

REPORT ON BOILERS.

Abn. No. 11964.
No. 26969

Received at London Office

HU. 19 JUL 1917

TUE. 24 APR 1917

Date of writing Report

191

When handed in at Local Office

23 APR 1917

Port of Sunderland

No. in Survey held at

Sunderland

Date, First Survey

13 Feb 1917

Last Survey

1917

Reg. Book.

on the

H.M. Hawker "William Browning"

(Number of Visits)

Gross

226.6

Net

102.44

Master

Built at Aberdeen

By whom built Hall Russell & Co (S/N 608)

When built 1917

Engines made at

Aberdeen

By whom made

Hall Russell & Co No. 608

When made 1917

Boilers made at

Sunderland

By whom made

George Clark Ltd (N. 1053 1/2)

When made 1917

Registered Horse Power

48

Owners

Admiralty

Port belonging to

✓

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

John Spencer & Son Ltd

Letter for record

3

Total Heating Surface of Boilers

1429 sq ft

Is forced draft fitted

no

No. and Description of

Boilers one single ended marine

Working Pressure 180

Tested by hydraulic pressure to 360

Date of test 21-4-17

No. of Certificate

3399

Can each boiler be worked separately

✓

Area of fire grate in each boiler

48 sq ft

No. and Description of

Safety valves to each boiler

2 direct spring

Area of each valve

5.94 sq in

Pressure to which they are adjusted

180 lbs

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

Mean dia. of boilers

12'-9"

Length

10'-9"

Material of shell plates

Steel

Thickness

1 1/2"

Range of tensile strength

29-32 1/2

Are the shell plates welded or flanged

no

Description of riveting: cir. seams

DR

long. seams

DBS. TR

Diameter of rivet holes in long. seams

1 1/8"

Pitch of rivets

7 1/8"

Width of butt straps

10 1/2"

Per centages of strength of longitudinal joint

89.7

Working pressure of shell by

Rules

183

Size of manhole in shell

12" x 16"

Size of compensating ring

2'-4" x 2'-8" x 1 1/2"

No. and Description of Furnaces in each

Boiler 3 plain

Material

Steel

Outside diameter

3'-4 1/2"

Length of plain part

6'-1"

Thickness of plates

1 1/2"

Description of longitudinal joint

welded

No. of strengthening rings

none

Working pressure of furnace by the rules

185

Combustion chamber

Material

Steel

Thickness: Sides

1 1/2"

Back

1 1/2"

Top

1 1/2"

Bottom

1 1/2"

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

Area

10' x 9"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

181

Material of stays

Steel

Diameter at

Smallest part

2'-3 1/2"

Area supported by each stay

116 sq in

Working pressure by rules

183

End plates in steam space: Material

Steel

Thickness

1 1/2"

Pitch of stays

18" x 18"

How are stays secured

D.N.

Working pressure by rules

180

Material of stays

Steel

Thickness

1"

Area supported by each stay

324 sq in

Working pressure by rules

190

Material of Front plates at bottom

Steel

Thickness

1"

Material of

Back plate

Working back plate

Steel

Thickness

1 1/2"

Greatest pitch of stays

9 1/8" x 14 1/2"

Working pressure of plate by rules

197

Diameter of tubes

3 1/2"

Pitch of tubes

4 1/2" x 4 1/2" x 4 1/2"

Material of tube plates

Steel

Thickness: Front

1"

Back

1 1/2"

Mean pitch of stays

10 1/8"

Pitch across wide

10 1/8"

Working spaces

14 1/2"

Working pressures by rules

182

Girders to Chamber tops: Material

Steel

Depth and thickness of

Stays

2 @ 9"

Working pressure by rules

183

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

Thickness

Diameter of flue

Material of flue plates

Thickness

How stayed

Stays

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

End plates: Thickness

How stayed

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 GEORGE CLARK LIMITED

Manufacturer.

Yes

Dates During progress of

work in shops - -

1917. Feb. 13. 22. Mar. 8. 12. 16. 20. 27. Apr. 2. 4. 11. 17. 21

While

During erection on

board vessel - - -

Building

Total No. of visits

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

Materials and workmanship are good.

Boiler has been constructed under special survey and will be forwarded to Aberdeen to be fitted in vessel. This boiler has now been fitted on board the above named vessel & tried under steam with satisfactory results. For recommendation of class see Machinery Report.

Survey Fee

£ 4 : 15 : -

When applied for,

23 APR 1917

Abn. F.C. Rept. N-11964

Travelling Expenses (if any) £

0 : 0 : -

When received,

30 APR 1917

Sh. Davis. Ridley Russell.

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

Committee's Minute

FRI. 20 JUL 1917

Assigned

See first entry rpt. attached