

REPORT ON MACHINERY.

Port of *Dundee*

Received at London Office

MON. 12 MAR 1894

No. in Survey held at *Dundee*
Reg. Book.Date, first Survey *May 11th 1893* Last Survey *Feb'y 26th 1894*

(Number of Visits)

on the *Steel Sloop "Glasgow"*Tons { Gross *1067*
Net *492*Master *Turnbull* Built at *Dundee* By whom built *W B Thompson & Co Lim*When built *1894*Engines made at *Dundee* By whom made *W B Thompson & Co Lim*when made *1894*Boilers made at *Dundee* By whom made *W B Thompson & Co Lim*when made *1894*Registered Horse Power *180* Owners *J. Rankine & Son*Port belonging to *Glasgow*Nom. Horse Power as per Section 28 *225*ENGINES, &c.— Description of Engines *Triple expansion*No. of Cylinders *Three*Diameter of Cylinders *21½ - 34 - 56* Length of Stroke *42* Revolutions per minuteDiameter of Screw shaft as per rule *10.68*Diameter of Tunnel shaft as fitted *10.14* Diameter of Crank shaft journals *11½* Diameter of Crank pin *11½* Size of Crank webs *8½ x 21½*Diameter of screw *12.6* Pitch of screw *18.0* No. of blades *4* State whether moveable *no* Total surface *55.5 sq*No. of Feed pumps *2* Diameter of ditto *3¾* Stroke *24* Can one be overhauled while the other is at work *yes*No. of Bilge pumps *1 and bilge pump* Diameter of ditto *3¾* Stroke *24* Can one be overhauled while the other is at work *✓*No. of Donkey Engines *2 Heirs* Sizes of Pumps *8-6 x 21*

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room *3 of 3" dia*In Holds, &c. *No 1 hold 2 of 3" dia. No 2 hold 2 of 3" dia**after hold 1 of 3" dia*No. of bilge injections *1* sizes *7"* Connected to condenser, or to circulating pump *yes* 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 *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 *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 *bilge and ballast* How are they protected *wood casings*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 *new vessel* Is the screw shaft tunnel watertight *yes*Is it fitted with a watertight door *yes* worked from *main deck*BOILERS, &c.— (Letter for record *a*)Total Heating Surface of Boilers *3705 sq*No. and Description of Boilers *Two. Single ended*Working Pressure *170* Tested by hydraulic pressure to *340*Date of test *22/12/93* Can each boiler be worked separately *yes* Area of fire grate in each boiler *56 sq* No. and Description of safety valves toeach boiler *2 - spring loaded* Area of each valve *5.93* Pressure to which they are adjusted *170 lbs* Are they fittedwith easing gear *yes* Smallest distance between boilers or uptakes and bunkers or woodwork *2 ft* Mean diameter of boilers *14.0*Length *11.0* Material of shell plates *steel* Thickness *1½* Description of riveting: circum. seams *double lap* long. seams *double straps 2½ long*Diameter of rivet holes in long. seams *1½* Pitch of rivets *9½* Lap of plates or width of butt straps *20¾*Per centages of strength of longitudinal joint rivets *88.5* plate *85.5* Working pressure of shell by rules *193* Size of manhole in shell *18 x 13*Size of compensating ring *McNeill's* No. and Description of Furnaces in each boiler *3 Purves* Material *steel* Outside diameter *3.4*Length of plain part top bottom *1* Thickness of plates crown bottom *1½* Description of longitudinal joint *welded* No. of strengthening rings *✓*Working pressure of furnace by the rules *174* Combustion chamber plates: Material *steel* Thickness: Sides *7/16* Back *7/16* Top *7/16* Bottom *3/4*Pitch of stays to ditto: Sides *7/16 x 7/16* Back *7/16 x 7/16* Top *7/8 x 8* If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules *171*Material of stays *Iron* Diameter at smallest part *1.63* Area supported by each stay *63* Working pressure by rules *248* End plates in steam space:Material *steel* Thickness *1.32* Pitch of stays *15 x 16* How are stays secured *2 nuts* Working pressure by rules *221* Material of stays *Iron*Diameter at smallest part *2.78* Area supported by each stay *240 sq* Working pressure by rules *189* Material of Front plates at bottom *steel*Thickness *1½* Material of Lower back plate *steel* Thickness *1½* Greatest pitch of stays *✓* Working pressure of plate by rules *✓*Diameter of tubes *3½* Pitch of tubes *4¾ x 4¾* Material of tube plates *steel* Thickness: Front *7/16* Back *7/16* Mean pitch of stays *10½*Pitch across wide water spaces *15½* Working pressures by rules *201* Girders to Chamber tops: Material *Iron* Depth andthickness of girder at centre *double 9½ x ¾* Length as per rule *33* Distance apart *7½* Number and pitch of Stays in each *3 of 8*Working pressure by rules *200* 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

