

REPORT ON MACHINERY.

Port of *Glasgow*

TUES. 3 JUL 1900

Received at London Office

18

No. in Survey held at *Glasgow* Date, first Survey *22 Decr '99* Last Survey *3 May 1900*
 Reg. Book. *637* on the *New Boilers for S.S. "Evelleen"* (Number of Visits *12*)
 Master *S.* Built at *Belfast* By whom built *Workman Clark & Co.* Tons Gross *485* Net *112*
 Engines made at *Glasgow* By whom made *Muir & Houston* when made *1891*
 Boilers made at *Glasgow* By whom made *Burley Burle & Coy Ltd* when made *1900-6*
 Registered Horse Power *90* Owners *J. Milligan & Coy* Port belonging to *Belfast*
 Nom. Horse Power as per Section 28 Is Refrigerating Machinery fitted Is Electric Light fitted

ENGINES, &c.—Description of Engines

*Triple*No. of Cylinders *3*No. of Cranks *3*

Dia. of Cylinders Length of Stroke Revs. per minute Dia. of Screw shaft as per rule as fitted Lgth. of stern bush
 Dia. of Tunnel shaft as per rule as fitted Dia. of Crank shaft journals as per rule as fitted Dia. of Crank pin Size of Crank webs Dia. of thrust shaft under collars
 Dia. of screw Pitch of screw No. of blades State whether moveable Total surface
 No. of Feed pumps Diameter of ditto Stroke Can one be overhauled while the other is at work
 No. of Bilge pumps Diameter of ditto Stroke Can one be overhauled while the other is at work
 No. of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room In Holds, &c.

No. of bilge injections sizes Connected to condenser, or to circulating pump Is a separate donkey suction fitted in Engine room & size
 Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible
 Are all connections with the sea direct on the skin of the ship Are they Valves or Cocks
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the discharge pipes above or below the deep water line
 Are they each fitted with a discharge valve always accessible on the plating of the vessel Are the blow off cocks fitted with a spigot and brass covering plate
 What pipes are carried through the bunkers How are they protected
 Are all 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
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock Is the screw shaft tunnel watertight
 Is it fitted with a watertight door worked from

BOILERS, &c.—

(Letter for record

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Total Heating Surface of Boilers

1598 1/2

Is forced draft fitted

None

No. and Description of Boilers *One Multitubular* Working Pressure *160 lb* Tested by hydraulic pressure to *320 lb*
 Date of test *25/4/1900* Can each boiler be worked separately *Yes* Area of fire grate in each boiler *60 sq ft* No. and Description of safety valves to each boiler
 Area of each valve Pressure to which they are adjusted Are they fitted with easing gear
 Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers *18 1/2"* Length *10 1/2"* Material of shell plates *Steel*
 Thickness *1 1/2"* Range of tensile strength *28532* Are they welded or flanged *Neither* Descrip. of riveting: cir. seams *D. lap* long. seams *D. butt*
 Diameter of rivet holes in long. seams *1 1/2"* Pitch of rivets *4 1/2"* Lap of plates or width of butt straps *10 1/2"*
 Per centages of strength of longitudinal joint rivets *88 7/10* Working pressure of shell by rules *161 lb* Size of manhole in shell *16" x 12"*
 Size of compensating ring No. and Description of Furnaces in each boiler *3 Deighton* Material *Steel* Outside diameter *3 1/4"*
 Length of plain part top *18 1/2"* Thickness of plates crown *1 1/2"* Description of longitudinal joint *Weld* No. of strengthening rings *1*
 bottom *18 1/2"* bottom *1 1/2"* Working pressure of furnace by the rules *161 lb* Combustion chamber plates: Material *Steel* Thickness: Sides *1 1/2"* Back *1 1/2"* Top *1 1/2"* Bottom *1 1/2"*
 Pitch of stays to ditto: Sides *8 1/2" x 9"* Back *8 1/2" x 9"* Top *8 1/2" x 9"* If stays are fitted with nuts or riveted heads *Nuts* Working pressure by rules *184 lb*
 Material of stays *Steel* Diameter at smallest part *1 1/4"* Area supported by each stay *4 1/2"* Working pressure by rules *160 lb* End plates in steam space: *Steel*
 Material *Steel* Thickness *1 1/4"* Pitch of stays *24 1/2" x 20"* How are stays secured *D. nuts* Working pressure by rules *164 lb* Material of stays *Steel*
 Diameter at smallest part *6 1/4"* Area supported by each stay *380"* Working pressure by rules *161 lb* Material of Front plates at bottom *Steel*
 Thickness *2 1/2"* Material of Lower back plate *Steel* Thickness *1 1/2"* Greatest pitch of stays *18 1/2"* Working pressure of plate by rules *200 lb*
 Diameter of tubes *3 1/4"* Pitch of tubes *4 1/2"* Material of tube plates *Steel* Thickness: Front *2 1/2"* Back *2 1/2"* Mean pitch of stays *9"*
 Pitch across wide water spaces *1 1/2"* Working pressures by rules *182 lb* Girders to Chamber tops: Material *Steel* Depth and thickness of girder at centre *43 1/2" x 3 1/2" (2)* Length as per rule *2 1/2"* Distance apart *8"* Number and pitch of Stays in each *2 - 9"*
 Working pressure by rule *164 lb* Superheater or Steam chest, how connected to boiler *None* Can the superheater be shut off and the boiler worked separately
 Diameter *2 1/2"* Length *1 1/2"* Thickness of shell plates *1 1/2"* Material *Steel* Description of longitudinal joint *Weld* Diameter of rivet holes *1 1/2"* Pitch of rivets *4 1/2"* Working pressure of shell by rules *161 lb* Diameter of flue *1 1/2"* Material of flue plates *Steel* Thickness *1 1/2"*
 If stiffened with rings *Yes* Distance between rings *1 1/2"* Working pressure by rules *161 lb* End plates: Thickness *1 1/2"* How stayed *By stays*
 Working pressure of end plates *161 lb* Area of safety valves to superheater *1 1/2"* Are they fitted with easing gear *Yes*

DONKEY BOILER— No. 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
Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile strength
Descrip. of riveting long. seams Dia. 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.
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,

FOR BARCLAY, CURLE & CO., LTD

Manufacturer.

Alex. Cleghorn

MANAGER

Dates of Survey
During progress of work in shops—
During erection on board vessel—
building
Total No. of visits

1899:— Dec. 22. 1900:— Jan. 16. 22. 31. Feb. 6. 19. 20. Mar. 30.
Apr. 2. 6. 20. May. 3.
12.

Is the approved plan of main boiler forwarded herewith

Yes

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

This main boiler has been made by Messrs Barclay Curle & Co. The materials & workmanship are of good description & test satisfied. It has now been forwarded to Belfast to be fitted on board the vessel.

A copy of this report has been forwarded to the Belfast Surveyors.

See Limit List

The amount of Entry Fee. £ : :
Special £ 5 : :
Donkey Boiler Fee £ : :
Travelling Expenses (if any) £ : :
When applied for, 25/6/200
When received, 6/7/18

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

Clyde District

FRI. 27 JUL 1900

FRI. 6 JUL 1900

Committee's Minute Glasgow. 2 JUL 1900

Assigned

Deferred for completion.

Lloyd's Register Foundation