

REPORT ON BOILERS.

No. 106768

Received at London Office. 30 NOV 1949

Date of writing Report..... 24/11/49..... When handed in at Local Office..... 24/11/49..... Port of..... NEWCASTLE-ON-TYNE

No. in Survey held at..... Walker on Tyne..... Date, First Survey..... 4/5/48..... Last Survey..... 16/11/49..... 19

Reg. Book..... 35045..... on the..... M.V. BRITISH ARDOUR..... (Number of Visits..... 133.....) Gross..... 8616..... Tons Net..... 4982.....

Master..... Built at..... Walker on Tyne..... By whom built..... Swan Hunter & Wigham Rich Ltd..... Yard No..... 1866..... When built..... 1949

Engines made at..... Walker on Tyne..... By whom made..... Swan Hunter & Wigham Rich Ltd..... Engine No..... 1866..... When made..... 1949

Boilers made at..... "..... By whom made..... "..... Boiler No..... 1866..... When made..... 1949

Nominal Horse Power..... 334..... Owners..... British Tanker Co Ltd..... Port belonging to..... London

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel..... Colvilles Ltd..... (Letter for Record..... S.....)

Total Heating Surface of Boilers..... 4010 sq ft = 2660 sq ft..... Is forced draught fitted..... Yes..... Coal or Oil fired..... waste heat.....

No. and Description of Boilers..... Two single ended multitubular..... Working Pressure..... 150 lbs/sq in

Tested by hydraulic pressure to..... 275 lbs/sq in..... Date of test..... 1-4-49..... No. of Certificate..... S-1333..... Can each boiler be worked separately..... Yes.....

Area of Firegrate in each Boiler..... 7.76 sq ft..... No. and Description of safety valves to each boiler..... 2 Spring loaded Cockburns Improved H.L.

Area of each set of valves per boiler..... 9.8 sq ft..... Pressure to which they are adjusted..... 150 lbs/sq in..... Are they fitted with casing 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..... 2'-0"..... Is oil fuel carried in the double bottom under boilers..... No.....

Smallest distance between shell of boiler and tank top plating..... 3'-6"..... Is the bottom of the boiler insulated..... Yes.....

Largest internal dia. of boilers..... 12'-9"..... Length..... 11'-6"..... Shell plates: Material..... Steel..... Tensile strength..... 30-34 Tons/sq in

Thickness..... 27/32"..... Are the shell plates welded or flanged..... No..... Description of riveting: circ. seams { end..... D.R.L.J. inter..... rivets.....

long. seams..... T.R.D.B.S. ✓..... Diameter of rivet holes in { circ. seams..... 15/16" long. seams..... 7/8"..... Pitch of rivets { 2.94" 6.0"

Percentage of strength of circ. end seams { plate..... 68.18 rivets..... 42.56..... Percentage of strength of circ. intermediate seam { plate..... 85.41 rivets..... 85.36.....

Percentage of strength of longitudinal joint { rivets..... 87.90..... Working pressure of shell by Rules..... 152.1 lbs/sq in

Thickness of butt straps { outer..... 21/32" inner..... 25/32"..... No. and Description of Furnaces in each Boiler..... 2 Deighton Type

Material..... Steel..... Tensile strength..... 26-30 Tons/sq in..... Smallest outside diameter..... 3'-9 3/4"

Length of plain part { top..... bottom..... Thickness of plates { crown..... 1/2" bottom..... Description of longitudinal joint.....

Dimensions of stiffening rings on furnace or c.c. bottom..... Working pressure of furnace by Rules..... 17 1/2 x 5 1/2 Tons

End plates in steam space: Material..... Steel..... Tensile strength..... 26-30 Tons/sq in..... Thickness..... 1"..... Pitch of stays..... 18 1/8 x 14 1/4"

How are stays secured..... Screwed into both plates & nuts outside only..... Working pressure by Rules..... 4 1/8"

Tube plates: Material { front..... Steel back..... Steel..... Tensile strength { 26-30 Tons/sq in Thickness { 3/8"

Mean pitch of stay tubes in nests..... 9 3/8"..... Pitch across wide water spaces..... 13 1/2"..... Working pressure { front..... back.....

