

REPORT ON MACHINERY.

No. 15301.

Port of Glasgow
 Survey held at Glasgow (Renfrew) Date, first Survey 25th April Last Survey 24th May 1897
 on the Watertube boiler for S. G. Anta
 Built at _____ By whom built _____
 when made _____
 when made 1897
 Owners Messrs. Pool, Skinner, & Williams Port belonging to Falmouth
 Is Electric Light fitted _____

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks _____
 Diameter of Cylinders 6, 10, 16" Length of Stroke 12" Revolutions per minute _____ Diameter of Screw shaft _____
 Diameter of Tunnel shaft _____ Diameter of Crank shaft journals _____ Diameter of Crank pin _____ Size of Crank webs _____
 Pitch of screw _____ No. of blades _____ State whether moveable _____ Total surface _____
 Feed pumps _____ Diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____
 Bilge pumps _____ Diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____
 Donkey Engines _____ Sizes of Pumps _____ No. and size of Suctions connected to both Bilge and Donkey pumps _____
 In Holds, &c. _____
 Connected to condenser, or to circulating pump _____ Is a separate donkey suction fitted in Engine room & size _____
 Are the roses in Engine room always accessible _____ Are the sluices on Engine room bulkheads always accessible _____
 Are they Valves or Cocks _____
 Are the discharge pipes above or below the deep water line _____
 Are the blow off cocks fitted with a spigot and brass covering plate _____
 How are they protected _____
 Are the pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times _____
 Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges _____
 Is the screw shaft tunnel watertight _____

BOILERS, &c.— (Letter for record _____) Total Heating Surface of Boilers 590 sq ft Is forced draft fitted no
 Description of Boilers one Watertube Babcock & Wilcox Working Pressure 160 lbs Tested by hydraulic pressure to 320 lbs
 Can each boiler be worked separately _____ Area of fire grate in each boiler 16 sq ft No. and Description of safety valves to _____
 Area of each valve _____ Pressure to which they are adjusted _____ Are they fitted _____
 Smallest distance between boilers or uptakes and bunkers or woodwork _____ Mean diameter of boilers 36"
 Material of shell plates Steel Thickness 7/16" Description of riveting: circum. seams lap upper half, double butt straps
 Pitch of rivets 3.95" Lap of plates or width of butt straps 14 3/8"
 Working pressure of shell by rules 225 lbs Size of manhole in shell none
 No. and Description of Furnaces in each boiler one large grate Material _____ Outside diameter _____
 Thickness of plates _____ Description of longitudinal joint _____ No. of strengthening rings _____
 Combustion chamber plates: Material none Thickness: Sides _____ Back _____ Top _____ Bottom _____
 Working pressure by rules _____
 Diameter at smallest part _____ Area supported by each stay _____ Working pressure by rules _____ End plates in steam space: _____
 Thickness 7/8" Pitch of stays none How are stays secured dished 36" radius Working pressure by rules approved Material of stays _____
 Area supported by each stay _____ Working pressure by rules _____ Material of Front plates at bottom _____
 Thickness _____ Greatest pitch of stays _____ Working pressure of plate by rules _____
 Pitch of tubes 3" diam Material of tubes Steel Thickness: Front 1/2" Back _____ Mean pitch of stays _____
 Working pressures by rules _____ Girders to Chamber tops: Material none Depth and _____
 Distance apart _____ Number and pitch of Stays in each _____
 Can the superheater be shut off and the boiler worked _____
 Diameter _____ Length _____ Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet _____
 Working pressure of shell by rules _____ Diameter of flue _____ Material of flue plates _____ Thickness _____
 Distance between rings _____ Working pressure by rules _____ End plates: Thickness _____ How stayed _____
 Area of safety valves to superheater _____ Are they fitted with easing gear _____

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 can 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 of 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:—

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building

During progress of work in shops— 1894 April 22. May 8. 10. 24th

During erection on board vessel —

Total No. of visits 4

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

This watertube boiler has been built under the conditions of special survey of good material & workmanship, and has been satisfactorily tested to double the working pressure. Before any holes were drilled into the various headers these were each subjected to a hydraulic test of 600 lbs per sq inch. The boiler has been sent to Falmouth where it will be fitted on board. This case is submitted for the favourable consideration of the Committee.

Note Attached hereto are two test sheets dated 17th & 24th May 97 detailing the tests on the shell plate & end plates of this boiler's steam drum. The material from which the headers were made was taken from stock, out of a batch of 500 plates, of which every one had been tested. The results showed that the tenacity was less than 28 tons and the elongation ranged from 25% to 32%.

C. E. Brown

The amount of Entry Fee. . . £ :
 Special £ 3 :
 Donkey Boiler Fee £ :
 Travelling Expenses (if any) £ :

When applied for,

16/6/97

When received,

21/6/97

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

Committee's Minute

Assigned



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Lloyd's Register

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