

REPORT ON BOILERS.

No. 54243.

Received at London Office

4 JUL 1947

Survey 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. 19 47

89
56 on the "REYKJANES" ex "EMPIRE CONTAY" ex "MALMO" (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 $\pi r^2 = 5850 \frac{1}{2} \text{ in}^2$
Area $\pi r^2 = 2 \times 2 \frac{7}{8} \phi = 2 \times 7 \frac{1}{2} \text{ in}^2$
 $= 8370 \frac{1}{2} \text{ in}^2$

Materials 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 185lbs/sq.in.

Hydraulic pressure to pressure 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. 2 7/8"

each set of valves per boiler per Rule. 12.98 Pressure to which they are adjusted 185lbs Are they fitted with easing gear Yes

of donkey boilers, state whether steam from main boilers can enter the donkey boiler -

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.

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 { 94.9mm
long. seams 29 mm 114 mm (see plans)

ge of strength of circ. end seams { plate as approved Percentage of strength of circ. intermediate seam { plate -
rivets - rivets -

ge of strength of longitudinal joint { plate as approved. Working pressure of shell by Rules approved
rivets - combined -

s of butt straps { outer 22m/m. No. and Description of Furnaces in each Boiler Two corrugated.
inner 18.5m/m.

Steel Tensile strength - Smallest outside diameter 1026 m/m.

of plain part { top - Thickness of plates { crown 13 m/m Description of longitudinal joint Welded.
bottom - bottom -

ms of stiffening rings on furnace or c.c. bottom - Working pressure of furnace by Rules approved.

tes in steam space: Material Steel Tensile strength 34 kgms/mm. Thickness 21 m/m. Pitch of stays 380 m/m.

stays secured Nuts and washers. outside (rivets) Working pressure by Rules -

ates: Material { front steel Tensile strength 34 kgms/mm. Thickness { 21 m/m.
back steel -do- 20 m/m.

ch of stay tubes in nests 271.5 m/m. Pitch across wide water spaces 360m/m. Working pressure { front -
back -

to combustion chamber tops: Material Steel Tensile strength 34-41 kgms. Depth and thickness of girder

145 m/m. 2 at 19 m/m. Length as per Rule - 614.52 on plans Distance apart 190 m/m. No. and pitch of stays

2 - 185 m/m. Working pressure by Rules - Combustion chamber plates: Material Steel

rength 34 kgms. Thickness: Sides 1815 m/m. Back 1515 m/m. Top 15 m/m. Bottom 15 m/m.

stays to ditto: Sides 182.5 m/m Back 200 m/m. Top 187.5 mean. Are stays fitted with nuts or riveted over nuts

pressure by Rules approved Front plate at bottom: Material Steel Tensile strength 34 kgms/mm.

21 m/m. Lower back plate: Material - Tensile strength - Thickness 21 on plans

stays at wide water space 340 m/m. Are stays fitted with nuts or riveted over nuts

Ship pressure approved. Main stays: Material Steel Tensile strength 34 - 41 kgms.

At body of stay - No. of threads per inch - Area supported by each stay -

Over threads 61 m/m. Screw stays: Material Steel Tensile strength 34 - 41 kgms.

pressure by Rules approved. No. of threads per inch - Area supported by each stay 200 m/m x 189 m/m.

At turned off part - No. of threads per inch - Area supported by each stay 200 m/m x 189 m/m.

Over threads 35.15 m/m.

See
4/8/47

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.

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. 75 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. 74.8 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 tubes forgings and castings and after assembly in place Are 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

Committee's Minute

Assigned Su F.E. mchey, oph

15 AUG 1947

R. Rodger & J. Blood

Engineer Surveyor to Lloyd's Register of

