

REPORT ON BOILERS.

No. 34730

Received at London Office

Date of writing Report

19

When handed in at Local Office

19

Port of **SUNDERLAND**No. in Surrey held at
Reg. Book.

Date, First Survey

see Rpt 4

Last Survey

19

on the

"LAGOSIAN"

(Number of Visits)

Gross 5106.5
Tons Net 2908.34Built at **Sunderland**

By whom built

Shipbuilding Corp. (Leas Branch)

Yard No. 11

When built 1947.

Engines made at **Bolton**

By whom made

Rich Hargreaves & Co L^d

Engine No. C/56.

When made

Boilers made at **Sunderland**

By whom made

G. Blank L^d

Boiler No. 1361.

When made

Nominal Horse Power

Owners

United Africa Co L^d

Port belonging to

Liverpool

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Colville L^d

Total Heating Surface of Boilers

5914 sq. ft.

Is forced draught fitted

Yes

(Letter for Record

S.

No. and Description of Boilers

Two Single Ended multitubular return tubes

Coal or Oil fired

oil

Tested by hydraulic pressure to

380

Date of test

No. of Certificate

(B.C.)

Can each boiler be worked separately

Yes

Area of Firegrate in each Boiler

-

No. and Description of safety valves to each boiler

7.86 sq. in.

Area of each set of valves per boiler

as fitted 7.94 sq. in.

Pressure to which they are adjusted

220 lb.

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

no.

Smallest distance between shell of boiler and tank top plating

2'-0"

Is the bottom of the boiler insulated

Yes

Largest internal dia. of boilers

15'-11 1/16"

Length

12'-4 1/2"

Shell plates: Material

Steel

Tensile strength

29/33

Thickness

1 1/32"

Are the shell plates welded or flanged

no.

Description of riveting: circ. seams

end

D.R. lap

Bog. seams

T.R.D.B.S.

Diameter of rivet holes in

circ. seams

19/16"

long. seams

19/16"

Pitch of rivets

4 1/8"

inter

10 13/16"

Percentage of strength of circ. end seams

plate

62.1

rivets

48.4

Percentage of strength of circ. intermediate seam

plate

-

Percentage of strength of longitudinal joint

plate

85.5

rivets

86.0

combined

88.2

Thickness of butt strips

outer

1 1/16"

inner

1 5/16"

No. and Description of Furnaces in each Boiler

Shaw Corrugated (Leighton).

Material

Steel

Tensile strength

26/30

Smallest outside diameter

3'-11 1/2"

Length of plain part

top

-

bottom

-

Thickness of plates

crown

4 1/4"

bottom

-

Description of longitudinal joint

Weld.

Dimensions of stiffening rings on furnace or c.c. bottom

Plates in steam space: Material

Steel

Tensile strength

26/30

Thickness

1 1/2"

Pitch of stays

23' x 20 13/16"

Are stays secured

Welded auto.

Front plates: Material

front

Steel

Tensile strength

26/30

Thickness

15/16"

4/8"

Pitch of stay tubes in nests

9 3/4"

Pitch across wide water spaces

14' x 8 1/4"

Boilers to combustion chamber tops: Material

Steel

Tensile strength

29/33

Depth and thickness of girder

Centre

11 1/2" x 1" (2)

Length as per Rule

3'-10 1/2"

Distance apart

8 1/2"

No. and pitch of stays

Pitch

3 @ 11 1/8"

Combustion chamber plates: Material

Steel

Tensile strength

26/30

Thickness: Sides

5/16"

Back

25/32"

Top

1 1/16"

Cant. 25/32"

Bottom

25/32"

Cant. 25/32"

Cant. 25/32"

Pitch of stays to ditto: Sides

11 1/8" x 8 7/8"

Back

10 1/2" x 7 3/4"

Top

11 1/8" x 8 7/8"

Are stays fitted with nuts or riveted over

nuts.

Plate at bottom: Material

Steel

Tensile strength

26/30

Thickness

15/16"

Lower back plate: Material

Steel

Tensile strength

26/30

Thickness

3/32"

Pitch of stays at wide water space

15 3/8" x 10 1/2"

Are stays fitted with nuts or riveted over

nuts.

Shipped stays: Material

Steel

Tensile strength

26/30

At body of stay, or

3 1/2"

No. of threads per inch

6

Over threads

3 3/4"

At turned off part, or

1 3/4"

back

1 1/8"

Sides

No. of threads per inch

9

Over threads

1 3/4"

back

1 1/8"

Sides



© 2021

Lloyd's Register

Foundation

010705-010711-0088

Are the stays drilled at the outer ends *No.* ✓
Margin stays: Diameter { At turned off part or Over threads *2 1/8* ✓
No. of threads per inch *9* ✓
Tubes: Material *S.D. Steel* ✓ External diameter { Plain *3* ✓ Stay *3* ✓ Thickness { *8 lb* ✓ *3/8* ✓ *3/16* ✓ No. of threads per inch *9* ✓
Pitch of tubes *4 7/8" x 4 1/8"* ✓
shell plate (*In End 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 *4 7/16* ✓ 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 *-* Thickness of crown *-* No. and diameter of rivets *-*
stays *-* Inner radius of crown *-* Diameter of rivet holes and pitch *-*
How connected to shell *-* Size of doubling plate under dome *-*
of rivets in outer row in dome connection to shell *-*

Type of Superheater *N.E.M. Smoke tube* Manufacturers of { Tubes *Stewart & Lloyd* ✓ Steel forgings *Appleby Ironfoundry* ✓ Steel castings *-*
Number of elements *126* ✓ Material of tubes *S.D. Steel* ✓ Internal diameter and thickness of tubes *1 7/8" x 2 1/2"* ✓
Material of headers *Inged Steel* ✓ Tensile strength *26/30* ✓ Thickness *7/8"* ✓ Can the superheater be shut off *Ylo.* ✓
the boiler be worked separately *Ylo.* ✓ Is a safety valve fitted to every part of the superheater which can be shut off from the boiler *Ylo.* ✓
Area of each safety valve *3.14 sq. ft.* ✓ Are the safety valves fitted with easing gear *Ylo.* ✓
Pressure to which the safety valves are adjusted *220 lb/sq. in.* ✓ Hydraulic test pressure *440 lb/sq. in.* ✓
tubes *1500 lb/sq. in.* ✓ forgings and castings *600 lb/sq. in.* ✓ and after assembly in place *440 lb/sq. in.* ✓
valves fitted to free the superheater from water where necessary *Ylo.* ✓
Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with *Ylo.* ✓

GEORGE CLARK (1938) LTD.
The foregoing is a correct description,
A. J. Schaffer RESIDENT MANAGER

Dates { During progress of work in shops - - - } Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)
while building { During erection on board vessel - - - } Total No. of visits *-*

Is this Boiler a duplicate of a previous case *-* If so, state Vessel's name and Report No. *-*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
These boilers, constructed under Special Survey of British Corporation (whose Certificate is attached herewith) have been fitted with Smoke tube Superheater & securely fixed on board the vessel.
They have been fitted to burn oil fuel (F.P. above 150°F) & Safety valves of boiler & superheater adjusted under Steam as above. Section 20 of the rules has been complied with.

In recommendation please see Machinery Rpt.

Survey Fee *See Machinery Rpt.* When applied for, *19*
Travelling Expenses (if any) £ *See Machinery Rpt.* When received, *19*

J. H. K. Krasw.
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute *26 SEP 1947*
Assigned *See F.E. mch. rpt.*