

REPORT ON BOILERS.

No. 66573

Received at London Office

21 JAN 1943

- 5 MAY 1943

Date of writing Report

10

When handed in at Local Office

16. 1.

1043

Port of

Glasgow

No. in Survey held at
eg. Book.

Glasgow

Date, First Survey

1-6-1942

Last Survey

21-12-

1942.

(Number of Visits 22.)

Gross 501

Net 227

on the ADMIRALTY OIL FUEL LIGHTER "C 606"

Sketch by

Scams 5427

5427

Master

Built at

Hull.

By whom built

H. Scarr Ltd.

Yard No.

439

When built

1943

Engines made at

Birmingham

By whom made

Bain & Morcom

Engine No.

9960

When made

1

Boilers made at

Glasgow

By whom made

Messrs John Thompson (Marine) Ltd

Boiler No.

5189

When made

1942.

Nominal Horse Power

Owners

The Admiralty

Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Bolton & Co.

(Letter for Record (S) ✓)

Total Heating Surface of Boilers

1280

Is forced draught fitted

No.

Coal or Oil fired

Oil.

No. and Description of Boilers

1 - Marine

Working Pressure 200.

Tested by hydraulic pressure to

350.

Date of test 25-11-42

No. of Certificate 21273.

Can each boiler be worked separately

✓

Area of Firegrate in each Boiler

7.45

No. and Description of safety valves to each boiler

1 - 2 1/2" Safety Spring

Area of each set of valves per boiler

per Rule

as fitted

Pressure to which they are adjusted

203 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

18"

Is oil fuel carried in the double bottom under boilers

None

Smallest distance between shell of boiler and tank top plating

None

Is the bottom of the boiler insulated

No

Largest internal dia. of boilers

11'6"

Length

10'0"

Shell plates: Material

Steel

Tensile strength 29-33.

Thickness

1 1/2

Are the shell plates welded or flanged

No.

Description of riveting: circ. seams

end DR

Long. seams

T.R.D.B.S.

Diameter of rivet holes in

circ. seams

1 1/2

long. seams

1 1/2

Pitch of rivets

3.523

inter.

7 1/2

Percentage of strength of circ. end seams

plate

68.06

rivets

43.39

Percentage of strength of circ. intermediate seam

plate

85.6

rivets

91.73

Percentage of strength of longitudinal joint

plate

85.6

rivets

91.73

combined

89.5.

Working pressure of shell by Rules

202.

Thickness of butt straps

outer

2 5/8

inner

2 3/8

No. and Description of Furnaces in each Boiler

2 - Leighton

Material

Steel

Tensile strength

26-30.

Smallest outside diameter

3' 5 3/16

Length of plain part

top

bottom

Thickness of plates

crown

1 1/2

bottom

Description of longitudinal joint

Welded.

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

Working pressure of furnace by Rules

✓

End plates in steam space: Material

Steel

Tensile strength

26-30.

Thickness

1 1/2

Pitch of stays 14 1/2" x 14 1/2"

How are stays secured

Double Nut.

Working pressure by Rules

✓

Tube plates: Material

front

steel

back

Tensile strength

26-30.

Thickness

3/8

2 3/8

Mean pitch of stay tubes in nests

9.3"

Pitch across wide water spaces

13 1/2"

Working pressure

front

back

Girders to combustion chamber tops: Material

Steel

Tensile strength

28-32.

Depth and thickness of girder

At centre 2 @ 8' x 1"

Length as per Rule

2' 2 3/4"

Distance apart

8"

No. and pitch of stays

In each 2 - 9"

Working pressure by Rules

✓

Combustion chamber plates: Material

Steel

Tensile strength

26-30.

Thickness: Sides

1 1/6

Back

1 1/6

Top

3 1/2

Bottom

1 1/6

Pitch of stays to ditto: Sides

8 x 9

Back

8 1/2 x 8 1/2

Top

8 x 9

Are stays fitted with nuts or riveted over

1 1/6

Working pressure by Rules

Front plate at bottom: Material

Steel

Tensile strength

26-30.

Thickness

7/8"

Lower back plate: Material

Steel

Tensile strength

26-30.

Thickness

1 1/6

Pitch of stays at wide water space

13 3/4"

Are stays fitted with nuts or riveted over

1 1/6

Working Pressure

Main stays: Material

Steel

Tensile strength

28-32.

Diameter

At body of stay,

2 1/2"

or

Over threads

No. of threads per inch

6

Area supported by each stay

26-30.

Working pressure by Rules

Screw stays: Material

Steel

Tensile strength

26-30.

Diameter

At turned off part,

1 5/8"

or

Over threads

No. of threads per inch

9

Area supported by each stay

26-30.

Lloyd's Register
Foundation

Working pressure by Rules ☒ Are the stays drilled at the outer ends *No* Margin stays: Diameter ^{At turned off part} *1 7/8*
No. of threads per inch *9* Area supported by each stay ☒ Working pressure by Rules ☒
Tubes: Material *SP. Steel* External diameter ^{Plain} *3"* Thickness ^{8 1/8} *5/16 - 3/8* No. of threads per inch *9*
Pitch of tubes *4 1/2 x 4 1/8* Working pressure by Rules ☒ Manhole compensation: Size of opening in
shell plate *20 x 16* Section of compensating ring *15 x 1 1/2* No. of rivets and diameter of rivet holes *44 - 1 1/8*
Outer row rivet pitch at ends *8 1/2* Depth of flange if manhole flanged *3 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 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

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 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 *Yes*

The foregoing is a correct description,

R. M. Arthur

FOR JOHN THOMPSON (MARINE BOILERS) LTD. Manufacturer.

Dates of Survey ^{1942 Jun 1, 3 Aug 4 Sep 8 15, 17, 22, 25}
During progress of work in shops - -
while building ^{Oct 3, 7, 14, 16, 20, 24 Nov 10, 17, 18, 25 Dec 3, 6, 13}
During erection on board vessel - - -
Are the approved plans of boiler and superheater forwarded herewith *Yes*
(If not state date of approval.)
Total No. of visits *22*

Is this Boiler a duplicate of a previous case *Yes* If so, state Vessel's name and Report No. *C 604 (Highly)* Report *66312*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This boiler has been constructed under Special Survey in accordance with the approved plan and the Society's Rules. The material and workmanship are good. The boiler is intended for Messrs Richard Duxton & Co. Thorne for installation in Messrs H. Sear's Ltd. Yard. No 439.*

256
17/1/43 [The above boiler examined under steam, safety valves adjusted to 203 lb, accumulation test held, and afterwards examined on completion of tests. *h.s.s.*]

Survey Fee ... £ 8 : 10 :

Travelling Expenses (if any) £ : :

When applied for,

19 JAN 1943

When received,

19

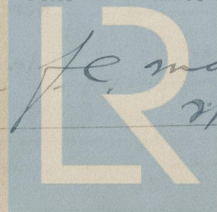
J. R. Dale

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *GLASGOW 19 JAN 1943*

Assigned *Referred for completion*

FRI. 14 MAY 1943



© 2021

Lloyd's Register Foundation