

REPORT ON MACHINERY.

6235

No. 6235

Received at London Office THURSDAY 13 SEPT 1883

No. in Survey held at Glasgow Date, first Survey 17th Jan^y Last Survey Aug^r 23 1885
Reg. Book. 124.35

on the Screw Steamer S^t Kilda Tons 56.53

Master Not appointed Built at Paisley By whom built The Aberdeen S. B. Coy When built 1883

Engines made at Glasgow By whom made Muir & Houston when made 1883

Boilers made at " By whom made " when made "

Registered Horse Power 50 Owners W & J Houston Port belonging to Glasgow

ENGINES, &c.—

Description of Engines Compound Inverted Direct Acting.

Diameter of Cylinders 18" & 36" Length of Stroke 24" No. of Rev. per minute 110 Point of Cut off, High Pressure .5 Low Pressure .5

Diameter of Screw shaft 6" Diam. of Tunnel shaft 6" Diam. of Crank shaft journals 6" Diam. of Crank pin 6" size of Crank webs 4" x 7 1/2"

Diameter of screw 8'-0" Pitch of screw 12'-0" No. of blades 4 state whether moveable sol. total surface 17.99 ft

No. of Feed pumps one diameter of ditto 2 1/4" Stroke 14" Can one be overhauled while the other is at work —

No. of Bilge pumps one diameter of ditto 2 1/4" Stroke 14" Can one be overhauled while the other is at work —

Where do they pump from All Compartments

No. of Donkey Engines one Size of Pumps 5" Cyl. 3" x 6" stroke Where do they pump from All Compartments

Are all the bilge suction pipes fitted with roses yes Are the roses always accessible yes Are the sluices on Engine room bulkheads always accessible yes

No. of bilge injections one and sizes 2 1/2" Are they connected to condenser, or to circulating pump Cir pump.

How are the pumps worked By Levers.

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

What pipes are carried through the bunkers None How are they protected —

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 before launching

Is the screw shaft tunnel watertight yes and fitted with a sluice door yes worked from upper platform

BOILERS, &c.—

Number of Boilers one Description Round Multitubular Whether Steel or Iron Steel

Working Pressure 80 lbs. Tested by hydraulic pressure to 160 lbs Date of test 1st August 1883

Description of superheating apparatus or steam chest Steam dome.

Can each boiler be worked separately — Can the superheater be shut off and the boiler worked separately —

No. of square feet of fire grate surface in each boiler 40. Description of safety valves Direct Spring No. to each boiler two

Area of each valve 7.07 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 8" Diameter of boilers 10'-7 1/2"

Length of boilers 9'-0" description of riveting of shell long. seams Tree Riv Lap. circum. seams double Lap. Thickness of shell plates 5/8"

Diameter of rivet holes 1 3/16" whether punched or drilled rimmed pitch of rivets 4 1/8" Lap of plating 5 1/2"

Per centage of strength of longitudinal joint 75% working pressure of shell by rules 83 lbs. size of manholes in shell 11" x 16"

Size of compensating rings 7/8" by 4" brass plate. No. of Furnaces in each boiler two.

Outside diameter 3'-3" length, top 6'-0" bottom 8'-6" thickness of plates 7/16" description of joint double buto. if rings are fitted no.

Greatest length between rings — working pressure of furnace by the rules 88 lbs combustion chamber plating, thickness, sides 7/16" back 7/16" top 7/16"

Pitch of stays to ditto, sides 7/4" back 7/4" top 8" x 8 1/2" If stays are fitted with nuts or riveted heads nut heads. working pressure of plating by rules 85 lbs Diameter of stays at smallest part 1 1/8" working pressure of ditto by rules 114 lbs end plates in steam space, thickness 7/16"

Pitch of stays to ditto 14 1/2" x 15" how stays are secured d. nuts. working pressure by rules 80 lbs. diameter of stays at smallest part 2" working pressure by rules 80 lbs. Front plates at bottom, thickness 9/16" Back plates, thickness 9/16"

Greatest pitch of stays — working pressure by rules — Diameter of tubes 3 1/2" pitch of tubes 4 1/2" thickness of tube plates, front 7/8" back 5/8" how stayed s. tubes pitch of stays 9 1/2" x 14 1/2" width of water spaces 6"

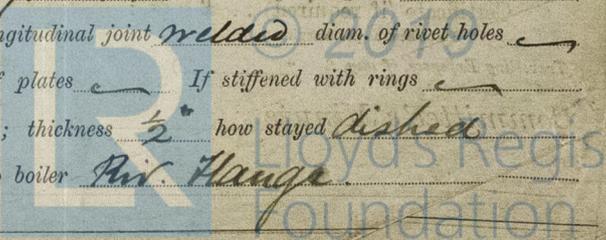
Diameter of Superheater or Steam chest 1'9" height 1'9" thickness of plates 3/8" description of longitudinal joint welded diam. of rivet holes —

Pitch of rivets — working pressure of shell by rules — 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 1/2" how stayed dished Superheater or steam chest; how connected to boiler Pat. Flange

State of Report.

G.L.S. 148-0212



6235. g.

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 _____ if fitted with easing gear _____ if steam from main boilers can enter the donkey boiler _____ diameter of donkey boiler _____ length _____ description of riveting _____ Thickness of shell plates _____ diameter of rivet holes _____ whether punched or drilled _____ pitch of rivets _____ lap of plating _____ per centage of strength of joint _____ thickness of crown plates _____ stayed by _____ Diameter of furnace, top _____ bottom _____ length of furnace _____ thickness of 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 plates _____ thickness of water tubes _____

SPARE GEAR. State the articles supplied:— *No spare gear has been fitted as this vessel is intended to trade out and in of harbour every day.*

The foregoing is a correct description,
Muir Houston Manufacturer.

General Remarks (State quality of workmanship, opinions as to class, &c. *The above mentioned Engines and Boilers are now completed onboard in a satisfactory manner of good workmanship and material and the Machinery is now in my opinion in a safe and good working condition and eligible to be noted in Register Book:*

+ L.M.C 8.83.

It is submitted that this vessel is eligible to have the notification of 1883 recorded.

13/9/83

The amount of Entry Fee . . . £ 1 : 0 : 0 received by me,
Special £ 8 : 0 : 0
Donkey Boiler Fee £ 0 : 0 : 0
Certificate (if required) . . . £ 0 : 0 : 0 *12/9/1883*
To be sent as per margin.

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

FRIDAY 12 SEPT 1883

Committee's Minute

+ L.M.C 8.83