

## REPORT ON BOILERS.

MAR 26 1924

No. 11634

Date of writing Report

10

When handed in at Local Office

7.7.23

Port of

Received at London Office

WED JUL 11 1923

No. in  
Reg. Book.Survey held at *Darlington*

Date, First Survey

14th March 1923

Last Survey

3rd July

1923

(Number of Visits)

8

Tons

Gross

Net

Master

Built at *Newcastle*By whom built *Thurston Wood Thinner & Co Ltd*

When built

Boilers made at *Darlington*By whom made *Blake Boiler, Wagon & Eng Co Ltd (No 3354)*When made *1923*

Owners

Port belonging to

## VERTICAL DONKEY BOILER—

No. *one*Description *Blake Patent*

Manufacturers of steel

*J. Spencer & Co*Made at *Darlington*By whom made *Blake Boiler, Wagon & Eng Co Ltd*When made *1923*Where fixed *on deck*Working pressure *100*tested by hydraulic pressure to *200*Date of test *3.7.23*No. of Certificate *6319*Fire grate area *14 1/2*

Description of safety valves

*Spring (See below)*No. of safety valves *2*Area of each *3.976*Pressure to which they are adjusted *105 lb*If fitted with easing gear *yes*

If steam from main boilers can

enter the donkey boiler *no*Dia. of donkey boiler *5'-6 1/2"*Length *11'-0"*Material of shell plates *steel*Thickness *7/16"*

Range of tensile

strength *28-32*Descrip. of riveting long. seams *Hot Riv lap*Dia. of rivet holes *1 3/16"*Whether punched or drilled *drilled*Pitch of rivets *2 5/8"*Lap of plating *4 1/2"*

Per centage of strength of joint

Rivets *73.96*Working pressure of shell by rules *119*Thickness of shell crown plates *1 1/2"*Pitch of rivets *2 5/8"*Radius of do. *4'-3"*No. of Stays to do. *1 plate*Dia. of stays *18" x 1"*Diameter of furnace Top *2'-9"*Bottom *4'-10"*Length of furnace *1'-10"*Thickness of furnace plates *1/2"*Description of joint *Weld*Working pressure of furnace by rules *100 lb*

Thickness of furnace crown

*C.C.*plates *5/8"*Radius of do. *2'-9"*Stayed by *Dischd & plate stay*Diameter of tubes *2 1/2"*

Thickness of tubes

*F = 4 1/2"*Thickness of tubes *No 9. L.S.G.*Pitch of tubes Vert = *3 5/8"* Hn = *2 1/2"* Stay = *4.404*Thickness of tube plates *B = 7/8"*

The foregoing is a correct description.

C.C. plate *1/2 x 2'-9" diam*Manhole Comp *4 1/2 x 7/8 + 36 Rivets @ 3/4" dia*

Manufacturer.

*W. Spencer*

Dates

During progress of

work in shops -

During erection on

board vessel -

Total No. of visits

*1923 March 14 April 4 13 May 2 9 23 28 July 3**8*

Is the approved plan of boiler forwarded herewith

*yes*

## GENERAL REMARKS

(State quality of workmanship, opinions as to class, &amp;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

This boiler was efficiently installed on the main deck in a donkey boiler house of the steamer "MARSDEN". It is fitted with 2 spring-loaded safety valves 3.976 sq area of each valve. Easing gear is fitted and the stop valve is non-return. The safety valves were adjusted to 105 lb sq the washers being lat valve 3/8" starboard valve 1/2" on 14th March 1924.

R Lee Turner  
Newcastle-on-Tyne

Survey Fee ... £ 4 : 4 - 0

Travelling Expenses (if any) £ - : 10 - 0

When applied for,

*monthly*

When received,

*19*

Committee's Minute

TUE 1 APR 1924

Assigned

*See Nwc. J.E. 776 93**Wm Morrison*

Engineer Surveyor to Lloyd's Register of Shipping.

002449-002456-0059