

REPORT ON BOILERS.

No. 22560.

Date of writing Report 17th JAN. 1944. When handed in at Local Office 20th JAN. 1944. Port of GREENOCK

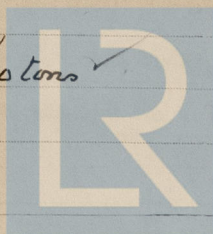
Received at London Office

27 JAN 1944

No. in Survey held at GREENOCK Date, First Survey 30th JUNE 1943. Last Survey 11th JANUARY 1944
 Reg. Book. Supp. 39937 on the M.V. TREVANION (Number of Visits 9) Gross 7375.27 Tons Net 5133.54
 Built at PORT GLASGOW By whom built LITHGOWS LTD Yard No. 985 When built 1944
 Engines made at GLASGOW By whom made HARLAND & WOLFE LTD Engine No. 8462/2 When made 1943
 Boilers made at GREENOCK By whom made JOHN C. KINCAID & CO LTD Boiler No. 1153 When made 1944
 Nominal Horse Power 490 Owners HAIN STEAMSHIP CO LTD Port belonging to LONDON

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Colvilles Ltd
 Total Heating Surface of Boilers 11234 Is forced draught fitted Yes (Letter for Record)
 No. and Description of Boilers 1 Cylindrical SE. Coal or Oil fired Oil or Gas
 Tested by hydraulic pressure to 275 Date of test 13 Aug 43 No. of Certificate 2347 Working Pressure 150 lb
 Area of Firegrate in each Boiler No. and Description of safety valves to each boiler 1 3/4" double opening 14 lb.
 Area of each set of valves per boiler (per Rule 4.25" as fitted 4.8" Pressure to which they are adjusted 150 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 12" Is oil fuel carried in the double bottom under boilers Yes
 Smallest distance between shell of boiler and tank top plating 2-9 1/2" Is the bottom of the boiler insulated Yes
 Largest internal dia. of boilers 10'-8 1/4" Length 10'-7" Shell plates: Material S Tensile strength 32 tons
 Thickness 25/32" Are the shell plates welded or flanged No Description of riveting: circ. seams (end DR inter. 2.875
 long. seams T.R. DBS. Diameter of rivet holes in (circ. seams 15/16 long. seams 13/16 Pitch of rivets 5.722
 Percentage of strength of circ. end seams (plate 67.4 rivets 50.4 Percentage of strength of circ. intermediate seam (plate 85.9 rivets 89.4
 Percentage of strength of longitudinal joint (plate 85.9 rivets 89.4 combined 89.3
 Thickness of butt straps (outer 5/8" inner 3/4" No. and Description of Furnaces in each Boiler Two Dighton corrugated
 Material S Tensile strength 26/30 tons Smallest outside diameter 3'-2 1/4"
 Length of plain part (top bottom Thickness of plates (crown 7/16 bottom 7/16 Description of longitudinal joint Weld
 Dimensions of stiffening rings on furnace or c.c. bottom
 End plates in steam space: Material S Tensile strength 26/30 tons Thickness 15/16 Pitch of stays 16 x 16"
 How are stays secured D.N.
 Tube plates: Material (front back S Tensile strength 26/30 tons Thickness 15/16 2/32"
 Mean pitch of stay tubes in nests 9.67 Pitch across wide water spaces 14"
 Girders to combustion chamber tops: Material S Tensile strength 28/32 tons Depth and thickness of girder
 at centre 8 x 1 3/8" Length as per Rule 2'-5 3/32" Distance apart 10'8" No. and pitch of stays
 in each Two @ 9 1/4" Combustion chamber plates: Material S
 Tensile strength 26/30 tons Thickness: Sides 3/32" Back 5/8" Top 2 1/32" Bottom 2 1/32"
 Pitch of stays to ditto: Sides 10'8" x 9 1/2" Back 9 1/2" x 9' Top 10'8" x 9 1/2" Are stays fitted with nuts or riveted over Nuts except through shell
 Front plate at bottom: Material S Tensile strength 26/30 tons
 Thickness 15/16 Lower back plate: Material S Tensile strength 26/30 tons Thickness 15/16
 Pitch of stays at wide water space 14" x 9 1/2" Are stays fitted with nuts or riveted over Nuts
 Main stays: Material S Tensile strength 28/32 tons
 Diameter (At body of stay, or Over threads 2 3/8" No. of threads per inch 6
 Screw stays: Material S Tensile strength 26/30 tons
 Diameter (At turned off part, or Over threads 1 5/8" No. of threads per inch 9



© 2021

Lloyd's Register Foundation

014887-014898-0334

Are the stays drilled at the outer ends No Margin stays: Diameter { At turned off part, 1 3/4" or Over threads 1 3/4" ✓
No. of threads per inch 9
Tubes: Material Lap welded iron External diameter { Plain 3" Stay 3" Thickness { 9 wa 5/16 No. of threads per inch 9
Pitch of tubes 4 1/4" x 4 3/16" Manhole compensation: Size of opening in shell plate 19 1/2" x 15 1/2" Section of compensating ring 15" x 1 3/16" No. of rivets and diameter of rivet holes 38 - 1 5/16"
Outer row rivet pitch at ends 7" Depth of flange if manhole flanged ✓ 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 Thickness of crown No. and diameter of stays
Inner radius of crown
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 easing gear
Pressure to which the safety valves are adjusted Hydraulic test pressure: tubes forgings and 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 22 inclusive for boilers been complied with

The foregoing is a correct description,
For JOHN G. KINCAID & CO. LIMITED.
W. Cairns Director. Manufacturer.

Dates of Survey { During progress of work in shops - - (1943) JUNE 30. JULY 21. 28. AUG. 4. 9. 13. Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)
while building { During erection on board vessel - - - DEC. 13. 18. (1944) JAN. 11. Total No. of visits 9

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.)

This boiler has been constructed in accordance with the Rules and approved plans. The materials & workmanship are sound & good. It has been efficiently installed in the vessel & its safety valves adjusted to a safe working pressure. For recommendation please see Machinery report.

Survey Fee £
Travelling Expenses (if any) £
When applied for, 19
When received, 19

See machinery report

Charles J. Hunter
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned



© 2021

Lloyd's Register
Foundation