Girders to combustion chamber tops: Material..... Steel..... Tensile strength..... 28-32 Tons/sq in..... Depth and thickness of girder

at centre..... 8 1/4 x 1 1/4" = 2 x 7/8"..... Length as per Rule..... 2 - 8 1/2"..... Distance apart..... 8 1/8"..... No. and pitch of stays

in each..... 2 x 10"..... Working pressure by Rules..... Combustion chamber plates: Material..... Steel

Tensile strength..... 26-30 Tons/sq in..... Thickness: Sides..... 5/8" Back..... 23/32" Top..... 5/8" Bottom..... 5/8"

Pitch of stays to ditto: Sides..... 10 x 8 1/4" Back..... 9 1/4 x 8" Top..... 10 x 8 1/4"..... Are stays fitted with nuts or riveted over REMAINDER OF C.C. BACK STAYS RIVETED OVER INSIDE.

Working pressure by Rules..... Front plate at bottom: Material..... Steel..... Tensile strength..... 26-30 Tons/sq in

Thickness..... 7/8"..... Lower back plate: Material..... Steel..... Tensile strength..... 26-30 Tons/sq in..... Thickness..... 7/8"

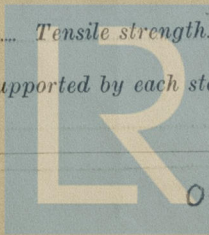
Pitch of stays at wide water space..... 15 x 7 1/2"..... Are stays fitted with nuts or riveted over..... No

Working pressure..... Main stays: Material..... Steel..... Tensile strength..... 28-32 Tons/sq in

Diameter { At body of stay..... 2 5/8" = 2 3/8" No. of threads per inch..... 6..... Area supported by each stay.....

Working pressure by Rules..... Screw stays: Material..... Steel..... Tensile strength..... 26-30 Tons/sq in

Diameter { At turned off part..... 1 1/2" No. of threads per inch..... 9..... Area supported by each stay.....



Lloyd's Register Foundation

002438-002446-0291

Working pressure by Rules. ✓ Are the stays drilled at the outer ends. No ✓ Margin stays: Diameter { At turned off part. ✓
No. of threads per inch. 9 ✓ Area supported by each stay. Working pressure by Rules. ✓
Tubes: Material Seamless Steel External diameter { Plain. 2 1/2" ✓ Thickness { 5/16" x 1/4" ✓ No. of threads per inch. 9 ✓
Pitch of tubes. 3 3/4" x 3 3/4" ✓ Working pressure by Rules. ✓ Manhole compensation: Size of opening in
shell plate. 20" x 16" ✓ Section of compensating ring. 27" x 20 1/2" ✓ No. of rivets and diameter of rivet holes. 38 x 1 1/8" ✓
Outer row rivet pitch at ends. 8" ✓ Depth of flange if manhole flanged. 2 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. ✓
Internal diameter. ✓ Working pressure by Rules. ✓ Thickness of crown. ✓ Rivets. ✓
stays. ✓ Inner radius of crown. ✓ Working pressure by Rules. ✓ No. and diameter of
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. None ✓

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. Working pressure as per
Rules. Pressure to which the safety valves are adjusted. Hydraulic test pressure
tubes. forgings and castings. and after assembly in place. Are drain cocks of
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 SWAN, HUNTER & WILSON

P. L. May Manufacturer

GENERAL MANAGER-ENGINEERING DEPT.

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

SEE REPORT U.B.

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

Total No. of visits. ✓

Is this Boiler a duplicate of a previous case. Yes ✓ If so, state Vessel's name and Report No. BRITISH EARL 104073

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

These boilers have been built under special survey in accordance with rule requirements & approved plans. Materials & workmanship are good. Hydraulic test satisfactory. They have been efficiently installed & fixed in vessel, examined under steam & the safety valves adjusted to the approved pressure.

Survey Fee ... £

Travelling Expenses (if any) £ See Mchg Report

When applied for, 19...

When received, 19...

J. H. Matthews

Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute

TUES. 20 DEC 1949

Assigned

In unit see J.E. Rpt.



© 2020

Lloyd's Register Foundation