© 2020

Lloyd's Register
Foundation

DONKEY BOILER— Description *Vertical 4 cross tubes*
 Made at *Dundee* By whom made *W B Thompson & Co Lim* When made *1894* Where fixed *stoke hold*
 Working pressure *80* tested by hydraulic pressure to *160* No. of Certificate *666* Fire grate area *26.7* Description of safety valves *spring loaded*
 No. of safety valves *two* Area of each *3.14* Pressure to which they are adjusted *80 lbs* If fitted with easing gear *yes* If steam from main boilers can
 enter the donkey boiler *no* Diameter of donkey boiler *6' 6"* Length *13' 0"* Material of shell plates *steel* Thickness *7/16*
 Description of riveting long. seams *double lap* Diameter of rivet holes *3/16* Whether punched or drilled *drilled* Pitch of rivets *2 3/4*
 Lap of plating *4"* Per centage of strength of joint Rivets *Y3.2* Thickness of shell crown plates *1/16* Radius of do. *flat* No. of Stays to do. *8 iron*
 Dia. of stays. *2 3/4* Diameter of furnace Top *5' 0 7/8* Bottom *5' 10 7/8* Length of furnace *6' 6"* Thickness of furnace plates *7/16* Description of
 joint *single lap* Thickness of furnace crown plates *7/16* Stayed by *8 solid iron stays* Working pressure of shell by rules *83.4*
 Working pressure of furnace by rules *80 lbs* Diameter of uptake *16"* Thickness of uptake plates *5/8 (neck)* Thickness of water tubes *3/8*

SPARE GEAR. State the articles supplied:—*Two connecting rod top end and two bottom end bolts and
 nuts. 2 main bearing bolts. 1 set coupling bolts. 1 set feed and bilge pump valves,
 24 valves for twin pumps.*

The foregoing is a correct description,
W. B. THOMPSON & Co., Limited. Manufacturer.
W. B. Thompson

General Remarks (State quality of workmanship, opinions as to class, &c.)

*The machinery of this vessel has been built under special survey in accordance
 with the rules, the approved plans (2) enclosed and the Secretaries letters of May 2nd
 June 6th and Sept 19th 1893. The main and donkey boilers are constructed of
 steel which has been tested at the steelworks by the Societys Surveyors and
 the test certificates are annexed. The safety valves have been adjusted
 to working pressures and engines seen running under steam.
 Materials and workmanship are good.
 It is recommended that the machinery be classed **LMC-2-94***

*It is submitted that
 this vessel is eligible for
 THE RECORD + LMC 2-94*
*W.A.
 12-3-94*

MACHINERY CERTIFICATE
 WRITTEN.

Certificate (if required) to be sent to

The amount of Entry Fee.. £ *2* : *0* :
 Special £ *31* : *5* :
 Donkey Boiler Fee £ *✓* : :
 Travelling Expenses (if any) £ *✓* : :
 When applied for, *March 3 1894*
 When received, *March 6 1894*

Harry Clarke
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping

Committee's Minute

TUES. 13 MAR 1894

Assigned

+ LMC 2, 94

*** These p
 Signal Letter

Official N

1026

No., Date, and

Whether British
 Foreign Built

British

Number of L

Number of M

Rigged ...

Stern ...

Build ...

Galleries

Head ...

Framework a

vessel ...

Number of E

Number of w

and their c

Total to qual
 at side am

No. of
 Engines

Let
 of
 three

Under Tonn

Closed-in spa

Space or s

Poop ...

Forecastle

Round Ho

Other clos

B

H

Spaces for

G

Deductions,

R

Name

No. of Own

Name, Resi

Jame

Dated 2

W B & L (439w)



© 2020

Lloyd's Register
 Foundation