

REPORT ON BOILERS.

No. 19126.

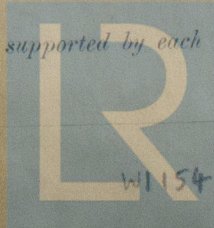
Received at London Office

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of writing book 2. 10 1929 When handed in at Local Office 22nd Nov 1929 Port of Greenock
 in Survey held at Greenock Date, First Survey 16th October 1928 Last Survey 21st November 1929
 on the T/m/s "A. H. Sultan" (Number of Visits ☒) Gross 8882 Tons Net 5259
 Built at Pl. Glasgow By whom built W. Hamilton & Co. Yard No. 408 When built 1929
 Engines made at Greenock By whom made John & Nisbet & Co. Ltd. Engine No. 1738 When made 1929
 Boilers made at ditto By whom made ditto Boiler No. 1738 When made 1929
 Nominal Horse Power Owners United Motors Co. Ltd. Port belonging to Liverpool

ULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Deerpark, Dowlton, Bigham, Tennant, Stirling, & Co. (Letter for Record S)
 Total Heating Surface of Boilers 1823 ft. Is furnace draught fitted yes Fuel or Oil fired Oil
 and Description of Boilers one single ended Working Pressure 180
 Tested by hydraulic pressure to 320 Date of test 16/8/29 No. of Certificate 1882 Can each boiler be worked separately yes
 Area of Firegrate in each Boiler Oil Fuel No. and Description of safety valves to each boiler Double Spring
 No. of each set of valves per boiler per Rule 1402 Pressure to which they are adjusted 185 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 5'-0" Is oil fuel carried in the double bottom under boilers no
 Smallest distance between shell of boiler and tank top plating 14 1/2" Is the bottom of the boiler insulated yes
 Largest internal dia. of boilers 13'-4 7/8" Length 11'-0" Shell plates: Material S Tensile strength 28.32
 Thickness 1 1/8" Are the shell plates welded or flanged yes Description of riveting: circ. seams DR
 No. of rivets 3.855 Pitch of rivets 8 3/8"
 Diameter of rivet holes in circ. seams 1 1/4" long. seams 1 3/16" Percentage of strength of circ. intermediate seam plate 64.5
rivets 46.5 Working pressure of shell by Rules 184
plate 85.82 rivets 90.5 combined 89.8
 Percentage of strength of circ. end seams plate 7/8" inner 1" No. and Description of Furnaces in each Boiler 3 Delightous
 Thickness of butt straps material S Tensile strength 26-30 Smallest outside diameter 3'-0 1/2 1/16"
 Length of plain part top 15 1/32" bottom 15 1/32" Description of longitudinal joint weld
 Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 182
 End plates in steam space: Material S Tensile strength 26-30 Thickness 13/32" Pitch of stays 18 1/2" x 18 1/2"
 How are stays secured ONE WASHERS Working pressure by Rules 182
 End plates: Material front S back S Tensile strength 26-30 Thickness 23/32"
 Can pitch of stay tubes in nests 10.8 Pitch across wide water spaces 14" Working pressure front 192 back 188
 Orders to combustion chamber tops: Material S Tensile strength 28-32 Depth and thickness of girder
 centre 9 1/2" x 7/8" Length as per Rule 37.62" Distance apart 8 1/2" No. and pitch of stays
 each 3 at 9" Working pressure by Rules 204 Combustion chamber plates: Material S
 Tensile strength 26-30 Thickness: Sides 21/32" Back 21/32" Top 21/32" Bottom 21/32"
 Pitch of stays to ditto: Sides 9" x 9 1/4" Back 8 1/2" x 9" Top 9" x 8 1/2" Are stays fitted with nuts or riveted over Nuts
 Working pressure by Rules 183 Front plate at bottom: Material S Tensile strength 26-30
 Thickness 1" Lower back plate: Material S Tensile strength 26-30 Thickness 25/32"
 Pitch of stays at wide water space 13 3/4" Are stays fitted with nuts or riveted over Nuts
 Working Pressure 183 Main stays: Material S Tensile strength 28-32
 Diameter: At body of stay 3" No. of threads per inch 6 Area supported by each stay 342.5"
 Over threads Working pressure by Rules 196 Screw stays: Material S Tensile strength 26-30
 Diameter: At turned off part 1 5/8" No. of threads per inch 9 Area supported by each stay 76.5"
 Over threads


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Working pressure by Rules 198 Are the stays drilled at the outer ends 870 Margin stays: Diameter { At turned off part, 13/4" or Over threads }
No. of threads per inch 9 Area supported by each stay 100.625 Working pressure by Rules 181
Tubes: Material Iron External diameter { Plain } 3" Thickness 9 WG 1/4 + 5/16 No. of threads per inch 9
Pitch of tubes 45/16 + 4 3/16 Working pressure by Rules 192 Manhole compensation: Size of opening in No. in
shell plate 20 1/2 + 16 1/2 Section of compensating ring 2-11 1/2 + 1 3/16 No. of rivets and diameter of rivet holes 36 at 15/16
Outer row rivet pitch at ends 8 3/4" Depth of flange if manhole flanged 3 1/2" 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
Number of elements Material of tubes Steel castings 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, 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.
Director. Manufacturer.

Dates of Survey { During progress of work in shops - - }
while building { During erection on board vessel - - - }
Are the approved plans of boiler forwarded herewith (If not state date of approval.)
Total No. of visits

SEE MACHINERY REPORT

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This Boiler has been built under Special Survey in accordance with the approved plans & the workmanship & material are of good quality. It is now securely fitted on board. This Report accompanies that of the Machinery

Survey Fee charged on Machinery Report When applied for, 192
Travelling Expenses (if any) When received, 192
W. Gordon-Mitchell
Engineer Surveyor to Lloyd's Register of Shipping.