

REPORT ON BOILERS.

No. 83275.

Received at London Office 19 SEP 1928

Date of writing Report

192

When handed in at Local Office

192

Port of

NEWCASTLE-ON-TYNE

No. in Survey held at
Reg. Book.

Date, First Survey 8/12/27

Last Survey 11.9.28. 192

on the

Wallsend-on-Tyne
New Steel S.S. "Gaddington Court"

(Number of Visits)

Gross 5322
Tons Net 3258

Master

Built at

Hillingdon Quay

By whom built

Northumberland S.S. Co. Ltd

Yard No. 405

When built 1928

Engines made at

Wallsend

By whom made

Wallsend Slipways & E. Co. Ltd

Engine No. 846

When made 1928

Boilers made at

Wallsend

By whom made

Wallsend Slipways & E. Co. Ltd

Boiler No. 846

When made 1928

Nominal Horse Power

569

Owners

Court Line Ltd

Port belonging to

London

MULTITUBULAR BOILERS—MAIN, ~~AUXILIARY~~, OR DONKEY.

Manufacturers of Steel

Steel Company of Scotland Ltd.

(Letter for Record

P. (+)

Total Heating Surface of Boilers

848 sq ft

Is forced draught fitted

Yes

Coal or Oil fired

Coal

No. and Description of Boilers

Three single ended 3 SB

Working Pressure

180 lbs

Tested by hydraulic pressure to

320 lbs

Date of test 20.4.28

No. of Certificate 264

Can each boiler be worked separately

Yes

Area of Firegrate in each Boiler

54 sq ft

No. and Description of safety valves to each boiler

Two spring loaded high lift.

Area of each set of valves per boiler

per Rule 18.5 = 9.2 sq ft

as fitted 9.88 sq ft

Pressure to which they are adjusted

185 lbs

Are they fitted with easing gear

Yes

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

Yes

Smallest distance between boiler uptakes and bunkers or woodwork

6'-6"

Is oil fuel carried in the double bottom under boilers

No

Smallest distance between shell of boiler and tank top plating

2'-1"

Is the bottom of the boiler insulated

No

Largest internal dia. of boilers

15'-6 9/16"

Length

12'-0"

Shell plates: Material

Steel

Tensile strength

30 to 34 tons

Thickness

1 1/8"

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

end

D.R.

long. seams

T. R. D. B. S.

Diameter of rivet holes in

circ. seams

long. seams

Pitch of rivets

3 1/2"

Pitch of rivets

3 1/2"

Percentage of strength of circ. end seams

plate

rivets

65.1

Percentage of strength of circ. intermediate seam

plate

rivets

Yes

Percentage of strength of longitudinal joint

plate

rivets

85.6

Working pressure of shell by Rules

183 lbs.

Thickness of butt straps

outer 1 1/8"

inner 1 1/8"

No. and Description of Furnaces in each Boiler

Three corrugated (Deighton)

Material

Steel

Tensile strength

26 to 30 tons

Smallest outside diameter

3'-10 3/4"

Length of plain part

top

bottom

Thickness of plates

crown

bottom

1 1/8"

Description of longitudinal joint

weld.

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

none

Working pressure of furnace by Rules

185 lbs.

End plates in steam space: Material

Steel

Tensile strength

26 to 30 tons

Thickness

1 3/8"

Pitch of stays

10 1/2" x 18 1/2"

How are stays secured

Double nuts

Working pressure by Rules

182 lbs.

Tube plates: Material

front

back

Steel

Tensile strength

26 to 30 tons

Thickness

1 5/8"

Mean pitch of stay tubes in nests

9.2/5.

Pitch across wide water spaces

13 1/4" x 1 1/2"

Working pressure

front

18 1/2 lbs.

back

2 1/4 lbs.

Girders to combustion chamber tops: Material

Steel

Tensile strength

28 to 32 tons

Depth and thickness of girder

at centre

2 @ 21 1/4" x 9 1/2"

Length as per Rule

2'-10 1/8"

Distance apart

9 1/2"

No. and pitch of stays

in each

3 @ 8 1/4"

Working pressure by Rules

182 lbs.

Combustion chamber plates: Material

Steel

Tensile strength

26 to 30 tons

Thickness: Sides

2 1/8"

Back

2 1/8"

Top

2 1/8"

Bottom

2 5/8"

Pitch 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

Thickness

1 5/8"

Lower back plate: Material

Steel

Tensile strength

26 to 30 tons

Thickness

1 1/8"

Pitch 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

Diameter

At body of stay,

or

Over threads

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 tons min

Diameter

At turned off part,

or

Over threads

No. of threads per inch

9

Area supported by each stay

80 sq in

Lloyd's Register
Foundation

008789-508795-0149

Working pressure by Rules *190 lbs* Are the stays drilled at the outer ends *no* Margin stays: Diameter *At turned off part, or Over threads* *2 1/8"*
 No. of threads per inch *9* Area supported by each stay *101.8 sq"* Working pressure by Rules *210 lbs.*
 Tubes: Material *Iron* External diameter *2 1/2"* Thickness *9 wgs. 5/16"* No. of threads per inch *9*
 Pitch of tubes *3 3/4" x 3 3/4"* Working pressure by Rules *WWS. 190 lbs* Manhole compensation: Size of opening in shell plate *16" x 20"* Section of compensating ring *11 1/2" x 1 1/2"* No. of rivets and diameter of rivet holes *11 @ 1 3/8"*
 Outer row rivet pitch at ends *8 1/2"* Depth of flange if manhole flanged *3 1/8"* Steam Dome: Material *none.*
 Tensile strength *204* Thickness of shell *5/16"* Description of longitudinal joint
 Diameter of rivet holes *3/8"* Pitch of rivets *3"* Percentage of strength of joint *Plate Rivets*
 Internal diameter *21"* Working pressure by Rules *WWS. 190 lbs* Thickness of crown *5/16"* No. and diameter of stays
 How connected to shell *Inner radius of crown* Working pressure by Rules *WWS. 190 lbs* Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell

Type of Superheater *none* Manufacturers of Tubes *Wallsend Slipway & Engineering Co. Ltd.*
 Number of elements Material of tubes *Steel castings* Internal diameter and thickness of tubes
 Material of headers Tensile strength *48,000 lbs* Thickness *5/16"* Can the superheater be shut off and the boiler be worked separately
 Area of each safety valve *1.5 sq in* Is a safety valve fitted to every part of the superheater which can be shut off from the boiler
 Rules *Pressure to which the safety valves are adjusted* Working pressure as per *190 lbs*
 tubes *castings* and after assembly in place *190 lbs* Hydraulic test pressure: *250 lbs*
 to free the superheater from water where necessary *Are drain cocks or valves fitted*

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

FOR THE WALLSEND SLIPWAY & ENGINEERING CO. LIMITED.

The foregoing is a correct description,
Adm. Loring Manufacturer.

Dates of Survey *During progress of work in shops - - -* Please see Machinery Report. Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) *yes*
while building *During erection on board vessel - - -* Total No. of visits *1*

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 *£ 192* When applied for.
 Travelling Expenses (if any) *£ 192* When received.

William Butler
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *FRI. 28 SEP 1928*
 Assigned *See Rpt. attached*