

REPORT ON BOILERS.

No. 4493

Port of MIDDLESBROUGH-ON-TEES

Received at London Office

THUR. 18 OCT 1906

No. in
Reg. Book.Survey held at StocktonDate, first Survey July 31Last Survey Oct. 2

1906

(Number of Visits 16)on the Donkey Boiler (No 3633) for S.S. "Millpool"Gross 4218Net 2407When built 1906Master Owen OwensBuilt at StocktonBy whom built Hopner & SonEngines made at StocktonBy whom made Polair & Co.when made 1906Boilers made at StocktonBy whom made Riley Bros Ltdwhen made 1906

Registered Horse Power

Owners The Pool Shipping Co. (H. Hopner & Sons)Port belonging to West Hartlepool

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel J. Spencer & Sons Ltd

(Letter for record

Total Heating Surface of Boilers 990 sq ftIs forced draft fitted No

No. and Description of

Boilers One Cyl. Multi single endedWorking Pressure 100 lb.Tested by hydraulic pressure to 200 lb.Date of test 30-8-06No. of Certificate 3750Can each boiler be worked separately ✓Area of fire grate in each boiler 29 sq ft

No. and Description of

safety valves to each boiler Two, springArea of each valve 7.07 sq inPressure to which they are adjusted 100 lb.Are they fitted with easing gear NoIn case of donkey boilers, state whether steam from main boilers can enter the donkey boiler NoSmallest distance between boilers or uptakes and bunkers or woodwork 24 in

Int

Mean dia. of boilers 10'-9"Length 10'-0"Material of shell plates SteelThickness 5/8"Range of tensile strength 27/32Are the shell plates welded or flanged NoDescrip. of riveting: cir. seams DR Laplong. seams DR DBSDiameter of rivet holes in long. seams 7/8"Pitch of rivets 4"Lap of plates or width of butt straps 9 1/2 x 5/8"

Per centages of strength of longitudinal joint

rivets 82

Working pressure of shell by

rules 102 lb.Size of manhole in shell 16 x 21"Size of compensating ring 9' x 3/4"plate 76.5boiler 2 plainMaterial SteelOutside diameter 3'-0"

Length of plain part

top 6'-2 1/2"bottom 8'-8 1/2"

No. and Description of Furnaces in each

Description of longitudinal joint weldedNo. of strengthening rings ✓Working pressure of furnace by the rules 141

Combustion chamber

plates: Material SteelThickness: Sides 17/32"Back 17/32"Top 1/2"Bottom 5/8"Pitch of stays to ditto: Sides 9 x 9"Back 9 x 8 1/2"Top 8 x 7 1/2"If stays are fitted with nuts or riveted heads nutsWorking pressure by rules 111Material of stays Iron

Diameter at

smallest part 1 3/8"Area supported by each stay 89.25 sq inWorking pressure by rules 107End plates in steam space: Material SteelThickness 3/32"Pitch of stays 16 1/2 x 9 1/4"How are stays secured Dr riv. stayWorking pressure by rules 107Material of stays IronDiameter at smallest part 2 5/8"Area supported by each stay 330 sq inWorking pressure by rules 123Material of Front plates at bottom SteelThickness 27/32"

Material of

Lower back plate SteelThickness 27/32"Greatest pitch of stays 12 x 8 1/2"Working pressure of plate by rules 227Diameter of tubes 3 1/4"

Material of

Pitch of tubes 4 3/8 x 4 5/8"Material of tube plates SteelThickness: Front 27/32"Back 19/32"Mean pitch of stays 10 5/32"

Pitch across wide

water spaces 13 1/2"Working pressures by rules 123 lb.Girders to Chamber tops: Material Steel

Depth and thickness of

rider at centre 6 x 1 1/4"Length as per rule 2'-3"Distance apart 7 1/2"Number and pitch of Stays in each Two 8"Working pressure by rules 115Superheater 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

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.

Description

Manufacturers of steel

Made at

By whom made

When made

Where fixed

Working pressure

tested by hydraulic pressure to

No. of Certificate

Fire grate area

Description of safety valves

No. of safety valves

Area of each

Pressure to which they are adjusted

If fitted with easing gear

If steam from main boilers can

enter the donkey boiler

Dia. of donkey boiler

Length

Material of shell plates

Thickness

Range of tensile

Strength

Descrip. of riveting long. seams

Dia. of rivet holes

Whether punched or drilled

Pitch of rivets

Lap of plating

Per centage of strength of joint

Rivets

Plates

Working pressure of shell by rules

Thickness of shell crown plates

Radius of do.

No. of Stays to do.

Dia. of stays

Diameter of furnace Top

Bottom

Length of furnace

Thickness of furnace plates

Description of joint

Working pressure of furnace by rules

Thickness of furnace crown

plates

Stayed by

Diameter of uptake

Thickness of uptake plates

Thickness of water tubes

The foregoing is a correct description,

Manufacturer.

1906 July 31. Aug 3. 8. 9. 11. 13. 16. 17. 28. 30

Sept. 7. 17. 20. 21. 26. Oct. 2

Is the approved plan of main boiler forwarded herewith

" " " donkey " "

" " " " " "

" " " " " "

DURING PROGRESS OF

work in shops - - -

DURING ERECTION ON

board vessel - - -

Total No. of visits

16

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Lloyd's Register

Foundation

5000-955N

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*

Certificate (if required) to be sent to

The amount of Entry Fee...	£	:	When applied for.
Special	£	:	7.9.1906
Donkey Boiler Fee ...	£	2 : 2	When received.
Travelling Expenses (if any) £	:	:	11.9.1906

R.D. Philston & Geo. A. Milner.
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

R.D.

Committee's Minute FRI. 19 OCT 1906

Assigned



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