

REPORT ON BOILERS. No. 480.

Received at London Office JUN 11 1937

Date of writing Report 19 When handed in at Local Office 10th June. 1937. Port of SHEFFIELD.

No. in Survey held at Newark. Date, First Survey 26th May 1937 Last Survey 9th June 1937.
 Reg. Book on the Mrs. Oksywie. (Number of Visits 3.) Gross Tons Net Tons

Built at By whom built Yard No. When built
 Engines made at By whom made Engine No. When made
 Boilers made at Newark By whom made Abbott & Co (Newark) Ltd. Boiler No. When made 1937.
 Order of Clarkson Limbless Tube Boiler Co. Ltd. intended for. Port belonging to
 Crickton Vulcan No 748.

VERTICAL DONKEY BOILER.

Made at Newark By whom made Abbott & Co (Newark) Ltd. Boiler No. When made 1937. Where fixed
 Manufacturers of Steel Patent Shaft & Axletree Co. Ltd.
 Total Heating Surface of Boiler 90 sq. ft. Is forced draught fitted Coal or Oil fired Oil.
 No. and Description of Boilers One, Vertical Limbless Tube. Working pressure 3 atmos. = 43 lb.
 Tested by hydraulic pressure to 88 lbs sq. in. / 6 atmos. Date of test No. of Certificate 586.
 Area of Firegrate in each Boiler No. and Description of safety valves to each boiler Single 2" marine Type.
 Area of each set of valves per boiler { per rule 2.29 sq. in. Pressure to which they are adjusted Not adjusted Are they fitted with easing gear YES.
 State whether steam from main boilers can enter the donkey boiler Smallest distance between boiler or uptake and bunkers
 Is oil fuel carried in the double bottom under boiler Smallest distance between base of boiler and tank top plating
 Is the base of the boiler insulated Largest internal dia. of boiler 3'-0" Height 7'-6"
 Shell plates: Material S.M. Steel. Tensile strength 28/32 tons sq. in. Thickness 5/16".
 Are the shell plates welded or flanged No. Description of riveting: circ. seams { end S.R.L. long. seams S.R.L.
 Dia. of rivet holes in { circ. seams 3/4" Pitch of rivets { 1 13/16" Percentage of strength of circ. seams { plate 58.6 of Longitudinal joint { plate 59.7
 Working pressure of shell by rules 107 lbs sq. in. Thickness of butt straps { outer inner
 Shell Crown: Whether complete hemisphere, dished partial spherical, or flat Flat Material S.M. Steel.
 Tensile strength 26-30 tons sq. in. Thickness 1/2" Radius of crown 2 1/2" Working pressure by rules 101 lbs sq. in.
 Description of Furnace: Plain, spherical, or dished crown plain with dished crown Material S.M. Steel. Tensile strength 26-30 tons sq. in.
 Thickness 7/16" External diameter { top 2'-3 7/8" Length as per rule 2'-7 3/4" Working pressure by rules 89 lbs sq. in.
 Pitch of support stays circumferentially and vertically Are stays fitted with nuts or riveted over
 Diameter of stays over thread Radius of spherical or dished furnace crown 3'-0" Working pressure by rule 91 lbs sq. in.
 Thickness of Ogee Ring Diameter as per rule { D d Working pressure by rule
 Combustion Chamber: Material Tensile strength Thickness of top plate
 Radius if dished Working pressure by rule Thickness of back plate Diameter if circular
 Length as per rule Pitch of stays Are stays fitted with nuts or riveted over
 Diameter of stays over thread Working pressure of back plate by rules
 Tube Plates: Material { front back Tensile strength { Thickness { Mean pitch of stay tubes in nests
 If comprising shell, Dia. as per rule { front back Pitch in outer vertical rows { Dia. of tube holes FRONT { stay plain BACK { stay plain
 Is each alternate tube in outer vertical rows a stay tube Working pressure by rules { front back
 Girders to combustion chamber tops: Material Tensile strength
 Depth and thickness of girder at centre Length as per rule
 Distance apart No. and pitch of stays in each Working pressure by rule

Crown stays: Material *wt uptake.* Tensile strength ☒ Diameter { at body of stay, ☒ or over threads ☒
 No. of threads per inch ☒ Area supported by each stay ☒ Working pressure by rules ☒
Screw stays: Material ☒ Tensile strength ☒ Diameter { at turned off part, ☒ or over threads ☒ No. of threads per inch ☒
 Area supported by each stay ☒ Working pressure by rules ☒ Are the stays drilled at the outer ends ☒
Tubes: Material *S.M. Steel Laminable Tubes* External diameter { plain *1 3/4"* stay *1 5/8"* Thickness { *10 L.S.* *10 L.S.*
 No. of threads per inch ☒ Pitch of tubes ☒ Working pressure by rules *1 3/4 - 182 lbs - 1 5/8 -*
Manhole Compensation: Size of opening in shell plate ☒ Section of compensating ring ☒ No. of rivets and diam of rivet holes ☒ Outer row rivet pitch at ends ☒ Depth of flange if manhole flanged ☒
Uptake: External diameter *1' - 1 1/4"* Thickness of uptake plate *3/8"*
Cross Tubes: No. ☒ External diameters { ☒ Thickness of plates ☒
 Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with *Yes.*

The foregoing is a correct description.
 R. ABBOTT & CO. (NEWARK) LIMITED.
R. L. Abbott Manufacture
 DIRECTOR.

Dates of Survey { During progress of work in shops - *26-5-37. 31-5-37. 9-6-37.* Is the approved plan of boiler forwarded herewith *Yes.*
 while building { During erection on board vessel - ☒ (If not state date of approval.)
 Total No. of visits *3.*

Is this Boiler a duplicate of a previous case *Yes.* If so, state Vessel's name and Report No. *Sheffield Report 478/9 (29/4/37)*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *The boiler described above (complete with its mountings) has been constructed under Special Survey of tested materials. The finished boiler agrees with the approved plan & has been tested to 6 atmos. & 88 lbs. Hydraulic pressure with satisfactory results. For identification the boiler has been marked:-*

LLOYDS TEST.
NO 586
6 Atmos. T.P.
3 Atmos. W.P.
WK. 9-6-37.

Survey Fee £ *4 : 4* : When applied for, *19*
 Travelling Expenses (if any) £ *1 : 37* : When received, *25 Aug 1937*

Committee's Minute
 Assigned *Not for Classing*
Committee

R. L. Abbott
 Engineer Surveyor to Lloyd's Register of Shipping.