

REPORT ON BOILERS.

No. 54243

Received at London Office

4 JUL 1947

Reporting Report 19..... When handed in at Local Office 19..... Port of HULL
 Survey held at Goole & Hull Date, First Survey 19-9-46 Last Survey 2-6-1947
 (Number of Visits 32) Tons { Gross 1021
 Net 576
 Built at Hamburg By whom built H.C. Stucklen Sohn Yard No. - When built 1918
 Made at Hamburg By whom made -do- Engine No. - When made -do-
 Made at -do- By whom made -do- Boiler No. - When made -do-
 Horse Power 122 Owners Oddsson & Co. Ltd. Port belonging to HULL

TUBULAR BOILERS - MAIN, AUXILIARY, OR DONKEY.

S.V. area reqd = $\frac{5850 \times 2}{2 \times 2 \frac{7}{8} \phi} = 2 @ 73 \frac{1}{2} \phi$
 Area provided = $2 @ 2 \frac{7}{8} \phi = 8370 \frac{1}{2}$

Material of Steel (Letter for Record S)
 Heating Surface of Boilers 2 x 1453.1 sq. ft. (270 m²) Is forced draught fitted No Coal or Oil fired Coal
 Description of Boilers 2 Scotch Marine Working Pressure 185 lbs/sq. in.
 Working pressure to hydraulic pressure to 2 Date of test 23/4/47 No. of Certificate - Can each boiler be worked separately Yes
 Firegrate in each Boiler 35.67 sq. ft. and Description of safety valves to each boiler 2 - ordinary
 each set of valves per boiler 12.98 Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes

Distance between boilers or uptakes and bunkers or woodwork 3'6" approx. Is oil fuel carried in the double bottom under boilers No
 Distance between shell of boiler and tank top plating 2'0" " Is the bottom of the boiler insulated Yes
 Internal dia. of boilers 3400 mm. Length 3000 mm. Shell plates: Material M.S. Tensile strength 45-5Kg/min.
 Thickness 22 mm. Are the shell plates welded or flanged No Description of riveting: circ. seams { end D.R.
 inter. -
 DB TR ✓ Diameter of rivet holes in { circ. seams 29 mm Pitch of rivets { 94.9 mm
 long. seams 29 mm { 114 mm (see plans)
 Percentage of strength of circ. end seams { plate as approved Percentage of strength of circ. intermediate seam { plate -
 rivets - rivets -
 Percentage of strength of longitudinal joint { plate as approved Working pressure of shell by Rules approved
 rivets - combined -

No. and Description of Furnaces in each Boiler Two corrugated
 Material Steel Tensile strength - Smallest outside diameter 1026 m/m.
 Thickness of plates { top 13 m/m Description of longitudinal joint Welded
 bottom -
 Working pressure of furnace by Rules approved
 Material Steel Tensile strength 34 kgms/min. Thickness 21 m/m. Pitch of stays 380 m/m.
 Material { front steel Tensile strength 34 kgms/min. Thickness { 21 m/m.
 back steel { -do- { 20 m/m.
 Pitch of stay tubes in nests 271.5 m/m. Pitch across wide water spaces 360 m/m. Working pressure { front 360 m/m.
 back -

Material Steel Tensile strength 34-41 kgms. Depth and thickness of girder
 Length as per Rule 614.52 Distance apart 190 m/m. No. and pitch of stays
 Working pressure by Rules - Combustion chamber plates: Material Steel
 Thickness: Sides 18.15 m/m. Back 15.15 m/m. Top 15 m/m. Bottom 15 m/m.
 Sides 182.5 m/m Back 200 m/m Top 187.5 mean. Are stays fitted with nuts or riveted over nuts
 Working pressure by Rules approved Front plate at bottom: Material Steel Tensile strength 34 kgms/mm.
 Lower back plate: Material - Tensile strength - Thickness 21 m/m.
 Working pressure 21 m/m. Are stays fitted with nuts or riveted over nuts

Material Steel Tensile strength 34 - 41 kgms.
 Working pressure approved Main stays: Material Steel Tensile strength 34 - 41 kgms.
 At body of stay 61 m/m. No. of threads per inch - Area supported by each stay 200 m/m x 189 m/m.
 Working pressure by Rules approved Screw stays: Material Steel Tensile strength 34 - 41 kgms.
 At turned off part 35.15 m/m. No. of threads per inch - Area supported by each stay 200 m/m x 189 m/m.



Working pressure by Rules - Are the stays drilled at the outer ends. **No** Margin stays: Diameter { At turned off part, or Over threads. **41.5 m/m**

No. of threads per inch - Area supported by each stay - Working pressure by Rules -

Tubes: Material **Stl.** External diameter { Plain. **83 m/m.** Stay. **83 m/m.** Thickness { **3 1/2 m/m.** **7 m/m.** No. of threads per inch -

Pitch of tubes **108.5 m/m.** Working pressure by Rules - Manhole compensation: Size of shell plate **320 m/m. x 425 m/m.** Section of compensating ring **160 m/m x 22 m/m.** No. of rivets and diameter of rivet holes **36 - 29**

Outer row rivet pitch at ends **104 m/m.** Depth of flange if manhole flanged - Steam Dome: Material **Steel**

Tensile strength **34 kgms.** Thickness of shell **15 m/m.** Description of longitudinal joint **D.R.**

Diameter of rivet holes **23 m/m.** Pitch of rivets **15 m/m.** Percentage of strength of joint { Plate. Rivets. **approved**

Internal diameter **750 m/m.** Working pressure by Rules - Thickness of crown **18 m/m.** No. and stays - Inner radius of crown **800 m/m.** Working pressure by Rules -

How connected to shell **riveted.** Size of doubling plate under dome - Diameter of rivet holes of rivets in outer row in dome connection to shell **23 m/m. 148 m/m.**

Type of Superheater - Manufacturers of { Tubes. Steel forgings. Steel castings.

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

Material of headers - Tensile strength - Thickness - Can the superheater be 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 -

Rules - Pressure to which the safety valves are adjusted - Hydraulic test -

tubes - forgings and castings - and after assembly in place - Are drilled valves fitted to free the superheater from water where necessary -

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with -

The foregoing is a correct description -

Dates of Survey while building { During progress of work in shops - - - } Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)

{ During erection on board vessel - - - } Total No. of visits -

Is this Boiler a duplicate of a previous case **No** If so, state Vessel's name and Report No. -

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

These boilers were not built under survey but have been opened up and examined internally and externally together with safety valves, mountings and their fastenings and found or placed in good condition. The scantlings are in accordance with the approved plan of 20/3/47. The boilers were examined under steam and hydro pressures and safety valves adjusted to 185 lbs/sq.in.

Survey Fee £ : } When applied for, 19.....

Travelling Expenses (if any) £ : } When received, 19.....

R. Rodgers & J. Blood
Engineer Surveyor to Lloyd's Register of

Committee's Minute.....

Assigned *See F.E. mchey, oph*

15 AUG 1947

