

REPORT ON MACHINERY.

Port of *Glasgow*

Received at London Office

TUES. 28 JUN 1893

No. in Survey held at *Glasgow*Date, first Survey *25. March*Last Survey *27. May* 1898

Reg. Book.

(Number of Visits *10*)on the *Steamer Standard*Tons ^{Gross}
_{Net}

Master

Built at

By whom built

When built

Engines made at

By whom made

when made

Boilers made at *Glasgow*By whom made *Ross & Dunnean*when made *1898.*

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Section 28

Is Electric Light fitted

ENGINES, &c.—Description of Engines

No. of Cylinders

No. of Cranks

Diameter of Cylinders

Length of Stroke

Revolutions per minute

Diameter of Screw shaft

as per rule
as fitted

Diameter of Tunnel shaft

as per rule
as fitted

Diameter of Crank shaft journals

Diameter of Crank pin

Size of Crank webs

Diameter 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 \$.)

Total Heating Surface of Boilers

Is forced draft fitted

No. and Description of Boilers

One: by Lind & Co. Superheater

Working Pressure

160 lb.

Tested by hydraulic pressure to

320 lb.

Date of test

6/6/98

Can each boiler be worked separately

Area of fire grate in each boiler

25 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 diameter of boilers

Length

8' 6"

Material of shell plates

Thickness

7/16"

Description of riveting: circum. seams

Lap Double

long. seams

D'Almeida Butt Strap

Diameter of rivet holes in long. seams

7/16"

Pitch of rivets

5 1/4"

Lap of plates or width of butt straps

12"

Per centages of strength of longitudinal joint

rivets

Working pressure of shell by rules

164 lb.

Size of manhole in shell

15' x 11 1/2'

Size of compensating ring

6' x 7/16"

No. and Description of Furnaces in each boiler

2: plain

Material

Steel

Outside diameter

31 1/16"

Length of plain part

5' 8"

Thickness of plates

7/16"

Description of longitudinal joint

Welded

No. of strengthening rings

partial at bottom

Working pressure of furnace by the rules

176 lb.

Combustion chamber plates: Material

Steel

Thickness: Sides

1/32"

Back

1/32"

Pitch of stays to ditto: Sides

4' x 4 1/2"

Back

4' x 4 1/2"

Top

4' x 6 1/2"

If stays are fitted with nuts or riveted heads

Nuts

Working pressure by rules

165 lb.

Material of stays

Steel

Diameter at smallest part

1 1/4"

Area supported by each stay

52 1/2 sq. in.

Working pressure by rules

184 lb.

End plates in steam space:

Material

Steel

Thickness

3/32"

Pitch of stays

11' x 12"

How are stays secured

Double washers

Working pressure by rules

185 lb.

Diameter at smallest part

1 1/16"

Area supported by each stay

132 sq. in.

Working pressure by rules

196 lb.

Material of Front plates at bottom

Steel

Thickness

23/32"

Material of Lower back plate

Steel

Thickness

23/32"

Greatest pitch of stays

10 1/2"

Working pressure of plate by rules

218 lb.

Diameter of tubes

3"

Pitch of tubes

4' x 4"

Material of tube plates

Steel

Thickness: Front

23/32"

Back

7/16"

Pitch across wide water spaces

12 1/2"

Working pressures by rules

185 lb. 265 lb.

Girders to Chamber tops: Material

Iron

Depth and

thickness of girder at centre

5' x 1 1/2"

Length as per rule

21"

Distance apart

6 1/2"

Number and pitch of Stays in each

2: 4'

Working pressure by rules

207 lb.

Superheater or Steam chest: Can the superheater be shut off and the boiler worked

separately

Diameter

24"

Length

24"

Thickness of shell plates

3/8"

Material

Steel

Description of longitudinal joint

Lap

Diam. of rivet

3/4"

Pitch of rivets

2 1/4"

Working pressure of shell by rules

228 lb.

Diameter of flue

24"

Material of flue plates

Steel

Thickness

7/16"

How stayed

Arched

If stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

7/16"

How stayed

Arched

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

Yes

Lloyd's Register

Foundation

G.L.S. 181-6164

16192 gls

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,
 Ross & Duncan Manufacturer.

Dates of Survey while building { During progress of work in shops - 1898: - Mar. 25 31 Apr. 6 20 24 May 4 11 20 24 29
 { During erection on board vessel -
 Total No. of visits 5

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

The Boiler of this vessel has been built under special survey and the materials and workmanship are good. When completed it was tested by hydraulic pressure to 50 lbs per sq. inch and found tight and sound. The approved plan is sent herewith. This Boiler has been shipped to Rio Janeiro.

This Boiler has been constructed under special survey, but as it does not appear to be intended for a classed vessel it is submitted that no further action need be taken.

28/6/98

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

When applied for,
 27-6-98
 Received, 5-7-98
 4-7-98

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

Committee's Minute

Assigned

Not for classing Committee



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