

REPORT ON MACHINERY.

548

No. 548

(Received at London Office 19th Feb 83.)

No. in Survey held at Hamburg
 Reg. Book. S. S. "Roma"
 on the

Date, ~~first~~ Survey almost daily Last Survey Feb 9 15th 1883
 during the whole time of building (Number of Visits)

Tons 1461.45

Master Schuler Built at Hamburg When built 1883
 Engines made at Hamburg By whom made Blohm & Voess when made 1883
 Boilers made at Hamburg By whom made Blohm & Voess when made 1883
 Registered Horse Power 250 Owners O. S. Eichmann Port belonging to Hamburg

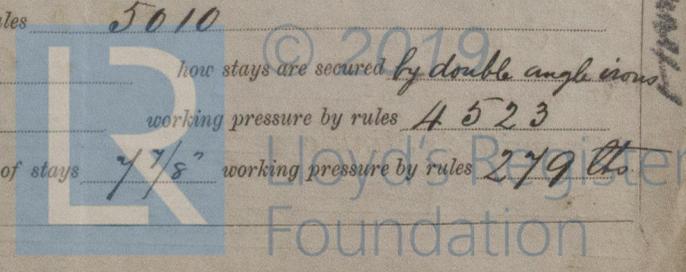
ENGINES, &c.

Description of Engines Direct acting, Compound, Surface Condensation
 Diameter of Cylinders 36" & 60" Length of Stroke 48" No. of Rev. per minute _____ Point of Cut off, High Pressure 3/8 Low Pressure 1/2
 Diameter of Screw shaft 12 7/8 Diameter of Tunnel shaft 11 1/2 Diameter of Crank shaft journals 12 3/4 Diameter of Crank pin 13" size of Crank webs 10 3/8" x 17 1/4"
 Diameter of screw 15.6" Pitch of screw 18.9" No. of blades 4 state whether moveable No total surface 96900"
 No. of Feed pumps 2 diameter of ditto 3 3/4 Stroke 28" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 diameter of ditto 3 3/4 Stroke 28" Can one be overhauled while the other is at work Yes
 Where do they pump from From all compartments
 No. of Donkey Engines 2 Size of Pumps 4 7/8" x 8 5/8" Where do they pump from? From sea, tanks and all compartments
 Are all the bilge suction pipes fitted with roses _____ Are the roses always accessible _____ Are the sluices on Engine room bulkheads always accessible Yes
 No. of bilge injections 1 and sizes 4" Are they connected to condenser, ~~or~~ to circulating pump _____
 How are the pumps worked? By beams connected with the crossheads of main engine
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Valves for Engines, Cocks for Boilers, bilge pumps
 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 Suction pipes for fore and aft tanks How are they protected? By wooden box
 Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times Yes
 Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges Yes
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock _____
 Is the screw shaft tunnel watertight Yes and fitted with a sluice door Yes worked from Engine room, height of upper deck

BOILERS, &c.

Number of Boilers 2 Description Cylindrical horizontal multitubular
 Working Pressure 80 Tested by hydraulic pressure to 160 lbs Date of test Dec 15th 1882
 Description of superheating apparatus or steam chest _____
 Can each boiler be worked separately Yes Can the superheater be shut off and the boiler worked separately _____
 No. of square feet of fire grate surface in each boiler 680 Description of safety valves Adam's spring valves
 No. to each boiler 2 area of each valve 17.70" Are they fitted with easing gear Yes
 No. of safety valves to superheater _____ area of each valve _____ are they fitted with easing gear _____
 Smallest distance between boilers and bunkers or woodwork 27" from spare bunker in Engine room
 Diameter of boilers 17 8/4" Length of boilers 12 7/8" description of riveting of shell long. seams Double Butt Straps circum. seams Double riveted
 Thickness of shell plates 15/16" diameter of rivet holes 1 1/8" whether punched or drilled drilled pitch of rivets 3 5/8"
 Lap of plating 4 1/2" per centage of strength of longitudinal joint 69% working pressure of shell by rules 95 lbs
 Size of manholes in shell 16 x 12 1/2 size of compensating rings 2 3/4" x 3/4"
 No. of Furnaces in each boiler 4 outside diameter 36 15/16" length, top 88 3/16 bottom 118
 Thickness of plates 9/16" description of joint single riveted if rings are fitted _____ greatest length between rings _____
 Working pressure of furnace by the rules 1074 lbs
 Combustion chamber plating, thickness, sides 1/2" back 1/2" top 1/2"
 Pitch of stays to ditto, sides _____ back 7/8" top strengthened by double angle irons
 If stays are fitted with nuts or riveted heads Nuts working pressure of plating by rules 103
 Diameter of stays at smallest part 1 1/8" working pressure of ditto by rules 5010
 End plates in steam space, thickness 3/4" pitch of stays to ditto 15" how stays are secured by double angle irons
 Working pressure by rules 90 lbs diameter of stays at smallest part 2 1/4" working pressure by rules 4523
 Front plates at bottom, thickness 3/4" Back plates, thickness 3/4" greatest pitch of stays 7/8" working pressure by rules 279 lbs

