

REPORT ON BOILERS.

No. 87425

Received at London Office 18 JAN 1924

Date of writing Report 18 JAN 1924 When handed in at Local Office 18 JAN 1924 Port of London

No. in Survey held at London Date, First Survey 4th December 1923 Last Survey 28th Dec 1923

Reg. Book. 9425 on the S.S. "London Trader" (Number of Visits 9) Tons { Gross 538 Net 199

Master Built at Leiderdorp By whom built Seb. Boer Leiderdorp Yard No. When built 1920

Engines made at Leiden By whom made Ronnikl. Nedert. Boymans Engine No. When made 1920

Boilers made at By whom made Boiler No. 776 When made 1920

Nominal Horse Power Owners James W Cook & Co. Ltd Port belonging to London

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel B. V. Suurweg (Letter for Record (5))

Total Heating Surface of Boilers 1856 # Is forced draught fitted No Coal or Oil fired Coal

No. and Description of Boilers One single ended Working Pressure 180 lb

Tested by hydraulic pressure to B.V. Date of test No. of Certificate B.V. Can each boiler be worked separately Yes

Area of Firegrate in each Boiler 50 # No. and Description of safety valves to each boiler Two spring loaded

Area of each set of valves per boiler { per Rule as fitted 11.8 # " Pressure to which they are adjusted 180 lb 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 10 " Is oil fuel carried in the double bottom under boilers No

Smallest distance between shell of boiler and tank top plating Is the bottom of the boiler insulated No

Largest internal dia. of boilers 13-9 1/2 " Length 10-9 1/4 " Shell plates: Material steel Tensile strength 44.2/50 Kg. - cm²

Thickness 29 mm Are the shell plates welded or flanged No Description of riveting: circ. seams { end DR L inter.

Long. seams T.R. D.B.S. Diameter of rivet holes in { circ. seams 30 mm long. seams 30 mm Pitch of rivets { 100 mm 200 mm

Percentage of strength of circ. end seams { plate rivets Percentage of strength of circ. intermediate seam { plate rivets

Percentage of strength of longitudinal joint { plate rivets combined Working pressure of shell by Rules

Thickness of butt straps { outer 40 mm inner No. and Description of Furnaces in each Boiler 3 Plain

Material steel Tensile strength 36.5-41 Kg. Smallest outside diameter 37 "

Length of plain part { top 5-7 " bottom Thickness of plates { crown 19 mm bottom Description of longitudinal joint weld

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules

End plates in steam space: Material steel Tensile strength 43/48 Kg. Thickness 24 mm Pitch of stays 335 x 415 mm

How are stays secured Double ends Working pressure by Rules

Tube plates: Material { front steel back steel Tensile strength { 40/46 Kg. Thickness { 22 mm 23 mm

Lean pitch of stay tubes in nests 222 mm Pitch across wide water spaces 420 mm Working pressure { front back

Girders to combustion chamber tops: Material steel Tensile strength 40/48 Kg. Depth and thickness of girder

Centre 180 x 23 mm x 2 Length as per Rule 750 mm Distance apart 200 mm No. and pitch of stays

Each 3 x 180 mm Working pressure by Rules Combustion chamber plates: Material steel

Tensile strength 40/46 Kg. Thickness: Sides 17 mm Back 17 mm Top 17 mm Bottom 20 mm

Pitch of stays to ditto: Sides 180 mm Back 180 mm Top 180 x 200 Are stays fitted with nuts or riveted over Riveted

Working pressure by Rules Front plate at bottom: Material steel Tensile strength 43/48 Kg.

Thickness 22 mm Lower back plate: Material steel Tensile strength 43/48 Thickness 22 mm

Pitch of stays at wide water space 420 mm Are stays fitted with nuts or riveted over Riveted

Working Pressure Main stays: Material steel Tensile strength 40/48 Kg.

Diameter { At body of stay, 70 mm No. of threads per inch Area supported by each stay 335 x 415 mm

{ Over threads swelled

Working pressure by Rules Screw stays: Material steel Tensile strength 40/48 Kg.

Diameter { At turned off part, 36 mm No. of threads per inch Area supported by each stay 180 x 180 mm

{ Over threads bottom of barrel



Working pressure by Rules _____ Are the stays drilled at the outer ends no Margin stays: Diameter { At turned off part, 41.6 ^{mm} or Over threads _____

No. of threads per inch _____ Area supported by each stay 180 x 420 Working pressure by Rules _____

Tubes: Material stut External diameter { Plain 83 ^{mm} Stay 83 Thickness { 3 ^{mm} 6 ^{mm} No. of threads per inch _____

Pitch of tubes 111 ^{mm} Working pressure by Rules _____ Manhole compensation: Size of opening in shell plate 400 x 500 ^{mm} Section of compensating ring Flanged No. of rivets and diameter of rivet holes 30 ^{mm} dia.

Outer row rivet pitch at ends 100 ^{mm} Depth of flange if manhole flanged Steam Dome: Material none

Tensile strength Thickness of shell Description of longitudinal joint

Diameter of rivet holes Pitch of rivets Percentage of strength of joint { Plate Rivets

Internal diameter Working pressure by Rules Thickness of crown No. and diameter of stays

How connected to shell Inner radius of crown Working pressure by Rules

Size of doubling plate under dome Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell

Type of Superheater none Manufacturers of { Tubes _____ Steel castings _____

Number of elements _____ Material of tubes _____ Internal diameter and thickness of tubes _____

Material of headers _____ Tensile strength _____ Thickness _____ Can the superheater be shut off and the boiler be worked separately _____

Is a safety valve fitted to every part of the superheater which can be shut off from the boiler _____

Area of each safety valve _____ Are the safety valves fitted with easing gear _____ Working pressure as per Rules _____

Pressure to which the safety valves are adjusted _____ Hydraulic test pressure: tubes _____ castings _____ and after assembly in place _____ Are drain cocks or valves fitted to free the superheater from water where necessary _____

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with _____

The foregoing is a correct description, _____

 Manufacturer.

Dates of Survey { During progress of work in shops - - } while building { During erection on board vessel - - - }

Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) _____
 Total No. of visits _____

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

This boiler has been opened out & examined & found in good condition & the principal dimensions verified. The safety valves have been adjusted & the boiler examined under steam.

This boiler is in my opinion suitable for use in a classed vessel in accordance with London Letter of 20th Nov. 1923.

Survey Fee £ : : | When applied for, 192
 Travelling Expenses (if any) £ : : | When received, 192

H. Gardner-Smith
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. JAN. 25 1924

Assigned See other Rpt
Don 87425

