

REPORT ON BOILERS.

No. 19294.

Received at London Office

Date of writing Report

5.12.30

When handed in at Local Office 30th JAN^y 1931.

Port of

Greenock

No. in
Reg. Book.

Survey held at

Greenock

Date, First Survey 1st APRIL 1930.Last Survey 30th JANUARY 1931.

(Number of Visits

Tons

Gross 406.40

Net 4180.14

on the

S/S "British Bride"

Master

Built at

P. J. Langon

By whom built

Lithgow L^d

Yard No. 849

When built 1931

Engines made at

Greenock

By whom made

John Bruce & Co. L^d

Engine No. 762

When made 1931

Boilers made at

ditto

By whom made

ditto

Boiler No. 762

When made 1931

Nominal Horse Power

653

Owners

British Tankers L^d

Port belonging to

London

MULTITUBULAR BOILERS AUXILIARY,

Manufacturers of Steel

W. & A. R. Berghau & Co. Ltd. Glasgow
W. & A. Metallurgische Werke & Bauanstalt AG of Scotland

Letter for Record S

Total Heating Surface of Boilers

1389 sq. ft.

Is forced draught fitted

yes

Coal or Oil fired

oil

No. and Description of Boilers

one single ended

Working Pressure 150

Tested by hydraulic pressure to

245

Date of test 1-12-30

No. of Certificate

1992

Can each boiler be worked separately

yes

Area of Firegrate in each Boiler

oil fuel

No. and Description of safety valves to each boiler

Backboilers (Double) High Lift.

Area of each set of valves per boiler

per Rule 8.42 sq. ft.

as fitted 9.80

Pressure to which they are adjusted

155

Are they fitted with easing gear

yes

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

Smallest distance between boilers or uptakes and bunkers or woodwork

1-6"

Is oil fuel carried in the double bottom under boilers

no

Smallest distance between shell of boiler and tank top plating

1-6"

Is the bottom of the boiler insulated

yes

Largest internal dia. of boilers

11-5 7/32"

Length 11-6"

Shell plates: Material

S

Tensile strength

29-33

Thickness

25 1/32"

Are the shell plates welded or flanged

yes

Description of riveting: circ. seams

end

DR

long. seams

TR & DBS

Diameter of rivet holes in

circ. seams 15 1/16"

long. seams 27 1/32"

Pitch of rivets

3 0/96"

6 5/32"

Percentage of strength of circ. end seams

plate 69.6

rivets 45.2

Percentage of strength of circ. intermediate seam

plate

rivets

Percentage of strength of longitudinal joint

plate 86.2

rivets 86.5

combined 89.7

Working pressure of shell by Rules

152

Thickness of butt straps

outer 5/8"

inner 3/4"

No. and Description of Furnaces in each Boiler

2 Deightons

Material

S

Tensile strength

26-30

Smallest outside diameter

3-27 1/8"

Length of plain part

top

bottom

Thickness of plates

crown 7 1/16"

bottom

Description of longitudinal joint

weld

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

Working pressure of furnace by Rules

160

End plates in steam space: Material

S

Tensile strength

26-30

Thickness

15 1/16"

Pitch of stays 163/8" 15 1/4"

How are stays secured

DN & Washers

Working pressure by Rules

159

Tube plates: Material

front

back

Steel

Tensile strength

26-30

Thickness

11 1/16"

Mean pitch of stay tubes in nests

10"

Pitch across wide water spaces

133/4"

Working pressure

front 174

back 167

Girders to combustion chamber tops: Material

S

Tensile strength

29-33

Depth and thickness of girder

at centre

9 x 3 1/4 (3)

Length as per Rule

34 5/8"

Distance apart

10 1/8"

No. and pitch of stays

in each

3 at 83/4"

Working pressure by Rules

164

Combustion chamber plates: Material

S

Tensile strength

26-30

Thickness: Sides

11 1/16"

Back

11 1/16"

Top

11 1/16"

Bottom

11 1/16"

Pitch of stays to ditto: Sides

83/4" x 4 1/2"

Back

8 x 8 1/4"

Top

10 1/8" x 83/4"

Are stays fitted with nuts or riveted over

Riveted

Working pressure by Rules

166

Front plate at bottom: Material

S

Tensile strength

26-30

Thickness

29 1/32"

Lower back plate: Material

S

Tensile strength

26-30

Thickness

7/8"

Pitch of stays at wide water space

14"

Are stays fitted with nuts or riveted over

Riveted

Working Pressure

154

Main stays: Material

S

Tensile strength

28-32

Diameter

At body of stay, or over threads

23 1/8"

No. of threads per inch

6

Area supported by each stay

249 sq. in.

Working pressure by Rules

158

Screw stays: Material

S

Tensile strength

26-30

Diameter

At turned off part, or over threads

13 1/8"

No. of threads per inch

9

Area supported by each stay

66 sq. in.

Working pressure by Rules **153** Are the stays drilled at the outer ends **90** Margin stays: Diameter ^(At turned off part, or Over threads) **1 5/8"** ✓

No. of threads per inch **9** Area supported by each stay **90.45"** Working pressure by Rules **164**

Tubes: Material **Iron** External diameter ^{Plain Stay} **2 3/4"** ✓ Thickness ^{10 WG} **5/16" & 1/4"** No. of threads per inch **9**

Pitch of tubes **4" x 4"** Working pressure by Rules **163** Manhole compensation: Size of opening in shell plate **16" x 20"** Section of compensating ring **2.85" x 2.45" x 15/16"** No. of rivets and diameter of rivet holes **38 at 1 7/8"**

Outer row rivet pitch at ends **8"** ✓ Depth of flange if manhole flanged **3 1/4"** 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

How connected to shell Inner radius of crown Working pressure by Rules

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

Number of elements Material of tubes Manufacturers of ^{Tubes Steel castings} 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 23 inclusive for boilers been complied with **Yes**

The foregoing is a correct description,
For **JOHN G. KINCAID & CO. LIMITED.** Director. Manufacturer.

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

SEE MACHINERY REPORT

Are the approved plans of boiler and ~~superheater~~ forwarded herewith **Yes**
(If not state date of approval.)

Total No. of visits **✓**

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

This Boiler has been built under Special Survey in accordance with the approved plans & the workmanship & material are of good quality. It is now securely fitted on board. This Report accompanies trial of the Machinery.

Survey Fee **charged on Monday Sept.**
Traveling Expenses (if any) £

When applied for, **192**
When received, **192**

W. Gordon-Mitchell

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 3 - FEB 1931**

Assigned **See Gen. Rpt. No. 19294** **SP**



© 2019

Lloyd's Register Foundation