

Rpt. 5a.

REPORT ON BOILERS.

No. 6435

SAT. 3 SEP 1910

Date of writing Report

10

When handed in at Local Office

14th Sept. 10

Port of

MIDDLESBROUGH-ON-TEES.

No. in Survey held at

Stockton-on-Tees

Date, First Survey

1st July

Last Survey

29th Aug. 1910

Reg. Book.

on the

S. S. Watermouth

(Number of Visits)

S.S. N^o 612

Gross

Tons

Net

Master

Built at Thornaby-on-Tees

By whom built

Richardson Dock & Co

When built 1910

Engines made at

By whom made

when made

Boilers made at

Stockton

By whom made

J. Sudron & Co Ltd. (N^o 2733)

when made 1910

Registered Horse Power

Owners

Messrs Anning Bros

Port belonging to

Cardiff

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

J. Spencer & Sons

(Letter for record

(S)

Total Heating Surface of Boilers

1141 sq

Is forced draft fitted

no

No. and Description of

Boilers

One single Ended

Working Pressure

100 Tested by hydraulic pressure to

200

Date of test 29.8.10

No. of Certificate

4486

Can each boiler be worked separately

—

Area of fire grate in each boiler

35½ sq

safety valves to each boiler

2 direct Spring

Area of each valve

7.07 sq

Pressure to which they are adjusted

104 lbs

Are they fitted with easing gear

yes

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

no

Smallest distance between boilers

on uptakes and bunkers, or woodwork

2 ft

dia. of boilers

11'-0"

Length 10'-6"

Material of shell plates

steel

Thickness

21/32

Range of tensile strength

29-33

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

Single lap

long. seams

3 Riv lap

Diameter of rivet holes in long. seams

15/16"

Pitch of rivets

3½"

Length of plates or width of butt straps

6½"

Per centages of strength of longitudinal joint

rivets 76.6

Working pressure of shell by

plate 72.14

rules

106

Size of manhole in shell

16" x 12"

Size of compensating ring

5½" x 27/32"

No. and Description of Furnaces in each

boiler

2 plain

Material

steel

Outside diameter

38½"

Length of plain part

top 80"

bottom 108"

Thickness of plates

crown 19/32

bottom 63 mean

Description of longitudinal joint

welded

No. of strengthening rings

none

Working pressure of furnace by the rules

103

Combustion chamber

plates: Material

steel

Thickness: Sides

1/2"

Back 17/32"

Top 1/2"

Bottom 1/2"

Pitch of stays to ditto: Sides

9½" x 7½"

Back 9" x 8½"

Top 9½" x 7½"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

105

Material of stays

steel

Diameter at

smallest part

1 1/11

Area supported by each stay

71.25

Working pressure by rules

105

End plates in steam space: Material

steel

Thickness

3/4"

Pitch of stays

17½" x 14½"

How are stays secured

nuts &

Working pressure by rules

105

Material of stays

steel

Diameter at smallest part

1.84

Area supported by each stay

250

Working pressure by rules

179

Material of Front plates at bottom

steel

Thickness

3/4"

Material of

Lower back plate

steel

Thickness

3/4"

Greatest pitch of stays

17½" x 8½"

Working pressure of plate by rules

100

Diameter of tubes

3 1/4"

Pitch of tubes

4½" x 4½"

Material of tube plates

steel

Thickness: Front

3/4"

Back 1/2"

Mean pitch of stays

10 3/8"

Pitch across wide

water spaces

13 3/4"

Working pressures by rules

107

Girders to Chamber tops: Material

steel

Depth and thickness of

girder at centre

6½" x 14"

Length as per rule

28 1/2"

Distance apart

9½"

Number and pitch of Stays in each

2 @ 7½"

Working pressure by rules

102

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

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If 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,

THOMAS SUDRON & CO LIMITED

Manufacturer.

Dates

During progress of

of Survey

work in shops - -

while

During erection on

building

board vessel - - -

1910. July 5. 8. 12. 21. 25. Aug. 4. 8. 10. 29.

Is the approved plan of boiler forwarded herewith

yes

Total No. of visits

9

GENERAL REMARKS

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

This boiler has been built under

Special Survey, is of good material and workmanship, and on completion was tested by hydraulic pressure with satisfactory results

Survey Fee

...

£ 3 : 16 : -

When received

24. 11. 1910

Travelling Expenses (if any) £

:

When received

24. 11. 1910

Wm Morrison & Co
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

TUE. 10 JAN 1911

Committee's Minute

Assigned

Lloyd's Register
Foundation
W752-0206