

REPORT ON BOILERS.

No. 15717
WFIL 16 FEB 1910

Received at London Office

Date of writing Report

19

When handed in at Local Office

10/2/

1910

Port of Greenock

No. in Survey held at
Reg. Book.

Greenock.

Date, First Survey

19th April 1908

Last Survey

7th Feb 1910.

(Number of Visits

76)

Gross 6504.

Tons } Net 3495.

on the SCREW STEAMER VALDURA.

Master A. G. McDougall.

Built at Port Glasgow

By whom built Russell & Co.

When built 1910

Engines made at

Greenock

By whom made

Rankin & Blackmore.

when made

1910

Boilers made at

Greenock

By whom made

Rankin & Blackmore.

when made

1910.

Registered Horse Power

Owners

The Valdura S.S. Co. Ltd.

Port belonging to

Glasgow.

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Glasgow Iron & Steel Co. Ltd.

(Letter for record R.)

Total Heating Surface of Boilers

1092 sq. ft.

Is forced draft fitted

No.

No. and Description of

Boilers One Cylindrical: S. End.

Working Pressure

100 lb

Tested by hydraulic pressure to

200 lb

Date of test 4/12/09.

No. of Certificate 952.

Can each boiler be worked separately

✓

Area of fire grate in each boiler

32 sq. ft.

No. and Description of

safety valves to each boiler 2 direct spring loaded.

Area of each valve

5.94 sq. in.

Pressure to which they are adjusted

105 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

18 in.

Mean dia. of boilers

11' 0"

Length

10' 0"

Material of shell plates

Steel.

Thickness

1 1/2 in.

Range of tensile strength

28 to 32 tons

Are the shell plates welded or flanged

No.

Descrip. of riveting: cir. seams Lap Single long. seams

On Straps

Diameter of rivet holes in long. seams

13/16 in.

Pitch of rivets

4 1/2 in.

Lap of plates or width of butt straps

8 3/4 in.

Per centages of strength of longitudinal joint

rivets 83.5

plate 82.6.

Working pressure of shell by

rules

103 lb

Size of manhole in shell

16" x 12"

Size of compensating ring

29 1/2" x 25" x 1 1/2"

No. and Description of Furnaces in each

boiler 2: plain

Material

Steel.

Outside diameter

34 1/8"

Length of plain part

top 6' 6"

bottom 6' 6"

Thickness of plates

crown 1 1/2"

bottom 1 1/2"

Description of longitudinal joint

Weld.

No. of strengthening rings

None.

Working pressure of furnace by the rules

102 lb

Combustion chamber

plates: Material

Steel.

Thickness: Sides

1 1/2"

Back

9/16"

Top

1 1/2"

Bottom

3/4"

Pitch of stays to ditto: Sides

8 1/2" x 10 1/2"

Back

10" x 10"

Top 12 1/2" x 8 1/2" If stays are fitted with nuts or riveted heads

Nuts.

Working pressure by rules

100 lb

Material of stays

Iron.

Diameter at

smallest part

1 3/8"

Area supported by each stay

86 sq. in.

Working pressure by rules

103 lb

End plates in steam space: Material

Steel.

Thickness

1 1/2"

Pitch of stays

19" x 20"

How are stays secured

By nuts.

Working pressure by rules

109 lb

Material of stays

Steel.

Diameter at smallest part

2 3/8 in.

Area supported by each stay

380 sq. in.

Working pressure by rules

114 lb

Material of Front plates at bottom

Steel.

Thickness

5/8"

Material of

Lower back plate

Steel.

Thickness

2 1/2"

Greatest pitch of stays

10"

Working pressure of plate by rules

109 lb

Diameter of tubes

3 1/2"

Pitch of tubes

4 5/8"

Material of tube plates

Steel.

Thickness: Front

5/8"

Back

3/4"

Mean pitch of stays

9 1/4"

Pitch across wide

water spaces

15 1/2"

Working pressures by rules

150 lb

101 lb

Girders to Chamber tops: Material

Steel.

Depth and thickness of

girder at centre

7 1/4" x 1 1/2"

Length as per rule

28 3/4"

Distance apart

12 1/4"

Number and pitch of Stays in each

2: 8 1/2"

Working pressure by rules 113 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,

Rankin & Blackmore Manufacturer.

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

See accompanying report.

Is the approved plan of boiler forwarded herewith

Total No. of visits 76.

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

Survey Fee ... £ : : When applied for, 19.

Travelling Expenses (if any) £ : : When received, 19.

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

Committee's Minute GLASGOW 15 FEB. 1910

Assigned See accompanying mach. report.