

REPORT ON BOILERS.

No. 8358

Date of writing Report 28.3.14

When handed in at Local Office 30.3.

Port of

MIDDLESBRO'

TUE MAR. 31. 1914

No. in Survey held at

Stockton-on-Tees

Date, First Survey

8th Jan.

Last Survey

30th Mar. 1914

Reg. Book.

on the

Steel screw steamer Moorish Prince

(Number of Visits 13)

(S.S. No 384)

Gross

5943

Net

3766

Master

Thomas

Built at

Sunderland

By whom built

Messrs Short Bros Lim

When built 1914

Engines made at

Stockton

By whom made

Messrs Blair & Co Lim.

When made 1914

Boilers made at

Stockton

By whom made

Messrs Riley Bros Lim. (No 4618)

When made 1914

Registered Horse Power

Owners

Prince Line

Port belonging to

Newcastle

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel

John Hunsen & Sons

(Letter for record (a))

Total Heating Surface of Boilers 1330 sq ft

Is forced draft fitted

No. and Description of

Boilers One single ended

Working Pressure 130

Tested by hydraulic pressure to 260

Date of test 20.3.14

No. of Certificate 5259

Can each boiler be worked separately

Area of fire grate in each boiler 36 sq ft

No. and Description of

Safety valves to each boiler

Two direct spring

Area of each valve 4910 sq in

Pressure to which they are adjusted 130

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

Between and between woodwork 18"

Inside

Main dia. of boilers 12'-0"

Length 10'-0"

Material of shell plates

Steel

Thickness 25/32

Range of tensile strength 29-33

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

2 R. lap

long. seams

2 B-3 Riv

Diameter of rivet holes in long. seams

15/16

Pitch of rivets

5 13/16

Lap of plates or width of butt straps

14 1/2 x 25/32

Per centages of strength of longitudinal joint

rivets 89.0

plate 84.17

Working pressure of shell by

rules 140

Size of manhole in shell 19" x 15"

Size of compensating ring 7 x 1 1/2

No. and Description of Furnaces in each

boiler 2 plain

Material steel

Outside diameter 41"

Length of plain part

top 73 1/2

Thickness of plates

crown 2 1/2

Description of longitudinal joint

Weld

No. of strengthening rings

one

Working pressure of furnace by the rules 140

Combustion chamber

plates: Material steel

Thickness: Sides 9/16

Back 5/8

Top 9/16

Bottom 7/8

Pitch of stays to ditto: Sides 9 x 9

Back 8 1/2 x 9 1/2

Top 8 1/2 x 9

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules 135

Material of stays

iron

Diameter at

smallest part 1 1/2

Area supported by each stay 81

Working pressure by rules 130

End plates in steam space: Material steel

Thickness 13/16

Pitch of stays 16 1/2 x 15

How are stays secured

nuts & washers

Working pressure by rules 131

Material of stays

iron

Diameter at smallest part 5.05

Area supported by each stay 247

Working pressure by rules 153

Material of Front plates at bottom

steel

Thickness 13/16

Material of

Lower back plate

steel

Thickness 13/16

Greatest pitch of stays 14 x 9 1/2

Working pressure of plate by rules 160

Diameter of tubes 3 1/4

Pitch of tubes 4 1/2 x 4 3/8

Material of tube plates steel

Thickness: Front 13/16

Back 3/4

Mean pitch of stays 11 1/2

Pitch across wide

water spaces 14 1/4

Working pressures by rules 142

Girders to Chamber tops: Material steel

Depth and thickness of

girder at centre 6 1/2 x 1 1/4

Length as per rule 27

Working pressure by rules 136

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

FOR The foregoing is a correct description,

RILEY BROS. (BOILERMAKERS) LIMITED.

Manufacturer.

SURVEY

NO. 820

REQUEST

ATTACHED.

Dates of Survey

During progress of

work in shops - -

while building

During erection on board vessel - - -

Jan. 8. 9. 23. 30. Feb. 11. 13. 17. 23. 25. Mar. 6. 12. 14. 20.

Apr. 20. May 5. 14.

Is the approved plan of boiler forwarded herewith

yes

Total No. of visits 13

Return for duplicate Boiler 31/3/14

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 has been satisfactorily fixed on the upper deck of the vessel and its safety valves adjusted as above. Adjusting washers - F 7/16. A 13/32.

Survey Fee

£ 4-9-0

When applied for

MONTHLY A/c.

Travelling Expenses (if any) £

When received

101

Committee's Minute

TUE. MAY. 26. 1914

Assigned

See minute on Sld fe 26/12

Wm Morrison & Sons Ltd.
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.Lloyd's Register
Foundation

W619-0213