

REPORT ON BOILERS.

No. 83303

110 AUG 19 1955

Received at London Office

of writing Report 14 Feb 1955 When handed in at Local Office 23 1955 Port of Glasgow

Survey held at Shelva Date, First Survey 19th May 1954 Last Survey 16th February 1955
 (Number of Visits 13) Tons { Gross
 Net

at Bowling By whom built Scott & Sons Yard No. 404 When built 1955

Names made at _____ By whom made _____ Engine No. _____ When made _____

Work made at Glasgow By whom made Burley, Burley & Co. Ltd Boiler No. 53-2 When made 1955

As per Rule _____ Owners _____ Port belonging to _____

TUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Coburns, Ltd.

Heating Surface of Boilers 2982 sq. ft. Of Superheaters

for Register Book 2982 sq. ft. Is forced draught fitted Yes Coal or Oil fired Oil

and Description of Boilers One Single Ended Multitubular Working Pressure 200 lb. sq. in.

Tested by hydraulic pressure to 350 lb. sq. in. Date of test 1-2-55 No. of Certificate 24352 Can each boiler be worked separately

of Firegrate in each Boiler 68.9 sq. ft. No. and Description of safety valves to each boiler 1-2 1/2 high lift double spring

of each set of valves per boiler { per Rule 8.66 sq. in. as fitted 9.87 sq. in. Pressure to which they are adjusted _____ Are they fitted with easing gear _____

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

Least distance between boilers or uptakes and bunkers or woodwork _____ Is oil fuel carried in the double bottom under boilers _____

Least distance between shell of boiler and tank top plating _____ Is the bottom of the boiler insulated _____

Least internal dia. of boilers 16'-0" Length 12'-0" Shell plates: Material SM Steel Tensile strength 29-33 tons

Welded, state name of welding Firm ✓ Have all the requirements of the Rules for Class I vessels _____

Complied with Thickness 1 13/32 Are the shell plates welded or flanged Description of riveting: circ. seams { end DR. Lap inter

Seams TR. DBS Diameter of rivet holes in { circ. seams 1 7/16 long. seams 1 7/16 Pitch of rivets { 10" 4.278"

Percentage of strength of circ. end seams { plate 66.3 rivets 42.8 Percentage of strength of circ. intermediate seam { plate rivets

Percentage of strength of longitudinal joint { plate 85.6 rivets 85.8 combined 88.4

Material of butt straps { outer 1 1/16 inner 1 3/16 No. and Description of Furnaces in each Boiler 3 Dighton section

Material SM Steel Tensile strength 26-30 tons Smallest outside diameter 47 1/4"

of plain part { top bottom Thickness of plates 21/32 Description of longitudinal joint Welded

of stiffening rings on furnace or c.c. bottom

Material in steam space: Material SM Steel Tensile strength 26-30 tons Thickness 1 3/8 Pitch of stays 21 1/2 x 19"

of stays secured Screwed and double nuts

Material { front SM Steel back " " Tensile strength { 26-30 tons 26-30 tons Thickness { 27/32 3/4

Pitch of stay tubes in nests _____ Pitch across wide water spaces 13 1/2"

to combustion chamber tops: Material SM Steel Tensile strength 28-32 tons Depth and thickness of girder 2 plates 11 x 7/8

Length as per Rule 3'-4 17/32 Distance apart 8 1/4" center, 9 3/4" wings No. and pitch of stays 3 stays 10" pitch

Combustion chamber plates: Material SM Steel Tensile strength 26-30 tons Thickness: Sides 25/32 Back 23/32 Top 25/32 Bottom 25/32

of stays to ditto: Sides 10 x 9 3/4" Back 9 3/4 x 9" Top 10 x 9 3/4" Are stays fitted with nuts or riveted over Nuts

Material at bottom: Material SM Steel Tensile strength 26-30 tons

Lower back plate: Material SM Steel Tensile strength 26-30 tons Thickness 13/16

of stays at wide water space 13 1/2 x 9" Are stays fitted with nuts or riveted over Nuts

Material of stays: Material SM Steel Tensile strength 28-32 tons

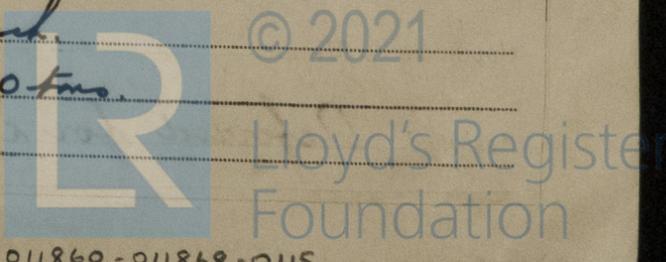
At body of stay 3 3/8 No. of threads per inch 6 threads per inch

Over threads 3 3/4 at hook end

Material of stays: Material SM Steel Tensile strength 26-30 tons

At turned off part _____ No. of threads per inch 9 threads per inch

Over threads 2 1/2, 1 7/8, 1 3/4



Are the stays drilled at the outer ends... *No.* Margin stays: Diameter { At turned off part, or Over threads... *2 1/8, 1 3/8.*

No. of threads per inch... *9 threads per inch.*

Tubes: Material... *Hot Rolled Mild Steel* External diameter { Plain... *2 1/2 and 2 3/16 of finished* Thickness... *9 W.G., 3/8, 5/16* No. of threads per inch... *9 threads*

Pitch of tubes... *3 3/4 x 3 3/4* Manhole compensation: Size of open shell plate... *21 x 17* Section of compensating ring... *19 1/2 x 1 13/32* No. of rivets and diameter of rivet holes... *40 - 1 7/16*

Outer row rivet pitch at ends... *10* Depth of flange if manhole flanged... *4 1/4* Steam Dome: Material... *None*

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 at ends... ✓

of rivets in outer row in dome connection to shell... ✓

Type of Superheater... *None* Manufacturers of { Tubes... ✓ Steel forgings... ✓ Steel castings... ✓

Number of elements... Material of tubes... Internal diameter and thickness of tubes... Can the superheater be shut off from the boiler... ✓

Material of headers... Tensile strength... Thickness... Is a safety valve fitted to every part of the superheater which can be shut off from the boiler... ✓

the boiler be worked separately... 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 drains fitted to free the superheater from water where necessary... ✓

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with... ✓

FOR BARCLAY CURLE & Co. Ltd.
The foregoing is a correct description,
Wm. G. Brownell
Chief Engineer

Dates of Survey while building { During progress of work in shops - - *1954. May 19. Jun. 11. 15. 23. 24.* Are the approved plans of boiler and superheater forwarded herewith... *Yes* (If not state date of approval.)
During erection on board vessel - - - *1955. Jan. 14. 21. 24. 26. 31. Feb. 1. 4. 16.*

Total No. of visits... *13*

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.) *The boiler has been constructed in accordance with the Rules and approved plans. Materials and workmanship have been found good. The boiler, in our opinion, will be eligible to be classed with the main machinery when efficiently installed on board the vessel.*

S.M.C. 2139/55
J.F. 17/3/55

Survey Fee £ 36: - : - } When applied for, 19.....
Travelling Expenses (if any) £ - : 13 : - } When received 19.....

A.B. Sinclair & W. W. Mants.
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute... *GLASGOW 8. MAR 1955*

Assigned... *Deferred for completion.*

