

REPORT ON BOILERS.

No. 35148

Received at London Office.

Date of writing Report 19... When handed in at Local Office 1st September 1949 Port of Sunderland.

No. in Reg. Book. Survey held at Sunderland. Date, First Survey see Rpt 4 Last Survey 19...
on the "Pooke River" (Number of Visits...)

Master... Built at Sunderland By whom built Wm Pickersgill & Sons Ltd Yard No. 313 When built 1949.

Engines made at Sunderland By whom made H.E. Marine Eng Co (1938) Ltd Engine No. 4195 When made 1949.

Boilers made at Sunderland By whom made H.E. Marine Eng Co (1938) Ltd Boiler No. 4195 When made 1949.

Nominal Horse Power MN. 196. Owners... Port belonging to...

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Colville

Total Heating Surface of Boilers 2950 Square feet Is forced draught fitted yes. Coal or Oil fired Coal.

No. and Description of Boilers 2. S.E. Multitubular Working Pressure 220 lb/sq. in.

Tested by hydraulic pressure to 380 lb/sq. in. Date of test 27.6.49 No. of Certificate 4734

Area of Firegrate in each Boiler 33 sq. ft. No. and Description of safety valves to each boiler 2-2 1/2" ordinary enclosed spring.

Area of each set of valves per boiler per Rule 7.97 sq. in. as fitted 9.80 sq. in. Pressure to which they are adjusted 220 lb/sq. in. Are they fitted with easing gear yes.

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler.

Smallest distance between boilers or uptakes and bunkers or woodwork 2'-9" Is oil fuel carried in the double bottom under boilers. No.

Smallest distance between shell of boiler and tank top plating 2'-0" Is the bottom of the boiler insulated.

Largest internal dia. of boilers 12'-3 5/8" Length 11'-0" Shell plates: Material Steel Tensile strength 29/33 T.

Thickness 1 3/16" Are the shell plates welded or flanged. Description of riveting: circ. seams end D.R. LAP. inter 3.895

long. seams T.R.D.B.S. Diameter of rivet holes in circ. seams 1 1/4" long. seams 1 1/4" Pitch of rivets 8.723

Percentage of strength of circ. end seams plate 67.80 % rivets 42.00 % Percentage of strength of circ. intermediate seam plate 85.67 % rivets 88.20 %

Percentage of strength of longitudinal joint rivets 89.00 % Working pressure of shell by Rules 220.1 lb/sq. in.

Thickness of butt straps outer 29/32 inner 13/32 No. and Description of Furnaces in each Boiler 2 Deighton type.

Material Steel Tensile strength 26/30 T. Smallest outside diameter 3'-8 5/8"

Length of plain part top 10 1/2" bottom 10 1/2" Thickness of plates crown 1 1/8" bottom 1 1/8" Description of longitudinal joint Fireweld.

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 226 lb/sq. in.

End plates in steam space: Material Steel Tensile strength 26/30 T. Thickness 1 3/32" Pitch of stays 1'-3" x 1'-4"

How are stays secured nuts both sides. Working pressure by Rules 231 lb/sq. in.

Tube plates: Material front Steel back Steel Tensile strength 26/30 T. Thickness 3/32" 27/32"

Mean pitch of stay tubes in nests 10.625" Pitch across wide water spaces 14 1/4" x 8 1/2" Working pressure front 303 lb/sq. in. back 228 lb/sq. in.

Girders to combustion chamber tops: Material Steel Tensile strength 28/32 T. Depth and thickness of girder at centre 2 @ 9" x 7" Length as per Rule 2-8 7/8" Distance apart 10"

in each 2 @ 10 1/4" Working pressure by Rules 226 lb/sq. in. No. and pitch of stays

Tensile strength 26/30 T. Thickness: Sides 13/16" Back 25/32" Top 13/16" Bottom 13/16"

Pitch of stays to ditto: Sides 10 1/4" x 10" Back 10 3/8" x 9" Top 10 1/4" x 10" Are stays fitted with nuts or riveted over Partition & back: nuts each end. Side: nuts on CC side only.

Working pressure by Rules 228 lb/sq. in. Front plate at bottom: Material Steel Tensile strength 26/30 T.

Thickness 31/32" Lower back plate: Material Steel Tensile strength 26/30 T. Thickness 29/32"

Pitch of stays at wide water space 15" x 9" Are stays fitted with nuts or riveted over nuts.

Working pressure 224 lb/sq. in. Main stays: Material Steel Tensile strength 28/32 T.

Diameter At body of stay 2 3/4", 2 1/2" & 2 1/4" No. of threads per inch 6 Area supported by each stay 288 sq. in.

Working pressure by Rules 227 lb/sq. in. Screw stays: Material Steel Tensile strength 26/30 T.

Diameter At turned off part 2 1/4", 2 1/8" & 2" No. of threads per inch 9 Area supported by each stay 102.5 sq. in.

Working pressure by Rules. 242 lb. Are the stays drilled at the outer ends. NO ✓ Margin stays: Diameter { At turned off part. 2" 2 1/2" 2 3/4"
or Over threads. 2" 2 1/2" 2 3/4"
No. of threads per inch. 9 ✓ Area supported by each stay. 136 sq. Working pressure by Rules. 239 lb. ✓
Tubes: Material. Steel External diameter { Plain. 3 1/2" ✓ Thickness. 8 W.G. ✓ No. of threads per inch. 9 ✓
Stay. 3 1/4" ✓ Pitch of tubes. 4 1/2" x 4 1/4" ✓ Working pressure by Rules. 220 lb. ✓ Manhole compensation: Size of opening in
shell plate. 20" x 16" ✓ Section of compensating ring. 8 1/4" x 1 1/4" ✓ No. of rivets and diameter of rivet holes. 32 - 1 1/2" ✓
Outer row rivet pitch at ends. 9 1/2" ✓ Depth of flange if manhole flanged. 3 7/8" ✓ Steam Dome: Material. ✓
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. ✓ Inner radius of crown. ✓ Working pressure by Rules. ✓
How connected to shell. ✓ 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. _____ 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 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 casing gear. _____ Working pressure as per
Rules. _____ Pressure to which the safety valves are adjusted. _____ Hydraulic test pressure. _____
tubes. _____ forgings and castings. _____ and after assembly in place. _____ Are drain cocks
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. YES THE NORTH EASTERN MARINE ENGINEERING CO. (1935) LTD.

The foregoing is a correct description,

RESIDENT MAKER.

Dates of Survey while building { During progress of work in shops - - } see Rpt 4 Are the approved plans of boiler and superheater forwarded herewith. No.
During erection on board vessel - - } Retained for use in sister vessels.
Total No. of visits. _____

Is this Boiler a duplicate of a previous case. yes. If so, state Vessel's name and Report No. S/S "Poole Harbour".

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

These boilers have been constructed in accordance with the approved plans, Secretary's letter and requirements of the Rules. The workmanship and materials are good, and the boilers have been efficiently fitted on board the vessel, examined under steam, and the safety valves adjusted at the working pressure of 220 lb.

A satisfactory sea trial was carried out on 26th August 1949.

Survey Fee ... £ see Rpt 4 } When applied for.19....
Travelling Expenses (if any) £ see Rpt 4 } When received.19....

John Lundgren
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute

Assigned

Sir F.E. Welch, rph

FRI. 7 OCT 1949



© 2021

Lloyd's Register
Foundation