single ended, 1 double ended Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs*
 No. of test *2.11.97* Can each boiler be worked separately *yes* Area of fire grate in each boiler *231 sq ft* No. and Description of safety valves to
 boiler *2 direct spring* Area of each valve *5.96 sq in* Pressure to which they are adjusted *180 lbs* Are they fitted
 easing gear *yes* Smallest distance between boilers or uptakes and bunkers or woodwork *12 inches* Mean diameter of boilers *15.0"*
 Material of shell plates *steel* Thickness *1 3/8"* Description of riveting: circum. seams *Double & Triple lap* long. seams *Triple lap*
 Diameter of rivet holes in long. seams *1 1/32"* Pitch of rivets *9 5/8" x 4 1/16"* Lap of plates or width of butt straps *1.9 1/4"*
 Percentages of strength of longitudinal joint *84.34* Working pressure of shell by rules *184 lbs* Size of manhole in shell *16" x 12"*
 No. of compensating ring *3 1/2 x 27 x 1 1/2* No. and Description of Furnaces in each boiler *total 12* Material *steel* Outside diameter *3' 4 1/4"*
 Length of plain part *6"* Thickness of plates *19"* Description of longitudinal joint *Welded* No. of strengthening rings *1*
 Working pressure of furnace by the rules *214 lbs* Combustion chamber plates: Material *steel* Thickness: Sides *19/32"* Back *19/32"* Top *20/32"* Bottom *3/4"*
 Thickness of stays to ditto: Sides *8 1/2" x 8"* Back *8 1/2" x 8"* Top *8 1/2" x 8 1/2"* If stays are fitted with nuts or riveted heads *yes* Working pressure by rules *180 lbs*
 Material of stays *steel* Diameter at smallest part *1 3/8"* Area supported by each stay *66 sq in* Working pressure by rules *180 lbs* End plates in steam space:
 Material *steel* Thickness *1"* Pitch of stays *18" x 16 1/2"* How are stays secured *Double nuts* Working pressure by rules *180 lbs* Material of stays *steel*
 Diameter at smallest part *8 1/2"* Area supported by each stay *294 sq in* Working pressure by rules *183 lbs* Material of Front plates at bottom *steel*
 Thickness *15/16"* Material of Lower back plate *steel* Thickness *13/16"* Greatest pitch of stays *14"* Working pressure of plate by rules *180 lbs*
 Diameter of tubes *3"* Pitch of tubes *4 1/2" x 4 1/2"* Material of tube plates *steel* Thickness: Front *3/8"* Back *1/4"* Mean pitch of stays *8 1/2"*
 Thickness across wide water spaces *14 1/2"* Working pressures by rules *180 lbs* Girders to Chamber tops: Material *iron* Depth and
 Thickness of girder at centre *7 1/2" x 1"* Length as per rule *2' 6"* Distance apart *8"* Number and pitch of Stays in each *(3) 8 1/2" x 8 1/4"*
 Working pressure by rules *180 lbs* Superheater or Steam chest; how connected to boiler *none* Can the superheater be shut off and the boiler worked
 separately *yes* Diameter *1"* Length *1"* Thickness of shell plates *1"* Material *steel* Description of longitudinal joint *Welded* Diam. of rivet
 Pitch of rivets *1"* Working pressure of shell by rules *180 lbs* Diameter of flue *1"* Material of flue plates *steel* Thickness *1"*
 Fitted with rings *yes* Distance between rings *1"* Working pressure by rules *180 lbs* End plates: Thickness *1"* How stayed *yes*
 Working pressure of end plates *180 lbs* Area of safety valves to superheater *yes* Are they fitted with easing gear *yes*

DONKEY BOILER—

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 _____
 enter the donkey boiler _____ Diameter of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____
 Description of riveting long. seams _____ Diameter 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 _____
 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:— 1 Crank shaft. 1 Propeller shaft. 1 air pump bucket & rod. 1 Impeller & spindle for circulating pump. 2 Main pump bolts. 4 connecting rod bolts 1 set coupling bolts. 3 slide valve spindles. 1 set feed & Pelge pump valves. 1 set boiler feed check valves. 2 propeller blades. 1 set of valves for various parts of engine.
 The foregoing is a correct description,
 Manufacturer. *Thos Robert* Secretary.

Dates of Survey while building
 During progress of work in shops— 1897 Feb 10, 17, Mar 16, 26, Apr 1, 5, 12, 22, 27, 28, May 7, 8, 11, 12, 14, 21, 22, 26, June 3, 9, 10, 12, 19, July 1, 6, 10, 12, 15, 30, Aug 5, 6, 11, 24, 25, Sep 7, 8, 10, 11, 18, 25, 26, 27, 28, Nov 3, 4, 6, 9, 10, 11, 24, 25, Dec 2, 7, 1898 Jan 6, 7, Feb 7, 9, 11, 18, 19, Mar 9, 22, 28, 31, Apr 1, 4, 13, 15, 19, 20, 26, 27, May 1.
 During erection on board vessel
 Total No. of visits 76
 General Remarks (State quality of workmanship, opinions as to class, &c.)

The Machinery & Boilers of this vessel have been surveyed during construction and while fitting on board, the material and workmanship are of good description. Construction in conformity with the rules, and were found efficient when tested under steam, and eligible in our opinion to be recorded in the Society's Register Book + L.M.C 5-98

It is submitted that this vessel is eligible for THE RECORD.

+ L.M.C 5,98

Blue Light

7/5/98

Certificate (if required) to be sent to

The amount of Entry Fee... £ 3 : 0 : 0 When applied for.
 Special ... £ 43 : 18 : 0 - C MAY 98
 Donkey Boiler Fee ... £ MACHINERY CERTIFICATE
 Travelling Expenses (if any) £ WAITEN :
 When received, 16/5/98

Committee's Minute LIVERPOOL - 6 MAY 98

Assigned + L.M.C 5,98

Mr. Gregor & John Dyke
 Engineer Surveyors to Lloyd's Register of British & Foreign Shipping



© 2019

Lloyd's Register Foundation