

REPORT ON BOILERS.

No.

Received at London Office

Date of writing Report 10th Febr. 1925 When handed in at Local Office 28th Febr. 1925 Port of DÜSSELDORF

No. in Survey held at Aachen Date, First Survey 13th Nov. 1924 Last Survey 6th February 1925

Reg. Book. on the (Number of Visits 4) Gross Tons Net

Built at By whom built Yard No. When built

Engines made at By whom made Engine No. When made

Boilers made at Aachen By whom made Jacques Piedbreuf Boiler No. 11744 When made 1925

Owners Port belonging to

VERTICAL DONKEY BOILER.

Made at Aachen By whom made Jacques Piedbreuf Boiler No. 11744 When made 1925 Where fixed

Manufacturers of Steel Rheinische Stahlwerke of Duisburg

Total Heating Surface of Boiler 107.6 sq. feet Is forced draught fitted no Coal or Oil fired coal fired

and Description of Boilers Vertical Cross Tube Boiler Working pressure 100 lbs.

Tested by hydraulic pressure to 200 lbs. Date of test 6th February 1925 No. of Certificate 8

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler 2 Spring

Area of each set of valves per boiler { per rule. as fitted 2268 sq. mm Pressure to which they are adjusted 100 lb Are they fitted with easing gear yes

State whether steam from main boilers can enter the donkey boiler ✓ Smallest distance between boiler or uptake and bunkers

woodwork Is oil fuel carried in the double bottom under boiler Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated Largest internal dia. of boiler Height

Shell plates: Material Siemens Martin Steel Tensile strength 45.3 kg/sq. mm Thickness 9 mm

Are the shell plates welded or flanged no Description of riveting: circ. seams { end. double row lapped inter. " " long. seams double row lapped

No. of rivet holes in { circ. seams 14 mm Pitch of rivets { 64 mm Percentage of strength of circ. seams { plate 75.4 % rivets 75.2 % of Longitudinal joint { plate 73.4 % rivets 80.0 % combined. ✓

Working pressure of shell by rules 129 lbs. Thickness of butt straps { outer ✓ inner ✓

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat dished partial spherical Material Siemens Martin Steel

Tensile strength 44.4 kg/sq. mm Thickness 12 mm Radius 1150 mm Working pressure by rules 131 lbs.

Description of Furnace: Plain, spherical, or dished crown plain Material Siemens Martin Steel Tensile strength 45.3 kg/sq. mm

Thickness 15.5 mm External diameter { top 1031 mm bottom 1031 mm Length as per rule 2104 mm Working pressure by rules 128 lbs.

No. of support stays circumferentially ✓ and vertically ✓ Are stays fitted with nuts or riveted over ✓

Diameter of stays over thread ✓ Radius of spherical or dished furnace crown ✓ Working pressure by rule ✓

Thickness of Ogee Ring 30 mm Diameter as per rule { D 1168 mm d 1108 mm Working pressure by rule 174 lbs.

Combustion Chamber: Material Siemens Martin Steel Tensile strength 45.3 kg/sq. mm Thickness of top plate 17 mm

Radius if dished 1200 mm Working pressure by rule 186 lbs. Thickness of back plate ✓ Diameter if circular ✓

Length as per rule ✓ Pitch of stays ✓ Are stays fitted with nuts or riveted over ✓

Diameter of stays over thread ✓ Working pressure of back plate by rules ✓

Plates: Material { front. back. Tensile strength { Thickness { Mean pitch of stay tubes in nests

Surrounding shell, Dia. as per rule { front. back. Pitch in outer vertical rows { Dia. of tube holes FRONT { stay. plain. BACK { stay. plain.

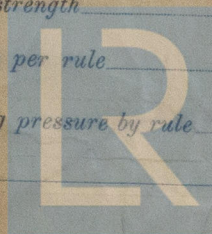
Does each alternate tube in outer vertical rows a stay tube Working pressure by rules { front. back.

Access to combustion chamber tops: Material Tensile strength

Depth and thickness of girder at centre Length as per rule

Distance apart No. and pitch of stays in each Working pressure by rule

Visits 5



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Crown stays: Material *✓* Tensile strength *✓* Diameter *✓* { at body of stay, or over threads. *✓*
 No. of threads per inch *✓* Area supported by each stay *✓* Working pressure by rules *✓*
Screw stays: Material *✓* Tensile strength *✓* Diameter *✓* { at turned off part, or over threads. *✓* No. of threads per inch *✓*
 Area supported by each stay *✓* Working pressure by rules *✓* Are the stays drilled at the outer ends *✓*
Tubes: Material *✓* External diameter *✓* { plain stay *✓* Thickness *✓*
 No. of threads per inch *✓* Pitch of tubes *✓* Working pressure by rules *✓*
Manhole Compensation: Size of opening in shell plate *300 x 400 mm* Section of compensating ring *85 x 16 mm* No. of rivets and diam of rivet holes *16 rivets of 14 mm* Outer row rivet pitch at ends *1 row 90 mm* Depth of flange if manhole flanged *20 mm*
Uptake: External diameter *320 mm* Thickness of uptake plate *10 mm*
Cross Tubes: No. *4* External diameters *310 mm* Thickness of plates *10 mm*

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with *yes*.

The foregoing is a correct description,

signed *Jacques Friedreich* *Aachen.* Manufac

Dates of Survey while building { During progress of work in shops - - *13th Nov., 18th Nov., 1924, 27th Jan., 6th Febr. 1925.* Is the approved plan of boiler forwarded herewith (If not state date of approval.) *yes.*
 { During erection on board vessel - - Total No. of visits *4.*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *The Boiler was built under Spec. Survey, and in accordance with the approved plan. The workmanship is of good quality and when tested to 200 lbs. showed no weakness and was found tight and satisfactory in every respect at that pressure and in my opinion, illegible for the notification. + N*
The boiler is ordered by Messrs. Deutsche Werke of Kiel for their vessel No. 198

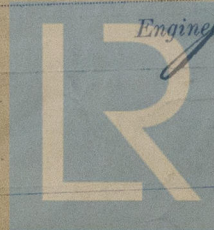
Survey Fee ... £ *4* : *4* : } When applied for, *21. February 1925.*
 Travelling Expenses (if any) £ *2* : *14* : } When received, *27. February 1925.*

Committee's Minute

Assigned

FRI. 12 JUN 1925

See Ham 3E. 16327



Engineer Surveyor to Lloyd's Register of Shipping

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