

REPORT ON BOILERS.

Sld. No. 32378

Mails No. 16251

FEB 5 1938

Received at London Office

Date of writing Report

19

When handed in at Local Office

3. 2. 1938

Port of

Middlesbrough

No. in Survey held at

Stockton

Date, First Survey

30 Nov/37

Last Survey

28 Jan/38

Reg. Book.

M. V. "LADY GLANELY"

(Number of Visits 9)

Tons

Gross 5497

Net 3232

on the

Master

Built at

Sunderland

By whom built

Wm. Bayford & Sons Ltd.

Yard No.

640

When built

1938

Engines made at

Sunderland.

By whom made

Wm. Bayford & Sons

Engine No.

640

When made

1938

Boilers made at

Stockton

By whom made

Stockton Chemical Engineers

Boiler No.

6256

When made

1938

Nominal Horse Power

516.

Owners

Latimer & Co. Ltd.

Port belonging to

Cardiff.

MULTITUBULAR BOILERS - MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Colvilles & Steel Co of Scotland Ltd

(Letter for Record

S

Total Heating Surface of Boilers

1660 sq. ft.

Is forced draught fitted

Yes.

Coal or Oil fired

Oil.

No. and Description of Boilers

183

Working Pressure

120 lbs

Tested by hydraulic pressure to

230

Date of test

28. 1. 38

No. of Certificate

6931.

Can each boiler be worked separately

2 direct Spring.

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler

2 direct Spring.

Area of each set of valves per boiler

per Rule 15.4 sq. in.

as fitted 19.2 sq. in.

Pressure to which they are adjusted

120

Are they fitted with easing gear

Yes.

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

Is oil fuel carried in the double bottom under boilers

Yes (one end)

Smallest distance between boilers or uptakes and bunkers or woodwork

2'-6"

Is the bottom of the boiler insulated

Yes.

Smallest distance between shell of boiler and tank top plating

11'-10 7/8"

Length

11'-6"

Shell plates: Material

Steel

Tensile strength

29/32

Largest internal dia. of boilers

11'-10 7/8"

Thickness

1 1/16"

Are the shell plates welded or flanged

110

Description of riveting: circ. seams

end 3 7/8"

inter. 3 7/8"

long. seams

W.R. D.B.S.

Diameter of rivet holes in

circ. seams 1 1/16"

long. seams 1 3/16"

Pitch of rivets

5 3/8"

Percentage of strength of circ. end seams

plate 68.5

rivets 45.6

Percentage of strength of circ. intermediate seam

plate 84.9

rivets 83.8

Percentage of strength of longitudinal joint

plate 84.9

rivets 83.8

combined 80.5

Working pressure of shell by Rules

123 lbs

Thickness of butt straps

outer 9/16"

inner 1 1/16"

No. and Description of Furnaces in each Boiler

2 Cf.

Material

Steel

Tensile strength

26-30

Smallest outside diameter

3'-11 1/2"

Length of plain part

top 13 1/2"

bottom 13 1/2"

Thickness of plates

crown 13 1/2"

bottom 13 1/2"

Description of longitudinal joint

weld.

Dimensions of stiffening rings on furnace or c.c. bottom

Working pressure of furnace by Rules

121 lbs

End plates in steam space: Material

Steel

Tensile strength

26-30

Thickness

27/32

Pitch of stays 17 x 16"

How are stays secured

D.N.T.W.

Working pressure by Rules

142 lbs

Tube plates: Material

front Steel

back Steel

Tensile strength

26-30

Thickness

13/16"

front 157

back 249

Mean pitch of stay tubes in nests

9 7/8"

Pitch across wide water spaces

14"

Working pressure

front 157

back 249

Girders to combustion chamber tops: Material

Steel

Tensile strength

28-32

Depth and thickness of girder

at centre

7' x 9 7/8" double

Length as per Rule

30 1/2"

Distance apart

9"

No. and pitch of stays

in each

2 at 9 1/2"

Working pressure by Rules

126 lbs

Combustion chamber plates: Material

Steel

Tensile strength

26-30

Thickness: Sides

19/32"

Back

9/16"

Top

19/32"

Bottom

7/8"

