

Rpt. 5a.

REPORT ON BOILERS.

Hon No. 44152

No. 8587

Date of writing Report 8.8.14

When handed in at Local Office 8.8.

Received at London Office

MON. AUG. 10. 1914

No. in Survey held at
Reg. Book.

Stockton-on-Tees

Date, First Survey

April 16th

Last Survey

August 5 1914.

(Number of Visits 14.)

Gross

Tons

Net

Master

Built at

By whom built

When built

Engines made at

St. Yarmouth

By whom made

Messrs Crabbie & Co Ltd

When made

Boilers made at

Stockton

By whom made

Messrs Crabbie & Co Ltd (No. 3516)

When made

1914

Registered Horse Power

Owners

Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel Messrs J. Spencer & Sons

(Letter for record

(5)

Total Heating Surface of Boilers

1019 sq ft

Is forced draft fitted

No. and Description of

Boilers

One single ended

Working Pressure

180

Tested by hydraulic pressure to

360

Date of test

5.8.14

No. of Certificate

5357

Can each boiler be worked separately

Area of fire grate in each boiler

35 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 casing 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

External

Mean dia. of boilers

11'-0"

Length

10'-0"

Material of shell plates

steel

Thickness

1 1/2"

Range of tensile strength

29-33

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

2 R. lap

long. seams

2 B-3 Riv

Diameter of rivet holes in long. seams

1 1/2"

Pitch of rivets

6 1/2"

Lap of plates or width of butt straps

13 1/2" x 1 1/2"

Per centages of strength of longitudinal joint

rivets

87.2

plate

84.9

Working pressure of shell by

rules

192

Size of manhole in shell

16" x 12"

Size of compensating ring

5 1/2" x 1 1/4"

No. and Description of Furnaces in each

boiler

2 plain

Material steel

Outside diameter

40 1/2"

Length of plain part

78"

Thickness of plates

crown 3/4"

bottom 7/8"

Combustion chamber

Description of longitudinal joint

Welded

No. of strengthening rings

one

Working pressure of furnace by the rules

180

Material of stays

steel

Diameter at

smallest part

4.3

plates: Material steel

Thickness: Sides

5/8"

Back

2 1/32"

Top

5/8"

Bottom

1 1/2"

Pitch of stays to ditto: Sides

9 1/2" x 7 1/2"

Back

9" x 8 1/2"

Top 7 1/2" x 7 1/2"

stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

180

Material of stays

steel

Diameter at

smallest part

4.3

smallest part 1.69

Area supported by each stay

66.5

Working pressure by rules

203

End plates in steam space: Material

steel

Thickness

2 1/2"

Pitch of stays

15" x 14 1/4"

How are stays secured

nuts + washers

Working pressure by rules

181

Area supported by each stay

210

Working pressure by rules

213

Material of Front plates at bottom

steel

Thickness

2 1/2"

Material of

Lower back plate

steel

Thickness

2 1/2"

Greatest pitch of stays

14 1/4" x 8 1/2"

Pitch of tubes

4 1/4" x 4 1/4"

Material of tube plates

steel

Thickness: Front

2 1/2"

Back

2 1/2"

Mean pitch of stays

10 1/2"

Pitch across wide

water spaces

14"

Working pressures by rules

182

Girders to Chamber tops: Material

steel

Depth and thickness of

girder at centre

6 1/4" x 1 1/2"

Length as per rule

26 1/4"

Distance apart

7 1/2"

Number and pitch of Stays in each

2 @ 7 1/2"

Working pressure by rules

181

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 casing gear

SURVEY REQUEST
NO. 964. ATTACHED.

The foregoing is a correct description,

THOMAS CRABBIE & CO. LIMITED

Manufacturer.

Dates

During progress of

work in shops

1914, Apr. 16

May 5

July 12

July 20

July 27

July 31

Is the approved plan of boiler forwarded herewith

yes

while building

During erection on

board vessel

22. 28. 31. Aug. 5.

Total No. of visits

14.

Return for duplicate Boiler

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 + 8 - 0

When applied for,

MONTHLY 4/0

Travelling Expenses (if any) £

When received,

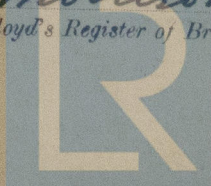
12/9/14

Committee's Minute

FRI. NOV. 13. 1914

Assigned

No action

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

W1202-0216