

REPORT ON BOILERS.

No. 83557

Received at London Office

5 DEC 1928

28. APL. 3. H. 1. Writing Report

192

When handed in at Local Office

4.12.1928

Port of

NEWCASTLE-ON-TYNE

Y. 10. AUG. 29

in Survey held at

book.

on the

Wallsend-on-Tyne

Date, First Survey

8 Dec. 1927

Last Survey

27 Nov. 1928

1928

New Steel S.S. Quarrington Court

(Number of Visits)

Gross 6900

Tons

Net 4330

Built at Willington Quay.

By whom built

Northumberland SBC

Yard No. 406.

When built 1928

es made at

Wallsend-on-Tyne

By whom made

Wallsend Shipways & E. Coy Ltd

Engine No. 847

When made 1928

s made at

Wallsend-on-Tyne

By whom made

Wallsend Shipways & E. Coy Ltd.

Boiler No. 847

When made 1928

ual Horse Power

569

Owners

United British S.S. Coy Ltd.

Port belonging to

London

L TITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

D. Schille & Sons Ltd.

(Letter for Record)

Heating Surface of Boilers

8484 sq ft

Is forced draught fitted

yes

Coal or Oil fired

coal

and Description of Boilers

Three single ended. 3 SB.

Working Pressure

180 lbs.

by hydraulic pressure to

320 lbs

Date of test

11-5-28

No. of Certificate

241

Can each boiler be worked separately

yes

of Firegrate in each Boiler

64 sq ft

No. and Description of safety valves to each boiler

Two spring loaded, high lift.

of each set of valves per boiler

as fitted

per Rule

9.2 sq ft

Pressure to which they are adjusted

185 lbs

Are they fitted with easing gear

yes

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

✓

Least distance between boilers or uptakes and bunkers or woodwork

6'-6"

Is oil fuel carried in the double bottom under boilers

no

Least distance between shell of boiler and tank top plating

2'-1"

Is the bottom of the boiler insulated

no.

Least internal dia. of boilers

15'-6 9/16"

Length

12'-0"

Shell plates: Material

Steel

Tensile strength

30 to 34 tons

ness

130"

132"

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

end

D.R.

seams

T.R.D.B.S.

Diameter of rivet holes in

circ. seams

long. seams

1 1/2"

Pitch of rivets

3.43"

Percentage of strength of circ. end seams

plate

65.1

rivets

48.5

Percentage of strength of circ. intermediate seam

plate

✓

Percentage of strength of longitudinal joint

plate

84.4

rivets

85.6

Working pressure of shell by Rules

183 lbs.

ness of butt straps

outer

inner

1 1/16"

No. and Description of Furnaces in each Boiler

Three corrugated (Deighton).

rial

Steel

Tensile strength

26 to 30 tons

Smallest outside diameter

3'-10 3/4"

h of plain part

top

bottom

✓

Thickness of plates

crown

bottom

1 1/32"

Description of longitudinal joint

weld

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

✓

Working pressure of furnace by Rules

185 lbs

plates in steam space: Material

Steel

Tensile strength

26 to 30 tons

Thickness

1 1/32"

Pitch of stays

2 1/2" x 18 1/2"

are stays secured

Double nuts

Working pressure by Rules

192 lbs.

plates: Material

front

back

steel

Tensile strength

26 to 30 tons

Thickness

3/4"

pitch of stay tubes in nests

4.345"

Pitch across wide water spaces

13 1/4" x 1 1/2"

Working pressure

front 184 lbs

ers to combustion chamber tops: Material

Steel

Tensile strength

28 to 32 tons

Depth and thickness of girder

ntre

2 @ 3 1/4" x 9 1/2"

Length as per Rule

2'-10 1/8"

Distance apart

9 1/2"

No. and pitch of stays

ch

3 @ 8 1/4"

Working pressure by Rules

182 lbs.

Combustion chamber plates: Material

Steel

ile strength

26 to 30 tons

Thickness: Sides

2 1/32"

Back

2 1/32"

Top

2 1/32"

Bottom

2 1/32"

of stays to ditto: Sides

10" x 8 1/4"

Back

10" x 8"

Top

9 1/2" x 8 1/4"

Are stays fitted with nuts or riveted over

nuts

Working pressure by Rules

182 lbs.

Front plate at bottom: Material

Steel

Tensile strength

26 to 30 tons

tness

15 1/16"

Lower back plate: Material

Steel

Tensile strength

26 to 30 tons

Thickness

1 1/8"

of stays at wide water space

14" x 9"

Are stays fitted with nuts or riveted over

nuts

Working Pressure

225 lbs.

Main stays: Material

Steel

Tensile strength

28 to 32 tons

eter

At body of stay,

or

Over threads.

3 1/4"

No. of threads per inch

6

Area supported by each stay

420 sq in

Working pressure by Rules

192 lbs

Screw stays: Material

Iron

Tensile strength

2 1/2 min

eter

At turned off part,

or

Over threads.

1 5/8"

No. of threads per inch

9

Area supported by each stay

80 sq in

WS07-0205

Working pressure by Rules 190 lbs Are the stays drilled at the outer ends no Margin stays: Diameter 1 1/8" ^{At turned off part} or ^{Over threads}

No. of threads per inch 9 Area supported by each stay 101.80" Working pressure by Rules 210 lbs

Tubes: Material Iron External diameter 2 1/2" Thickness 9 w.g. No. of threads per inch 9

Pitch of tubes 3 1/4" x 3 3/4" Working pressure by Rules 190 lbs Manhole compensation: Size of opening 16" x 20"

shell plate 16" x 20" Section of compensating ring 11 1/2" x 1 1/2" No. of rivets and diameter of rivet holes 44 @ 1 1/2"

Outer row rivet pitch at ends 8 1/2" Depth of flange if manhole flanged 3 1/2" Steam Dome: Material none

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 diam

stays Inner radius of crown Working pressure by Rules

How connected to shell Size of doubling plate under dome Diameter of rivet holes and

of rivets in outer row in dome connection to shell

Type of Superheater none 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

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

Rules Pressure to which the safety valves are adjusted Hydraulic test pressure

tubes, castings and after assembly in place Are drain cocks or valves

to free the superheater from water where necessary

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with yes FOR THE WALLSEND SLIPWAY & ENGINEERING

The foregoing is a correct description, Manufa

Dates of Survey During progress of work in shops - - Are the approved plans of boiler and superheater forwarded herewith yes (If not state date of approval.)

while building During erection on board vessel - - - Total No. of visits

See Mchly Report

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

These Boilers have been built under Special Survey. Materials & Workmanship good. Hydraulic tests satisfactory. They are securely fixed in the vessel were examined under steam & safety valves adjusted.

Survey Fee £ : ✓ : When applied for, 192

Travelling Expenses (if any) £ : ✓ : When received, 192

See Mchly Report

William Butler
Engineer Surveyor to Lloyd's Register of Ships

Committee's Minute TUE 18 DEC 1928

Assigned See Mchly Report attached