

# REPORT ON BOILERS.

No. 7561

WED. SEP 25. 1912

Received at London Office

Date of writing Report 31 Dec 1912 When handed in at Local Office

24. 9. 1912 Port of

MIDDLESBROUGH-TEES

Date, First Survey 27 June

Last Survey 16 Sept. 1912

No. in Survey held at

Stockton

Reg. Book.

71 on the Boiler for Messrs Philip & Son Ltd - Dartmouth

Gross 88.15  
Net 7.75

Master

Built at Dartmouth By whom built Philip Son Ltd

When built 1912

Engines made at

Dartmouth

By whom made Philip Son Ltd

when made 1912

Boilers made at

Stockton

By whom made Messrs Riley Bros (No 4465)

when made 1912

Registered Horse Power

Owners The Amazon River Steam Nav. Co (1912) Ltd Port belonging to Para

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

John Spencer & Sons

Letter for record

(r)

Total Heating Surface of Boilers

1050 sq

Is forced draft fitted

No

No. and Description of

Boilers

One single ended

Working Pressure

185

Tested by hydraulic pressure to

375

Date of test 16.9.12

No. of Certificate

4945

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

36 sq

No. and Description of

safety valves to each boiler

Two on each boiler

Area of each valve

7.07

Pressure to which they are adjusted

185 lb/sq in

Are they fitted with easing gear

Yes

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

5 inches

Mean dia. of boilers

10'-6"

Length

10'-0"

Material of shell plates

steel

Thickness

2 3/8"

Range of tensile strength

29-33

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

2 B lap

long. seams

2 B - 3 Riv

Diameter of rivet holes in long. seams

1 1/2"

Pitch of rivets

7 1/2"

Top of plates or width of butt straps

15 1/2" x 7 1/2"

Per centages of strength of longitudinal joint

90.5

Working pressure of shell by

plate

86.47

Rules

194

Size of manhole in shell

16" x 12"

Size of compensating ring

7" x 1"

No. and Description of Furnaces in each

boiler

2 Morrison

Material

steel

Outside diameter

40 1/2"

Length of plain part

top

bottom

Thickness of plates

crown

bottom

Description of longitudinal joint

Weld

No. of strengthening rings

Yes

Working pressure of furnace by the rules

187

Combustion chamber

plates: Material

steel

Thickness: Sides

5/8"

Back

5/8"

Top

5/8"

Bottom

Pitch of stays to ditto: Sides

9 x 8"

Back

8 1/2 x 8"

Top 9 x 8. If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

186

Material of stays

iron

Diameter at

smallest part

2.07

Area supported by each stay

72

Working pressure by rules

215

Pitch of stays

18 1/2" x 14"

How are stays secured

nuts

Working pressure by rules

187

Material of stays

steel

Diameter at smallest part

5.05

Area supported by each stay

262.5

Working pressure by rules

200

Material of Front plates at bottom

steel

Thickness

1 1/2"

Material of

Lower back plate

steel

Thickness

1 1/2"

Pitch of tubes

4 x 4"

Material of tube plates

steel

Thickness: Front

1 1/2"

Back

3/4"

Mean pitch of stays

9 1/4"

Pitch across wide

water spaces

14"

Working pressures by rules

girder at centre

7 1/2" x 1 1/4"

Length as per rule

24 3/8"

Distance apart

9"

Number and pitch of Stays in each

2 @ 8"

Working pressure by rules

203

Superheater or Steam chest: how connected to boiler

none

Can the superheater be shut off and the boiler worked

separately

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

25.9.12

The foregoing is a correct description.

RILEY BROS. (BOILERMAKERS) LIMITED.

Manufacturer.

Dates

During progress of

work in shops -

while

building

board vessel -

1912. June 27. July 4. 6. 17. 23. 25. 31. Aug. 2. 8. 13. 16. 29.

Is the approved plan of boiler forwarded herewith

yes

Sept. 1. 7. 10. 16.

Nov 12. 19. Dec 4. 13. 20

Total No. of visits

16 + 5 = 21

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.

Has since been placed on board, all valves and mountings fitted, examined under steam at full working pressure and found tight and satisfactory.

Survey Fee

£ 3 - 10 - 0

When applied for.

1912.

When received.

29 Jan 1913

Credited to Middlesbrough Tees

1913

Wm Morrison

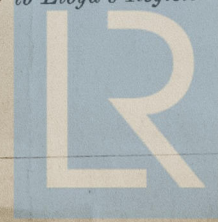
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

FRI. FEB - 7 1913

Assigned

See minute on Phy. Rpt 15462



Lloyd's Register Foundation