

REPORT ON BOILERS.

No. 9619

Received at London Office SAT. 10 FEB. 1917

Date of writing Report

191

When handed in at Local Office 7.2.17 191

Port of Middlesbrough

Date, First Survey 6th DecLast Survey 2nd Feb 1917

No. in Survey held at

Reg. Book.

on the

Master

Engines made at

Boilers made at

Registered Horse Power

Built at

By whom built

When built

By whom made

When made

By whom made

Port belonging to

Owners

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

(Letter for record (5))

Total Heating Surface of Boilers 1090 #

Is forced draft fitted no

No. and Description of

Boilers

One single ended.

Working Pressure 120

Tested by hydraulic pressure to 240

Date of test 2.2.17

No. of Certificate 5428

Can each boiler be worked separately

Area of fire grate in each boiler 29 #

No. and Description of

safety valves to each boiler

2 direct spring

Area of each valve 5.94 sq

Pressure to which they are adjusted 125 lb

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

1'-6"

INSIDE

dia. of boilers

11'-0"

Length

10'-6"

Material of shell plates

Steel

Thickness

2/32"

Range of tensile strength

29-32

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

2-R. Lap

long. seams

2-B. - 3-R.

Diameter of rivet holes in long. seams

15/16"

Pitch of rivets

6 3/4"

Lap of plates or width of butt straps

12 1/2" 5/8"

Per centages of strength of longitudinal joint

rivets

91.1

Working pressure of shell by

rules

121

Size of manhole in shell

10' x 15"

Size of compensating ring

1/2" 1/2" 1/2"

No. and Description of Furnaces in each

boiler

2 plain

Material

Steel

Outside diameter

40"

Length of plain part

top

10' 3/4"

Thickness of plates

crown

2 1/2"

bottom

3 1/2"

3 1/2"

3 1/2"

Description of longitudinal joint

weld.

No. of strengthening rings

none

Working pressure of furnace by the rules

32

Combustion chamber

plates: Material

Steel

Thickness: Sides

9/16"

Back

9/16"

Top

9/16"

Bottom

2 1/2"

Pitch of stays to ditto: Sides

10' x 9"

Back

9' x 9"

Top

8' x 9"

If stays are fitted with nuts or riveted heads

none

Working pressure by rules

121

Material of stays

Steel

Area at

smallest part

1.45

Area supported by each stay

81

Working pressure by rules

43

End plates in steam space: Material

Steel

Thickness

15/16"

Pitch of stays

16' x 15"

How are stays secured

none

Working pressure by rules

30

Material of stays

Steel

Area at smallest part

2.84

Area supported by each stay

240

Working pressure by rules

25

Material of Front plates at bottom

Steel

Thickness

15/16"

Material of

Lower back plate

Steel

Thickness

15/16"

Lower back plate

Steel

Thickness

15/16"

Greatest pitch of stays

14' x 9"

Working pressure of plate by rules

65

Diameter of tubes

3 1/2"

Pitch of tubes

4 1/4" 4 1/4"

Material of tube plates

Steel

Thickness: Front

15/16"

Back

11/16"

Mean pitch of stays

11"

Pitch across wide

water spaces

14"

Working pressures by rules

120

Girders to Chamber tops: Material

Steel

Depth and thickness of

girder at centre

1/2" x 1 1/2"

Length as per rule

30"

Distance apart

8"

Number and pitch of Stays in each

2 @ 9"

Working pressure by rules

128

Steam dome: description of joint to shell

none

% of strength of joint

Diameter

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

Pitch of rivets

Working pressure of shell by rules

Crown plates

Thickness

How stayed

SUPERHEATER.

Type

none

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

SURVEY REQUEST

NO. 1319

ATTACHED.

The foregoing is a correct description,

FOR

RILEY BROS. (BOILERMAKERS) LIMITED

Manufacturer.

SECRETARY.

Dates

During progress of

work in shops

1916. Dec 6-22. 1917. Jan 4. 7. 19. 26.

Is the approved plan of boiler forwarded herewith

yes

while

During erection on

board vessel

Feb 2.

Total No. of visits

7

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 valve adjusted

Survey Fee ...

£ 3 - 13-0

When applied for

Monthly a/c

When received

191

Travelling Expenses (if any) £

When received

191

12.3.17

W. Morrison

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 25 MAY. 1917

Assigned

Foreign Shipping.

Survey Fee

Travelling Expenses (if any) £

When applied for

When received

191

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Engineer Surveyor to Lloyd's Register of Shipping.

12.3.17

FRI. 25 MAY. 1917

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