

REPORT ON BOILERS.

No. 67128

26 MAY 1943

Received at London Office

14 AUG 1943

Date of writing Report

19

When handed in at Local Office

24.5.43

Port of Glasgow

No. in Reg. Book. Survey held at Glydebank Date, First Survey 28th May 1942 Last Survey 8th March 1943

on the

1/3 ASHANTIAN(Number of Visits 123)Gross 5123Tons 2855Master Newcastle Built at Newcastle By whom built Shipbuilding Corporation (Type B) Yard No. 14 When builtEngines made at Newcastle By whom made North Eastern Marine Engineering Co. Ltd Contract No. 3121 Engine No. 496 When madeBoilers made at Glydebank By whom made John Brown & Co. Ltd Boiler No. A.63 When madeNominal Horse Power Owners UNITED AFRICA CO LTD Port belonging toordered by A/MS/M.MULTITUBULAR BOILERS—MAIN, ~~AUXILIARY~~, OR ~~DONKEY~~.Manufacturers of Steel Bolwilles L^t (Letter for Record S)Total Heating Surface of Boilers 5920 Is forced draught fitted Yes Coal or Oil fired CoalNo. and Description of Boilers 2 - Multitubular Working Pressure 220Tested by hydraulic pressure to 380 Date of test 1-3-43 No. of Certificate 21839 Can each boiler be worked separatelyArea of Firegrate in each Boiler 66.64 No. and Description of safety valves to each boiler 2 - 3 1/4" S.K.Area of each set of valves per boiler {per Rule 15.74 as fitted 16.58" Pressure to which they are adjusted 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 Is oil fuel carried in the double bottom under boilers

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

Largest internal dia. of boilers 16' - 1 29/64" Length 12' - 0 15/16" Shell plates: Material S Tensile strength 29-33Thickness 1 35/64" Are the shell plates welded or flanged No Description of riveting: circ. seams {end J.R. inter. hillong. seams T.R.I.B.S. Diameter of rivet holes in {circ. seams 8.1 9/16" F 1 3/8" Pitch of rivets { 8.4 19/64" F 3.4" 10 13/16"Percentage of strength of circ. end seams {plate F60 B62.7 rivets 44.7 " 4.7 Percentage of strength of circ. intermediate seam {plate 85.5 rivets 85.26Percentage of strength of longitudinal joint {plate 85.5 rivets 85.26 combined 88.13 Working pressure of shell by Rules ✓Thickness of butt straps {outer 1 1/64" inner 1 19/64" No. and Description of Furnaces in each Boiler 4 - DeightonMaterial S Tensile strength 26-30 Smallest outside diameter 3' - 5 1/4"Length of plain part {top ✓ bottom ✓ Thickness of plates {crown 5/8" bottom 5/8" Description of longitudinal joint weldDimensions of stiffening rings on furnace or c.c. bottom None Working pressure of furnace by Rules ✓End plates in steam space: Material S Tensile strength 26-30 Thickness 1 13/32" Pitch of stays 20.5"How are stays secured J.N. Working pressure by Rules ✓Tube plates: Material {front S back S Tensile strength { 26-30 " " Thickness { 15/16" 25/32"Mean pitch of stay tubes in nests 10" x 9.61 Pitch across wide water spaces 14" Working pressure {front ✓ back ✓Girders to combustion chamber tops: Material S Tensile strength 26-32 Depth and thickness of girderat centre 10" x 1 3/4" Length as per Rule 30.6" Distance apart 9 3/8" No. and pitch of staysin each 3 - 8 3/4" Working pressure by Rules ✓ Combustion chamber plates: Material STensile strength 26-30 Thickness: Sides 25/32" Back 2 1/32" Top 25/32" Bottom 25/32"Pitch of stays to ditto: Sides 8 3/4" x 9 3/8" Back 8 1/2" x 8" Top 9 3/8" x 8 3/4" Are stays fitted with nuts or riveted over nutsWorking pressure by Rules ✓ Front plate at bottom: Material S Tensile strength 26-30Thickness 15/16" Lower back plate: Material S Tensile strength 26-30 Thickness 53/64"Pitch of stays at wide water space 13 1/2" Are stays fitted with nuts or riveted over nutsWorking Pressure ✓ Main stays: Material S Tensile strength 28-32Diameter {At body of stay, 3 1/2" - 3 1/4" No. of threads per inch 6 Area supported by each stay ✓Working pressure by Rules ✓ Screw stays: Material S Tensile strength 26-30Diameter {At turned off part, 1 5/8", 1 3/4", 1 7/8", 2 1/4" No. of threads per inch 9 Area supported by each stay ✓

