

REPORT ON BOILERS.

No. 19014

10 APR 1929

Received at London Office

Date of writing Report 28/2/1929 When handed in at Local Office 5/4/1929 Port of Greenock
No. in Survey held at Greenock Date, First Survey 6th June 1928 Last Survey 5-4-1929
Reg. Book. on/r "Athol duckers" (Number of Visits ☒) Gross Tons ☐ Net ☐
Master P. E. Elson Built at P. E. Elson By whom built W. Hamilton & Co. Ltd. Yard No. 406 When built 1929
Engines made at Greenock By whom made John & Co. Ltd. Engine No. 1734 When made 1929
Boilers made at ditto By whom made ditto Boiler No. 1734 When made 1928
Nominal Horse Power ✓ Owners United M. & L. Co. Ltd. Port belonging to London

MULTITUBULAR BOILERS ~~MULTITUBULAR~~, AUXILIARY, ~~SP. POWER~~.

Manufacturers of Steel Steel Co. of Scotland & Kirkcaldy & Co. Ltd. (Letter for Record S)
Total Heating Surface of Boilers 18234 Is forced draught fitted Ann'd Coal or Oil fired oil
No. and Description of Boilers one single ended Working Pressure 180
Tested by hydraulic pressure to 320 Date of test 24.1.29 No. of Certificate 1854 Can each boiler be worked separately yes
Area of Firegrate in each Boiler 14.02 No. and Description of safety valves to each boiler Double spring
Area of each set of valves per boiler 14.13 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 ✓
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 13.47/8" Length 11-0" Shell plates: Material S Tensile strength 28.32
Thickness 1 1/8" Are the shell plates welded or flanged ✓ Description of riveting: circ. seams end 3.855
long. seams TRIDBS Diameter of rivet holes in 1 3/16" Pitch of rivets 8 3/8"
Percentage of strength of circ. end seams 64.5 Percentage of strength of circ. intermediate seam 184.5
Percentage of strength of longitudinal joint 85.82 Working pressure of shell by Rules 184.5
Thickness of butt straps 7/8" No. and Description of Furnaces in each Boiler 3 Deighton
Material S Tensile strength 26.30 Smallest outside diameter 3.0 15/16"
Length of plain part ✓ Thickness of plates 1 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 1 3/32" Pitch of stays 18 1/2 x 18 1/2"
How are stays secured DN - washers Working pressure by Rules 181.6
Tube plates: Material S Tensile strength 26.30 Thickness 23/32"
Mean pitch of stay tubes in nests 10.8" Pitch across wide water spaces 14" Working pressure 192
Girders to combustion chamber tops: Material S Tensile strength 28.32 Depth and thickness of girder 188
at centre 9 1/2 x 7/8 (2) Length as per Rule 34.62 Distance apart 8 1/2" No. and pitch of stays 21/32"
in each 3 at 9" Working pressure by Rules 204 Combustion chamber plates: Material S
Tensile strength 26.30 Thickness: Sides 2 1/32" Back 2 1/32" Top 2 1/32" Bottom 2 1/32"
Pitch of stays to ditto: Sides 9 x 9 1/4" Back 8 1/2 x 9" Top 8 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
Shipping Diameter 3" No. of threads per inch 6 Area supported by each stay 342.5"
Working pressure by Rules 196 Screw stays: Material S Tensile strength 26.30
Diameter 1 1/8" No. of threads per inch 9 Area supported by each stay 46 5/8"

Working pressure by Rules 198 Are the stays drilled at the outer ends 80 Margin stays: Diameter { At turned off part, 1 3/4"
or
Over threads 180.5
No. of threads per inch 9 Area supported by each stay 100.62" Working pressure by Rules 180.5
Tubes: Material Iron External diameter { Plain 3" Thickness 9/16" No. of threads per inch 9
Pitch of tubes 4 5/16" x 4 3/16" Working pressure by Rules 192 Manhole compensation: Size of opening 15 1/16"
shell plate 20 1/2" x 16 1/2" Section of compensating ring 2.11 x 2.4 x 1 3/16" No. of rivets and diameter of rivet holes 36 at 1 5/16"
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
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 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 23 inclusive for boilers been complied with yes

The foregoing is a correct description,
For JOHN G. KINCAID & COY, LIMITED

Manufacture

Dates { During progress of
work in shops - -
while
building { During erection on
board vessel - - -

See Machinery Report

Are the approved plans of boiler and superheater forwarded herewith
(If not state date of approval.) yes

Total No. of visits 1

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

This Boiler has been built and
Special Survey in accordance with the approved plans and the
workmanship & material are of good quality, it is now securely
fitted on board. This Report accomplishes the duty of the Machinery
(Duplicate of K35 Mr. Arthur Duke Greenock Rpt. No 18991.)

Survey Fee £
Charged on Machinery Rpt.
Traveling Expenses (if any) £

When applied for, 192

When received, 192

W. Gordon Muirhead

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW

9 APR 1929

Assigned See accompanying machinery
report.



© 2021

Lloyd's Register
Foundation