

pt. 5a.

REPORT ON BOILERS.

No. 6778.

WED. 14 JUN 1911

THUR. 25 MAY 1911

Received at London Office

Date of writing Report

10

When handed in at Local Office

29.4.11 Port of

MIDDLESBROUGH ON TYNES

No. in Survey held at Middlesbrough

Date, First Survey

12th Dec, 1910

Last Survey

19th April 1911

Safety Reg. Book.

on the Main Boiler No: 4564

is "Harvey Hague"

(Number of Visits)

Gross 295

Net 115

Master

Built at Middlesbrough By whom built Smith's Dock Co. Ltd. (No: 470) When built 1911

Engines made at N. Shields

By whom made The Shields Eng. & B. Co. Ltd. (No: 229) When made 1911

Boilers made at Middlesbrough

By whom made Richardsons, Westgarth & Co. Ltd. when made 1911

Registered Horse Power

Owners New Dock, Ltd. & J. Rowling & Co. Port belonging to Fleetwood

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel John Spencer & Sons Ltd.

Letter for record

(5)

Total Heating Surface of Boilers 1599 sq. ft.

Is forced draft fitted

No. and Description of

Boilers One S. E. Cyl. boiler.

Working Pressure 180 lbs

Tested by hydraulic pressure to 360 lbs

Date of test 13.4.11.

No. of Certificate

4625

Can each boiler be worked separately

✓

Area of fire grate in each boiler 52¹/₂ sq. ft.

No. and Description of

Safety valves to each boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

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

Int.

Mean dia. of boilers 13'-6"

Length 11'-6"

Material of shell plates Steel

Thickness 1³/₂"Range of tensile strength 28³/₄ - 32

Are the shell plates welded or flanged No

Grip. of riveting: cir. seams B.R. Lap long. seams B.B. 5 Rivets

Diameter of rivet holes in long. seams 1³/₁₆"Pitch of rivets 8¹/₄"

of plates or width of butt straps 18"

Per centages of strength of longitudinal joint

rivets 91.8

Working pressure of shell by

Size of manhole in shell 16" x 12"

Size of compensating ring 34¹/₂ x 29 x 1³/₂"

No. and Description of Furnaces in each

Three plain Material Steel

Outside diameter 3'-4"

Length of plain part

top 6'-11³/₂"

Thickness of plates

crown 1³/₁₆"bottom 9²⁵/₃₂"

Description of longitudinal joint Welded

No. of strengthening rings

Working pressure of furnace by the rules 190 lbs

Combustion chamber

Material Steel Thickness: Sides 1¹/₁₆"Back 2³/₃₂"11¹/₁₆"Top 2³/₃₂"Bottom 1¹/₁₆"Pitch of stays to ditto: Sides 9' x 8¹/₂"Back 9¹/₄ x 9¹/₄"

Area

11'4" x 8¹/₄" If stays are fitted with nuts or riveted heads Nuts

Working pressure by rules 185

Material of stays Steel

Diameter at

Smallest part 2'-09"

Area supported by each stay 92.8

Working pressure by rules 203

End plates in steam space: Material Steel

Thickness 1¹/₄"

Area

Diameter at smallest part 7'-06"

Pitch of stays 20' x 20"

How are stays secured B.R. & W.

Working pressure by rules 185

Material of stays Steel

Area

Diameter at smallest part 7'-06"

Supported by each stay 380"

Working pressure by rules 193

Material of Front plates at bottom Steel

Thickness 1"

Material of

Back plate Steel

Thickness 2⁹/₃₂"

Greatest pitch of stays 15' x 9'

Working pressure of plate by rules 185

Pitch of tubes 4³/₄ x 4³/₄"

Material of tube plates Steel

Thickness: Front 1"

Back 2⁵/₃₂"Mean pitch of stays 11⁷/₈ x 9¹/₂"

Pitch across wide

spaces 14¹/₂"

Working pressures by rules 182 lbs

Girders to Chamber tops: Material Steel

Depth and thickness of

at centre 10¹/₂ x 1⁷/₈"Length as per rule 3'-0¹/₂"Distance apart 11¹/₄"Number and pitch of Stays in each 30 8¹/₄"

Working pressure by rules 190 lbs

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

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

Are they 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

For and on behalf of

The foregoing is a correct description,

RICHARDSONS, WESTGARTH & CO., LTD.

Manufacturer.

MANAGING DIRECTOR

Is the approved plan of boiler forwarded herewith

yes

Total No. of visits

16

During progress of

work in shops - -

1910. Dec. 4. 16. 28. 1911. Jan. 11. 20. Feb. 4. 8. 17. 24

while

During erection on

Mar. 2. 14. 22. 25. Apr. 3. 13. 19

building

board vessel - - -

See Newcastle Report on weekly

GENERAL REMARKS

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

This boiler has been

constructed under Special Survey, is of good material

and workmanship and has been tested by hydraulic

pressure with satisfactory results.

SURVEY REQUEST

NO. 210 ATTACHED.

Survey Fee ...

£ 5 : 7 :

When applied for, MONTHLY 2/6

Travelling Expenses (if any) £

:

When received, 3/11/11

Committee's Minute

Assigned

FRI 16 JUN 1911

Lloyd's Register

Foundation

008900-008908-0365