

REPORT ON MACHINERY.

Port of

Glasgow

THUR, 12 JAN 1899

Received at London Office

18

No. in Survey held at
Reg. Book.

Glasgow

Date, first Survey 10 Sept. 97

Last Survey 9. Jan 1899

(Number of Visits 74)

on the

S.S. "Omaha"

Tons } Gross 8291.75
Net 4637.75

Master

Built at

Glasgow

By whom built

Fairfield S.R. & Co

When built

1898

Engines made at

Glasgow

By whom made

Fairfield S.R. & Co

when made

1898

Boiler made at

Glasgow

By whom made

Ludlow Burnet & Co

when made

1898

Registered Horse Power

Owners

Orient S.N. Co

Port belonging to

London

Nom. Horse Power as per Section 28

1772

Is Electric Light fitted

Yes

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

Diameter of Tunnel shaft

as per rule

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 S)

Total Heating Surface of Boilers

771 4

Is forced draft fitted

No. and Description of Boilers

One cylindrical return tube

Working Pressure

120

Tested by hydraulic pressure to

240

Date of test

31/10/98

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

88 4

No. and Description of safety valves to

each boiler

one pair direct spring

Area of each valve

6.9 4

Pressure to which they are adjusted

125 lb.

Are they fitted

with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

Mean diameter of boilers

10-10

Length

9.0

Material of shell plates

Steel

Thickness

25/32

Description of riveting: circum. seams

Double butt

long. seams

Double butt

Diameter of rivet holes in long. seams

1"

Pitch of rivets

5 3/8"

Lap of plates or width of butt straps

10 1/2

Per centages of strength of longitudinal joint

rivets 98.0

plate 80.0

Working pressure of shell by rules

142

Size of manhole in shell

16 x 12

Size of compensating ring

10" x 10"

and Description of Furnaces in each boiler

Two Foxin

Material

Steel

Outside diameter

43 3/8

Length of plain part

top

Thickness of plates

crown 13/32

Description of longitudinal joint

Double butt

No. of strengthening rings

Yes

Working pressure of furnace by the rules

130

Combustion chamber plates: Material

Steel

Thickness: Sides

9/16

Back

9/16

Top

9/16

Bottom

9/16

Pitch of stays to ditto: Sides

8 1/2 x 9 1/2

Back

9 1/2 x 9 1/2

Top

9 x 9

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

142, 130, 135

Material of stays

Steel

Area supported by each stay

1.44

Working pressure by rules

136 1/2

End plates in steam space:

Material

Steel

Thickness

1"

Pitch of stays

16 1/2 x 16 1/2

How are stays secured

2 nuts

Working pressure by rules

165

at smallest part

1.44

Area supported by each stay

272

Working pressure by rules

170

Material of Front plates at bottom

Steel

Thickness

3/4"

Material of Lower back plate

Steel

Thickness

9/16"

Greatest pitch of stays

15"

Working pressure of plate by rules

169

Diameter of tubes

3 1/2"

Pitch of tubes

4 1/2 x 4 1/2"

Material of tube plates

Steel

Thickness: Front

3/4"

Back

3/4"

Mean pitch of stays

11 1/2"

Pitch across wide water spaces

15 1/2 x 14"

Working pressures by rules

169

Girders to Chamber tops: Material

Iron

Depth and

thickness of girder at centre

8 1/2 x 15"

Length as per rule

21.5

Distance apart

9"

Number and pitch of Stays in each

(2) 9"

Working pressure by rules

160

Steam chest; how connected to boiler

Double

Can the superheater be shut off and the boiler worked

separately

Yes

Diameter

27"

Length

30

Thickness of shell plates

3/16"

Material

Steel

Description of longitudinal joint

Double butt

Diam. of rivet

holes

3/16"

Pitch of rivets

2 3/4"

Working pressure of shell by rules

160

Diameter of flue

Yes

Material of flue plates

Yes

Thickness

1/2"

If stiffened with rings

Yes

Distance between rings

Yes

Working pressure by rules

Yes

End plates: Thickness

1/2"

How stayed

From plates

Working pressure of end plates

175

Area of safety valves to superheater

Yes

Are they fitted with easing gear

Yes

Lloyd's Register

GLS183 Foundation

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 _____
 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 :—

16687 Gls

The foregoing is a correct description,

Manufacturer.

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

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

ENGINES—Length of stern bush _____ Diameter of crank shaft journals _____ as per rule _____ Diameter of thrust shaft under collars _____
 as fitted _____

BOILERS—Range of tensile strength _____ Are they welded or flanged _____ **DONKEY BOILERS**—No. _____ Range of tensile strength **28**

Is the approved plan of main boiler forwarded herewith

Is the approved plan of donkey boiler forwarded herewith

This boiler has been built under special survey, the material & workmanship are of good description & the boiler has been tested in accordance with the rules

This Boiler is placed on deck. When fitted on board it was examined under steam and its safety valve adjusted to lift at 125 lbs per sq. inch.

Wm. A. Austin.

Certificate (if required) to be sent to
 The Surveyors are requested not to write on or below the space for Committee's Minute.

The amount of Entry Fee. . . £ : : When applied for, 1/4 18/6
 Special £ : : When received, 1/4 18/6
 Donkey Boiler Fee £ : :
 Travelling Expenses (if any) £ : : 18/6

Committee's Minute

JAN 20 1899

Assigned

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



© 2019

Lloyd's Register
 Foundation