

## REPORT ON BOILERS.

No. 11234

Received at London Office

11th MAY 25 1922

Date of writing Report 24<sup>th</sup> May 1922. When handed in at Local Office 24<sup>th</sup> May 1922. Port of Southampton.

No. in Survey held at Cowes. Date, First Survey April 19<sup>th</sup> Last Survey May 24<sup>th</sup> 1922

Reg. Book. 27855 On the "NESS" ex "ALEXANDER PALMER" (Number of Visits 6) Gross 275 Tons Net 107.

Master ✓ Built at Middlesbro' By whom built Smiths Dock Co. Ltd. When built 1917.

Engines made at Newcastle By whom made Hawthorn Leslie & Co. Ltd. when made 1917

Boilers made at Newcastle By whom made Hawthorn Leslie & Co. Ltd. when made 1917.

Registered Horse Power \_\_\_\_\_ Owners J.B. White & Co. Ltd. Port belonging to London.

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

(Letter for record S) Total Heating Surface of Boilers 1619 sq Is forced draft fitted No. No. and Description of Boilers One Single-ended. Working Pressure 180 lbs Tested by hydraulic pressure to 270 lbs Date of test ✓

No. of Certificate ✓ Can each boiler be worked separately ✓ Area of fire grate in each boiler 50.6 sq No. and Description of safety valves to each boiler 2 spring loaded. Area of each valve 4.9 sq Pressure to which they are adjusted 180 lbs

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 or uptakes and bunkers or woodwork 9 " INT. dia. of boilers 13'-6" Length 10'-6"

Material of shell plates S. Thickness 1 1/8" Range of tensile strength 26-30 Are the shell plates welded or flanged ✓

Descrip. of riveting: cir. seams D.R. long. seams T.R. D.B.S. Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 7 3/8"

1'-5 5/8" width of butt straps 1'-5 5/8" Per centages of strength of longitudinal joint rivets 94.7 plate 84.9 Working pressure of shell by rules 184 lbs Size of manhole in shell 16" x 12" Size of compensating ring 37" x 33" x 1 1/8" No. and Description of Furnaces in each boiler 3 Plain Material S. Outside diameter 3'-6" Length of plain part 6'-3 1/2" Thickness of plates crown 7/8" bottom 7/8"

Description of longitudinal joint welded No. of strengthening rings None Working pressure of furnace by the rules 182 lbs Combustion chamber plates: Material S. Thickness: Sides 1 1/8" Back 3/4" Top 1 1/8" Bottom 1" Pitch of stays to ditto: Sides 10" x 7 1/2" Back 9 1/2" x 7 1/2" Top 10" x 8 3/4" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 210 lbs Material of stays S Diameter at smallest part 1 3/4" Area supported by each stay 73.25 Working pressure by rules 284 End plates in steam space: Material S Thickness 1 1/8"

Pitch of stays 18 1/2" x 18" How are stays secured D.N.S. & W.S. Working pressure by rules 200 Material of stays S. Diameter at smallest part 3"

Area supported by each stay 333 Working pressure by rules 221 Material of Front plates at bottom S Thickness 1 1/8" Material of Lower back plate S. Thickness 1 5/8" Greatest pitch of stays 14 1/2" x 7 1/2" Working pressure of plate by rules 258 Diameter of tubes 3 1/2"

Pitch of tubes 9 1/2" Material of tube plates S Thickness: Front 1 1/8" Back 3/4" Mean pitch of stays 9 3/4" Pitch across wide water spaces 14 1/2" Working pressures by rules 189 lbs Girders to Chamber tops: Material S. Depth and thickness of girder at centre 8 1/2" x 14" Length as per rule 27 Distance apart 8 1/4" Number and pitch of Stays in each 2 at 10"

Working pressure by rules 238 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. \_\_\_\_\_ Description \_\_\_\_\_ Manufacturers of steel \_\_\_\_\_

Made at \_\_\_\_\_ By whom made \_\_\_\_\_ When made \_\_\_\_\_ Where fixed \_\_\_\_\_ Working pressure \_\_\_\_\_

tested by hydraulic pressure to \_\_\_\_\_ Date of test \_\_\_\_\_ 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 \_\_\_\_\_ Radius of do. \_\_\_\_\_ Stayed by \_\_\_\_\_ Diameter of uptake \_\_\_\_\_ Thickness of uptake plates \_\_\_\_\_

Thickness of water tubes \_\_\_\_\_

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building

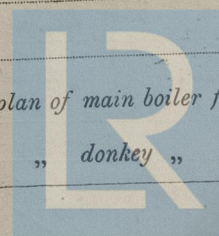
During progress of work in shops - -

During erection on board vessel - -

Total No. of visits \_\_\_\_\_

Is the approved plan of main boiler forwarded herewith

" " " donkey " " " "



© 2020

Lloyd's Register Foundation

008925+008937-0247



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

Certificate (if required) to be sent to  
(The Surveys 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 ...          | £ | : | : | When received,    |
| Travelling Expenses (if any) £ | : | : | : | 19                |

*J.G. MacKillop*

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

Committee's Minute

FRI. 20 MAY. 1922

Assigned

*See minute on other report*



© 2020

Lloyd's Register  
Foundation