Pitch of stays to ditto: Sides

9 x 9 7/8"

Back

9 1/2 x 8 3/4"

Top

9 x 9 1/2"

Are stays fitted with nuts or riveted over

nuts

Working pressure by Rules

129 lbs

Front plate at bottom: Material

Steel

Tensile strength

26-30

Thickness

27/32"

Lower back plate: Material

Steel

Tensile strength

26-30

Thickness

27/32"

Pitch of stays at wide water space

13 1/2" x 9 7/8"

Are stays fitted with nuts or riveted over

nuts

Working Pressure

201 lbs

Main stays: Material

Steel

Tensile strength

28-32

Diameter

At body of stay, 2 1/4"

or Over threads

No. of threads per inch

6

Area supported by each stay

288.4 sq. in.

Working pressure by Rules

120 lbs

Screw stays: Material

Steel

Tensile strength

26-30

Area supported by each stay

84

Diameter

At turned off part, 1 3/8"

or Over threads

No. of threads per inch

9

Area supported by each stay

84

Working pressure by Rules 120 lbs. Are the stays drilled at the outer ends no Margin stays: Diameter { At turned off part, 1 7/8" or Over threads 1 7/8"

No. of threads per inch 9 Area supported by each stay 100 Working pressure by Rules 152 lbs.

Tubes: Material 2 1/2" Mild iron External diameter { Plain 2 1/2" Stay 2 1/2" Thickness { 8 W.G. No. of threads per inch 9

Pitch of tubes 3 3/4" 3 3/4" Working pressure by Rules P. 315 Stay 276 Manhole compensation: Size of opening in shell plate 20" x 16" Section of compensating ring 7" x 1" No. of rivets and diameter of rivet holes 44 - 1 1/2"

Outer row rivet pitch at ends 6 1/2" Depth of flange if manhole flanged ✓ Steam Dome: Material ✓

Tensile strength ✓ Thickness of shell ✓ Description of longitudinal joint ✓

Diameter of rivet holes ✓ Pitch of rivets ✓ Percentage of strength of joint { Plate ✓ Rivets ✓

Internal diameter ✓ Working pressure by Rules ✓ Thickness of crown ✓ No. and diameter of stays ✓ Inner radius of crown ✓ Working pressure by Rules ✓

How connected to shell ✓ Size of doubling plate under dome ✓ Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell ✓

Type of Superheater ✓ Manufacturers of { Tubes ✓ Steel castings ✓

Number of elements ✓ Material of tubes ✓ Internal diameter and thickness of tubes ✓

Material of headers ✓ Tensile strength ✓ Thickness ✓ Can the superheater be shut off and the boiler be worked separately ✓ Is a safety valve fitted to every part of the superheater which can be shut off from the boiler ✓

Area of each safety valve ✓ Are the safety valves fitted with easing gear ✓ Working pressure as per Rules ✓ Pressure to which the safety valves are adjusted ✓ Hydraulic test pressure: tubes ✓, castings ✓ and after assembly in place ✓ Are drain cocks or valves fitted to free the superheater from water where necessary ✓

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with yes

and on behalf of
The foregoing is a correct description,
G. H. Riley Manufacturer.
DIRECTOR

Dates of Survey { During progress of work in shops - - - 1917 Nov 30 Dec 7 16 23 1918 Jan 5 10 Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)

while building { During erection on board vessel - - - 20 25 26 Total No. of visits 9

Is this Boiler a duplicate of a previous case yes If so, state Vessel's name and Report No. Chalk Rpt 15541

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

The boiler has been made under special survey in accordance with the approved plan & the requirements of the rules.

The materials & workmanship are good & the boiler was found sound & tight under hydraulic test.

The boiler is to be forwarded to Sunderland.

This boiler has been securely fixed on board the vessel, examined under steam, safety valves adjusted to working pressure & accumulation test carried out satisfactorily.

In recommendation please see memo. Rpt

G. H. Riley

Survey Fee ... £ 11 : 2 : 0 When applied for, 4 - 2 - 1938

Travelling Expenses (if any) £ : : When received, 6 - 5 - 1938

R. H. M. J. J. J.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI 20 MAY 1938

Assigned Su Sea 32378



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Foundation