

Rpt. 5a.

## REPORT ON BOILERS

M. Opt. No 25/36

No. 709

SAT FEB 3 - 1912

Date of writing Report 31.10.11

When handed in at Local Office 31.10.11

Port of MIDDLESBROUGH-ON-TEES

No. in Survey held at Reg. Book.

Stockton-on-Tees

Date, First Survey 21st Sept.

Last Survey 27th Feb. 1912

on the

S/s Yi Loong

(Number of Visits 8) (S.S. No 235)

Gross 1844 Tons Net 1122

Master Wrightson

Built at

Sunderland

By whom built

Messrs. J. Priestman &amp; Co

When built

1912

Engines made at

Sunderland

By whom made

Richardsons, Waparth &amp; Co

when made

1912

Boilers made at

Stockton

By whom made

Messrs. Thos Hudson &amp; Co Ltd (No 2974)

when made

1911

Registered Horse Power

Owners

Mannin &amp; S. Co Ltd.

Port belonging to

London

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

J. Spencer &amp; Sons

(Letter for record (S) /)

(S) /

Total Heating Surface of Boilers

864

Is forced draft fitted

✓

No. and Description of

Boilers One single ended

Working Pressure

100

Tested by hydraulic pressure to

200

Date of test 27.10.11

No. of Certificate

4768

Can each boiler be worked separately

✓

Area of fire grate in each boiler

32 sq

No. and Description of

safety valves to each boiler

two

Area of each valve

5.4 sq

Pressure to which they are adjusted

103

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 or uptakes and bunkers or woodwork

13"

dia. of boilers

10'-0"

Length

10'-6"

Material of shell plates

steel

Thickness

19/32

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

3 7/8"

Lap of plates or width of butt straps

6 1/2"

Per centages of strength of longitudinal joint

rivets 82.5%

plate 74.15%

Working pressure of shell by

rules

boiler

2 plain

Material

steel

Outside diameter

36"

Length of plain part

top 84 1/2"

bottom 110"

Thickness of plates

crown 9/16"

bottom 6/8"

Description of longitudinal joint

weld

No. of strengthening rings

none

Working pressure of furnace by the rules

100

Combustion chamber

plates: Material

steel

Thickness: Sides

9/16"

Back

17/32"

Top

9/16"

Bottom

1 1/8"

Pitch of stays to ditto: Sides

8 3/4"

Back

9 1/2 x 8 3/4"

Top

9"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

102

Material of stays

steel

Diameter at

smallest part

1.19

Area supported by each stay

87.5

Working pressure by rules

109

End plates in steam space: Material

steel

Thickness

27/32"

Pitch of stays

17 1/2 x 18"

How are stays secured

nuts

Working pressure by rules

100

Material of stays

steel

Diameter at smallest part

3.43"

Area supported by each stay

315

Working pressure by rules

113

Material of Front plates at bottom

steel

Thickness

27/32"

Material of

Lower back plate

steel

Thickness

27/32"

Greatest pitch of stays

13 x 8 3/4"

Working pressure of plate by rules

198

Diameter of tubes

3 1/4"

Pitch of tubes

4 3/4 x 4 3/8"

Material of tube plates

steel

Thickness: Front

27/32"

Back

2 1/2"

Mean pitch of stays

11.31"

Pitch across wide

water spaces

girder at centre

6 3/8 x 1 1/4"

Length as per rule

26.15

Distance apart

9

Number and pitch of Stays in each

one

Working pressure by rules

113

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

yes

The foregoing is a correct description,

THOMAS HUDSON &amp; CO. LIMITED.

Manufacturer.

Dates of Survey

During progress of work in shops - 1911, Sept. 21, Oct. 12, 18, 20, 26, 27

while building

During erection on board vessel - Jan. 9, 11, 15, 18

Is the approved plan of boiler forwarded herewith

yes

Total No. of visits

8/12

GENERAL REMARKS

(State quality of workmanship, opinions as to class, &amp;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. Stayed, mounted, examined under steam. Safety valves adjusted to working pressure.

Survey Fee

£ 2-18-0

When applied for,

19

Travelling Expenses (if any) £

:

When received,

19

MONTHLY A/c.

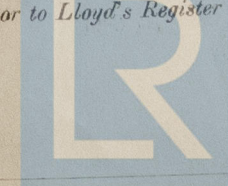
Committee's Minute

TUE FEB 6 - 1912

Assigned

Wm. Morrison

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



Lloyd's Register Foundation

W1618-0098