Pinn 116-0746



Diameter of tubes $3\frac{1}{4}$ outside pitch of tubes $4\frac{1}{2}$ thickness of tube plates, front $\frac{3}{4}$ back $\frac{3}{4}$
 How stayed *screwed tubes* pitch of stays $22\frac{3}{4}$ width of water spaces $1\frac{1}{8}$
 Diameter of ~~Superheater or Steam chest~~ dome $47\frac{3}{8}$ length 57
 Thickness of plates $\frac{9}{16}$ description of longitudinal joint *single riveted* diameter of rivet holes $\frac{7}{8}$ pitch of rivets $2\frac{3}{8}$
 Working pressure of shell by rules 120 Diameter of flue — thickness of plates —
 If stiffened with rings — distance between rings — Working pressure by rules —
 End plates of superheater, or steam chest; thickness — How stayed —
 Superheater or steam chest; how connected to boiler —

DONKEY BOILER— Description *Horizontal cylindrical multitubular*
 Made at *Hamburg* By whom made *Blohm & Voss* when made *1883*
 Where fixed *In Bridge house on upper deck* working pressure *60 lbs* Tested by hydraulic pressure to *120* No. of Certificate *Dec 76*
 Fire grate area *10 sq* Description of safety valves *Adam's spring* No. of safety valves *1* area of each *50*
 If fitted with casing gear *Yes* If steam from main boilers can enter the donkey boiler *Prevented by a non-ret*
 Diameter of donkey boiler *67* length *101* description of riveting *longitud. seams double riveted, circum. seam double riv.*
 thickness of shell plates *7/16* diameter of rivet holes *13/16* whether punched or drilled *Punched*
 pitch of rivets *3* lap of plating *H* per centage of strength of joint *72.9*
 thickness of crown plates — stayed by *Screwed tubes with nuts*
 Diameter of furnace, top *28* bottom — length of furnace *65 3/4*
 thickness of plates *3/8* description of joint *single riveted*
 thickness of furnace crown plates — stayed by —
 Working pressure of shell by rules *43.5 lbs* working pressure of furnace by rules *81.5 lbs*
 diameter of uptake — thickness of plates — thickness of water tubes —

The foregoing is a correct description,
Blohm & Voss Manufacturer.

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

The Engines and Boilers of this vessel are of the very best material and workmanship and have been built under my daily inspection. The Boilers have been tested by hydraulic and the safety valves adjusted under steam and in my opinion the vessel ought be marked *⊕ L.M.C. 2. 83.* in the Register book. —

*Not submitted
 had the vessel
 submitted to
 examination & the
 certificate recorded
 W.G.
 19/10/83*

The amount of Entry Fee .. £ : : received by me,
 Special .. £ *33:10:*
 Certificate (if required) .. £ : : 18
 To be sent as per margin.
 (Travelling Expenses, if any, £)

Committee's Minute

Friday, 2nd March, 1883.

J.A. Lilberty
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



Lloyd's Register
 Foundation