

REPORT ON BOILERS.

No. 16109

WED. OCT. 11. 1911

Received at London Office

Date of writing Report

19

When handed in at Local Office

6th Oct. 1911 Port of Greenock

Safety

No. in
Reg. Book.

Survey held at

Port Glasgow.

Date, First Survey

23rd January 1911 Last Survey30th Sept. 1911

(Number of Visits

6)

Gross

3139

Tons

Net

1985.

on the SCREW STEAMER **EMERALD WINGS.**

Master

Halley

Built at

Port Glasgow

By whom built

Russell & Co.

When built

1911.

Engines made at

Port Glasgow.

By whom made

Clyde S.S. Eng. Co. Ltd.

when made

1911.

Boilers made at

Port Glasgow

By whom made

Clyde S.S. Eng. Co. Ltd.

when made

1911.

Registered Horse Power

Owners

Wing Steamship Co. Ltd.

Port belonging to

London

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel

Steel Co. of Scotland Ltd.

Letter for record

S.

Total Heating Surface of Boilers

1080 sq. ft.

Is forced draft fitted

No.

No. and Description of

Boilers One cylindrical multi-tube single

Working Pressure 180 lb

Tested by hydraulic pressure to 360 lb

Date of test

16/8/11

No. of Certificate 1019

Can each boiler be worked separately

Area of fire grate in each boiler

352 sq. ft.

No. and Description of

safety valves to each boiler 2: Direct Spring

Area of each valve

3.98 sq. in.

Pressure to which they are adjusted

185 lb

Are they fitted with easing gear

Yes

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

No.

Smallest distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers

11' 0"

Length

10' 6"

Material of shell plates

Steel

Thickness

15/16"

Range of tensile strength 28 to 32 tons Are the shell plates welded or flanged

No.

Descrip. of riveting: cir. seams Lap Double long. seams D. Butt Strap

Diameter of rivet holes in long. seams

1 1/8"

Pitch of rivets

7/8" 3/8"

Gap of plates or width of butt straps

15/8"

Per centages of strength of longitudinal joint

rivets 97

Working pressure of shell by

plate 85-3.

Rules 184 lb

Size of manhole in shell

16" x 12"

Size of compensating ring Flanged Ring

No. and Description of Furnaces in each

boiler 2: Plain

Material Steel

Outside diameter

40 3/4"

Length of plain part

top 6' 4"

Thickness of plates

crown 23/32"

bottom 3/8"

Description of longitudinal joint

Weld

No. of strengthening rings

None

Working pressure of furnace by the rules 184 lb: Combustion chamber

plates: Material Steel

Thickness: Sides

5/8"

Back

5/8"

Top

5/8"

Bottom

1 1/8"

Pitch of stays to ditto: Sides 8 1/4" x 8 1/2" Back 9" x 7 1/4"

Top 7 1/2" x 8 1/2"

If stays are fitted with nuts or riveted heads

Nuts

Working pressure by rules 192 lb

Material of stays

Steel

Diameter at

smallest part

1 5/8"

Area supported by each stay

41 sq. in.

Working pressure by rules

265 lb

End plates in steam space: Material Steel Thickness 1"

Pitch of stays 16" x 15"

How are stays secured

D. Butt Nuts

Working pressure by rules

186 lb

Material of stays

Steel

Diameter at smallest part

2 5/8" free

Area supported by each stay

240 sq. in.

Working pressure by rules

186 lb

Material of Front plates at bottom

Steel

Thickness

1"

Material of

Lower back plate

Steel

Thickness

13/16"

Greatest pitch of stays

13 1/2"

Working pressure of plate by rules

189 lb

Diameter of tubes

3 1/4"

Pitch of tubes 4 1/2" x 4 3/8"

Material of tube plates

Steel

Thickness: Front

1"

Back

3/4"

Mean pitch of stays

8 5/8"

Pitch across wide

water spaces

14"

Working pressures by rules

182 lb

257 lb

Girders to Chamber tops: Material

Steel

Depth and thickness of

girder at centre

9" x 1 1/2"

Length as per rule

32 5/8"

Distance apart

8 1/2"

Number and pitch of Stays in each

3: 7 1/2"

Working pressure by rules

184 lb

Superheater or Steam chest; ~~how connected to boiler~~ None

Can the superheater be shut off and the boiler worked

separately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

The foregoing is a correct description.

THE CLYDE SHIPBUILDING & ENGINEERING CO. LIMITED,

John Brown

Manufacturer.

Is the approved plan of boiler forwarded herewith

Director. Yes

Total No. of visits

67

Dates of Survey
During progress of work in shops - -
while building
During erection on board vessel - - -

See accompanying report

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

This Boiler was built under special survey and the workmanship is good. On completion it was tested as required by the Rules. For recommendations, see preceding sheet.

Survey Fee ... £ : When applied for, 19.....
Travelling Expenses (if any) £ : When received, 19.....

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

Committee's Minute GLASGOW 10 OCT. 1911 FRI. OCT. 13. 1911

Assigned See minute on accompanying machinery report



003541-003548-0032