Working pressure by Rules ☒ Are the stays drilled at the outer ends *no* Margin stays: Diameter $\left\{ \begin{array}{l} \text{At turned off part,} \\ \text{or} \\ \text{Over threads} \end{array} \right. \frac{3}{4}"$
No. of threads per inch *9* Area supported by each stay ☒ Working pressure by Rules ☒
Tubes: Material *S* External diameter $\left\{ \begin{array}{l} \text{Plain} \\ \text{Stay} \end{array} \right. \frac{3}{4}"$ Thickness $\left\{ \begin{array}{l} 8 \text{ nc.} \\ \frac{1}{4}, \frac{5}{16}, \frac{3}{8}, \frac{7}{16} \end{array} \right.$ No. of threads per inch *9*
Pitch of tubes *4 1/8" x 4 3/16"* Working pressure by Rules ☒ Manhole compensation: Size of opening in
shell plate ☒ Section of compensating ring No. of rivets and diameter of rivet holes
Outer row rivet pitch at ends Depth of flange if manhole flanged Steam Dome: Material
Tensile strength Thickness of shell Description of longitudinal joint
Diameter of rivet holes Pitch of rivets Percentage of strength of joint $\left\{ \begin{array}{l} \text{Plate} \\ \text{Rivets} \end{array} \right.$
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 $\left\{ \begin{array}{l} \text{Tubes} \\ \text{Steel forgings} \\ \text{Steel castings} \end{array} \right.$
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 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

John Brown & Company Limited.
The foregoing is a correct description,

Manufacturer.

Dates of Survey $\left\{ \begin{array}{l} \text{During progress of} \\ \text{work in shops} - - \end{array} \right.$ *1942 May 28 Jun 1, 4, 5, 10, 11, 18, 22, 24, 25, 26, 27, 28, 29, 30, 31, 1943 Jan 4, 5, 6, 7, 11, 12, 13, 14, 20, 21, 22, 25, 29, 29, Feb 3, 4, 5, 8, 10, 12, 13, 18, 19, 22, 25, 26, Mar 1, 8.*
while building $\left\{ \begin{array}{l} \text{During erection on} \\ \text{board vessel} - - \end{array} \right.$ *18-26, 26, 28, 31, Sep 3, 4, 8, 9, 10, 11, 21, 22, 23, 24, 25, 26, 27, Dec 1, 2, 4, 5, 1943 Jan 4, 5, 6, 7, 11, 12, 13, 14, 20, 21, 22, 25, 29, 29, Feb 3, 4, 5, 8, 10, 12, 13, 18, 19, 22, 25, 26, Mar 1, 8.*
Total No. of visits *123*

Is this Boiler a duplicate of a previous case *yes* If so, state Vessel's name and Report No. *"Sichui" Gls N° 63572.*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *These Boilers have been built under special survey in accordance with the approved plan and the Society's Rules and requirements the materials and workmanship are good.*

The requirements of the Ministry of Shipping specification have been carried out satisfactorily

These 2 Main Boilers have been fitted on board of ASHANTIAN, Ship Corp (Tyne Branch) Yard No 144

Note. These Boilers have been allocated to Fishgown

Blackmore Engine No 496, See Gls Rules 2-5-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100

Survey Fee ... £ *32 : 5 :*

When applied for, *25 MAY 1943*

Travelling Expenses (if any) £ *25 % add: m.s.p.m. 8-1-0*

When received, *19*

Jas. Cairns.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *GLASGOW 25 MAY 1943*

Assigned *Deferred for completion*

FRI. 19 SEP 1947

See F.E. mch. rpt.
Lloyd's Register Foundation