

Continuation

pt. 5a.

# REPORT ON BOILERS.

No. 3952H.

Received at London Office

Date of writing Report

191

When handed in at Local Office

191

Port of Glasgow

No. in Survey held at

Glasgow

Date, First Survey 20/6/18.

Last Survey 6/1/1920.

1920.

Reg. Book.

on the Donkey Boiler S.S. "BALFE"

(Number of Visits 51.)

Gross Tons  
Net

Master

Built at Glasgow

By whom built D & W Henderson & Co Ltd

When built 1919

Engines made at

Glasgow

By whom made D & W Henderson & Co Ltd

When made 1919

Boilers made at

do

By whom made do

When made 1919

Registered Horse Power

Owners Lamport & Holt

Port belonging to Liverpool

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

Beardmore & Co Ltd

Letter for record

(S)

Total Heating Surface of Boilers

1372 sq ft

Is forced draft fitted

No

No. and Description of

Boilers One Single ended

Working Pressure

150 lb

Tested by hydraulic pressure to 230 lb

Date of test 15.11.19

No. of Certificate 14990

Can each boiler be worked separately

—

Area of fire grate in each boiler

37.5 sq ft

No. and Description of

Safety valves to each boiler

2 Spring loaded

Area of each valve

5.93 sq in

Pressure to which they are adjusted

120 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

1-6

Inside

Mean dia. of boilers

12.6 in

Length

10.6 in

Material of shell plates

Steel

Thickness

3/4 in

Range of tensile strength

28632 tons

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

do lap

long. seams

T.R.D.B.S.

Diameter of rivet holes in long. seams

7/8 in

Pitch of rivets

5 1/2 in

Gap of plates or width of butt straps

13 3/4 in

Per centages of strength of longitudinal joint

86.68

Working pressure of shell by

Rules

124

Size of manhole in shell

16 x 12 in

Size of compensating ring

2-7 x 2-2 x 1 1/4

No. and Description of Furnaces in each

Boiler 2 corrugated

Material Steel

Outside diameter

49 1/8 in

Length of plain part

top -  
bottom -

Thickness of plates

crown 7/8 in  
bottom 5/8 in

Description of longitudinal joint

Welded

No. of strengthening rings

-

Working pressure of furnace by the rules

128

Combustion chamber

Plates: Material

Steel

Thickness: Sides

9/16 in

Back

9/16 in

Top

9/16 in

Bottom

9/16 in

Pitch of stays to ditto: Sides

9 x 8 in

Back

9 x 8 in

Top 9 x 9 in

If stays are fitted with nuts or riveted heads

No

Working pressure by rules

131

Material of stays

Steel

Diameter at

Area

Smallest part

1 1/4 in

Area supported by each stay

830 sq in

Working pressure by rules

142

End plates in steam space: Material

Steel

Thickness

1/8 in

Pitch of stays

18 x 18 in

How are stays secured

No nuts

Working pressure by rules

123

Material of stays

Steel

Diameter at smallest part

3.85 in

Area supported by each stay

3240 sq in

Working pressure by rules

23

Material of Front plates at bottom

Steel

Thickness

1/8 in

Material of

Lower back plate

Steel

Thickness

1/8 in

Greatest pitch of stays

14 x 8 in

Working pressure of plate by rules

146

Diameter of tubes

3 1/4 in

Pitch of tubes

4 1/2 x 4 1/2 in

Material of tube plates

Steel

Thickness: Front

13/16 in

Back

1/2 in

Mean pitch of stays

10.5 in

Pitch across wide

Water spaces

14 in

Working pressures by rules

183

Girders to Chamber tops: Material

Steel

Depth and thickness of

Order at centre

6 3/4 x 11 (2)

Length as per rule

30.8

Distance apart

9 1/4 in

Number and pitch of Stays in each

(2) 9 in

Working pressure by rules

121

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

Plates

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

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,

FOR DAVID & WILKINSON & CO., LTD.

J. H. Patric

Manufacturer.

Dates

During progress of

Survey

work in shops - -

while

During erection on

building

board vessel - -

See accompanying Machinery Reports.

Is the approved plan of boiler forwarded herewith

Yes

Total No. of visits

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

This boiler has been built under Special Survey Materials and workmanship are good and it has been satisfactorily fitted to the vessel.

Survey Fee

...

£

When applied for,

191

Travelling Expenses (if any)

£

When received,

191

Committee's Minute

GLASGOW 13 JAN 1920

Assigned

See attached machinery report

James Dastous Mc Murray  
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

002743-002749-0048

Lloyd's Register  
Foundation