

Rpt. 5.

REPORT ON BOILERS.

No. 4264

TUES. 7 APR 1908

Port of MIDDLESBROUGH-ON-TEES.

Received at London Office

19

No. in Survey held at

Stockton

Date, first Survey 9th August

Last Survey 21st Sept 1905

Reg. Book.

on the Donkey Boiler No 3578

S. S. "Ruth"

(Number of Visits 4)

Gross Tons

Net

Master

Built at Middlesbrough

By whom built

W. Walker

When built 1908

Engines made at

Glasgow

By whom made

Hutton & Son Ltd No 294

when made 1905

Donkey Boilers made at

Stockton

By whom made

Riley Bros Ltd

when made 1905

Registered Horse Power

Owners

W. Wang

Port belonging to Jorberg

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

(Letter for record

Total Heating Surface of Boilers

Is forced draft fitted

No. and Description of

Boilers

Working Pressure

Tested by hydraulic pressure to

Date of test

No. of Certificate

Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of

safety valves to each boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing 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

Mean dia. of boilers

Length

Material of shell plates

Thickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

long. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Per centages of strength of longitudinal joint

rivets

Working pressure of shell by

rules

Size of manhole in shell

Size of compensating ring

No. and Description of Furnaces in each

boiler

Material

Outside diameter

Length of plain part

Thickness of plates

crown

bottom

Description of longitudinal joint

No. of strengthening rings

Working pressure of furnace by the rules

Combustion chamber

plates: Material

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

Material of stays

Diameter at

smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space: Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Thickness

Material of

Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

Diameter of tubes

Pitch of tubes

Material of tube plates

Thickness: Front

Back

Mean pitch of stays

Pitch across wide

water spaces

Working pressures by rules

Girders to Chamber tops: Material

Depth and thickness of

girder at centre

Length as per rule

Distance apart

Number and pitch of Stays in each

Working pressure by rules

Superheater or Steam chest: how connected to boiler

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

VERTICAL DONKEY BOILER—

No. one

Description Vertical 2 cross tubes

Manufacturers of steel

J. Spencer & Sons Ltd

Made at Stockton

By whom made

Riley Bros (Boilermakers) Ltd

When made 21-9-05

Where fixed

Stokehold

Working pressure 80 lb tested by hydraulic pressure to 160

No. of Certificate 3514

Fire grate area 13 ft 5 in

Description of safety valves single spring

No. of safety valves 1

Area of each 7.06

Pressure to which they are adjusted 80 lbs

If fitted with easing gear

Yes

If steam from main boilers can

enter the donkey boiler

No

Dia. of donkey boiler 4'-9"

Length 9'-6"

Material of shell plates

Steel

Thickness

3/8"

Range of tensile

strength 27/32

Descrip. of riveting long. seams

D. riv. lap

Dia. of rivet holes

13/16"

Whether punched or drilled

drilled

Pitch of rivets

2 13/16"

Lap of plating 4 1/4

Per centage of strength of joint

Rivets 83.4

Plates 71.1

Working pressure of shell by rules

97 lbs

Thickness of shell crown plates

15/32"

Radius of do. 5'-0"

No. of Stays to do. 5

Dia. of stays 1 1/2"

Diameter of furnace Top

3'-8 1/4"

Bottom

4'-2 1/4"

Length of furnace

4'-2 1/2"

Thickness of furnace plates

1/2"

Description of joint

S. r. lap

Working pressure of furnace by rules

99 lbs

Thickness of furnace crown

plates

3/8"

plates

15/32"

Stayed by as above

Diameter of uptake

11"

Thickness of uptake plates

7/16"

Thickness of water tubes

3/8"

3/8"

The foregoing is a correct description,

Manufacturer.

Riley Bros

DIRECTOR.

1905 August 9. 28. Sept. 6. 12. 18. 20. 21

Dates of Survey while building

During progress of work in shops - - -

During erection on board vessel - - -

Total No. of visits

(Initials) 4

Is the approved plan of main boiler forwarded herewith

" donkey "

" "

retained for duplicate

Lloyd's Register

Foundation

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

*This boiler has been built under special survey
The materials and workmanship are good and efficient
After satisfactorily withstanding the hydraulic test it has
been sent to Glasgow for fitting on board.*

Certificate (if required) to be sent to

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee...	£	:	:	When applied for.
Special	£	:	:	19
Donkey Boiler Fee ...	£	2	2	When received.
Travelling Expenses (if any) £	:	:	:	19

Committee's Minute

1UES. 7 APL 1906

Assigned

*see minute on
J.C. rpt.*

R.D. Shulston

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



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Lloyd's Register
Foundation

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