

REPORT ON BOILERS.

No. 9878

WED. 7-NOV. 1917

Received at London Office

15/9/1917

5a.

Writing Report

When handed in at Local Office

15/9/1917 Port of

Middlesbrough

Survey held at

Stockton-on-Tees

Date, First Survey

10th May 1917

Last Survey

8th Sept^r 1917

Book.

on the

donkey boiler for the 5 1/2" CARDIGAN

(Number of Visits 11)

Gross Tons

Net

Built at

Stockton

By whom built

Messrs. Richardson Duck & Co

When built

es made at

Stockton

By whom made

Messrs. Blair & Co Ltd

When made

s made at

Stockton

By whom made

Messrs. J. Hudson & Co Ltd

When made

ered Horse Power

Owners

Port belonging to

TITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY. - Manufacturers of Steel

John Spencer & Sons.

for record

Total Heating Surface of Boilers

1240 sq

Is forced draft fitted

no

No. and Description of

one single ended

Working Pressure

100

Tested by hydraulic pressure to

200

Date of test

8/9/17

Certificate

5798

Can each boiler be worked separately

yes

Area of fire grate in each boiler

36 sq

No. and Description of

valves to each boiler

two direct spring

Area of each valve

7.07

Pressure to which they are adjusted

105 lb.

ey fitted with easing gear

yes

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

no

est distance between boilers or uptakes and bunkers or woodwork on upper deck

Ext:

Mean dia. of boilers

11'-0"

Length

11'-0"

ial of shell plates

Steel

Thickness

2 1/32

Range of tensile strength

29-33

Are the shell plates welded or flanged

no

ip. of riveting: cir. seams

s. lap

long. seams

3. P. lap

Diameter of rivet holes in long. seams

15/16

Pitch of rivets

3 1/2"

of plates or width of butt straps

6 1/2"

Per centages of strength of longitudinal joint

rivets 76.7

Working pressure of shell by

plate 73.14

on bolts

26

Size of manhole in shell

16" x 12"

Size of compensating ring

5 1/2" x 2 1/32"

No. and Description of Furnaces in each

2 plain

Material Steel

Outside diameter

40 1/2"

Length of plain part

87 1/2"

Thickness of plates

top 19/32"

bottom 5/8"

ription of longitudinal joint

weld

No. of strengthening rings

Working pressure of furnace by the rules

100

Combustion chamber

Material

Steel

Thickness: Sides

17/32"

Back

17/32"

Top

17/32"

Bottom

1/16"

Pitch of stays to ditto: Sides 9 1/2" x 8 1/8" Back 9 x 8 1/4"

1/2 x 8 1/8"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

110

Material of stays

Steel

Area

1st part

1.19

Area supported by each stay

78.75

Working pressure by rules

121

End plates in steam space: Material Steel Thickness 3/4"

of stays

17 1/2" x 1 1/2"

How are stays secured

nuts

6 x 9/16"

Working pressure by rules

103

Material of stays Steel Area Diameter at smallest part 2.66

supported by each stay

2.36

Working pressure by rules

117

Material of Front plates at bottom

Steel

Thickness 3/4"

Material of

back plate

Steel

Thickness 3/4"

Greatest pitch of stays

13 x 8 3/4"

Working pressure of plate by rules

158

Diameter of tubes

3 1/4"

of tubes

4 1/2" x 4 1/4"

Material of tube plates Steel Thickness: Front

3/4"

Back

5/8"

Mean pitch of stays

11

Pitch across wide

spaces

13 3/4"

Working pressures by rules

114

Girders to Chamber tops: Material Steel

Depth and thickness of

at centre

6 1/2" x 1 1/4"

Length as per rule

28 5/16"

Distance apart

9 1/2"

Number and pitch of Stays in each

ing pressure by rules

104

Superheater or Steam chest: ~~how~~ connected to boiler

none

Can the superheater be shut off and the boiler worked

ately

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

ened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

ing pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

THE REGISTER

REQUEST

1145 ATTACHED.

The foregoing is a correct description,

Manufacturer.

es

During progress of

1917 May 10-17 30 June 20 July 4-12

Is the approved plan of boiler forwarded herewith

Yes

ey

work in shops - -

Aug 10-16 30 Sept 3-8

Total No. of visits

11

le

During erection on

board vessel - - -

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. The boiler is to be fitted on board at this port. The boiler has now been satisfactorily secured on board, examined under steam and safety valves adjusted.

Survey Fee

£ 4 : 3 : 0

When applied for

Monthly Account

Travelling Expenses (if any)

£

When received

191

(Signed)

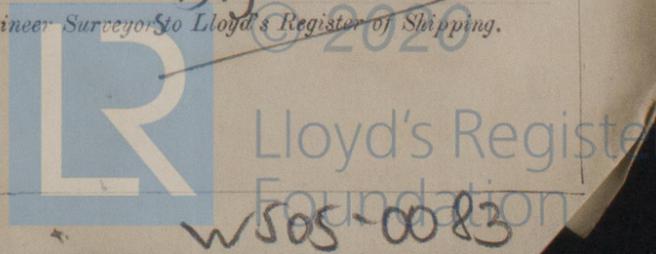
Wm Morrison & J. Skakle

Engineer Surveyors to Lloyd's Register of Shipping.

Committee's Minute

FRI. 9-NOV. 1917

Signed



W505-0083