

# REPORT ON BOILERS.

No. 69097

Received at London Office 14 DEC 1944

Date of writing Report

19

When handed in at Local Office

11. 2. 10 44 Port of

Glasgow.

No. in Survey held at

Glasgow.

Date, First Survey

2. 12. 43

Last Survey

24. 10. 1944.

on the

Dumb Mooring Lighter MOORPOUT

(Number of Visits 32)

Gross Tons

Net

Master

Built at Great Yarmouth

By whom built Fellows & Co Ltd

Yard No. 354

When built

Engines made at

By whom made

Engine No.

When made

Boilers made at

Glasgow.

By whom made

John Thompson (Marine Boilers) Ltd

Boiler No. 5220

When made 1944.

Nominal Horse Power

Owners

Admiralty

Port belonging to

## MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Bohills Ltd

(Letter for Record (s))

Total Heating Surface of Boilers

2554 sq ft.

Is forced draught fitted

Yes

Coal or Oil fired

Coal.

No. and Description of Boilers

1- Marine

Working Pressure

35 lbs/sq in.

Tested by hydraulic pressure to

253

Date of test

12. 10. 44

No. of Certificate

21798

Can each boiler be worked separately

-

Area of Firegrate in each Boiler

57.75 sq ft.

No. and Description of safety valves to each boiler

1- 3 1/2" Dumb Spring

Area of each set of valves per boiler

per Rule

21.4 sq in.

Pressure to which they are adjusted

22 sq in.

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

14' 6"

Length

12' 0"

Shell plates: Material

Steel

Tensile strength

29-33 Tons

Thickness

3/32"

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

end

D.R.

long. seams

T.R.D.B.S.

Diameter of rivet holes in

circ. seams

1 1/8"

Pitch of rivets

3 1/2"

Percentage of strength of circ. end seams

plate

69.6

Percentage of strength of circ. intermediate seam

plate

-

Percentage of strength of longitudinal joint

plate

85.7

Working pressure of shell by Rules

140.2 lbs/sq in.

Thickness of butt straps

outer

1 1/8"

No. and Description of Furnaces in each Boiler

3- Deighton

Material

Steel

Tensile strength

26-30 Tons

Smallest outside diameter

3'-6 1/4"

Length of plain part

top

bottom

Thickness of plates

crown

3/16"

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 Tons

Thickness

1 1/8"

Pitch of stays

18" x 19"

How are stays secured

Double nuts

Working pressure by Rules

13 1/8"

Tube plates: Material

front

Steel

Tensile strength

26-30 Tons

Thickness

13 1/8"

Mean pitch of stay tubes in nests

9 3/8"

Pitch across wide water spaces

13"

Working pressure

front

back

Girders to combustion chamber tops: Material

Steel

Tensile strength

28-32 Tons

Depth and thickness of girder

at centre

2 (9" x 1 1/8")

Length as per Rule

2'-11 1/2"

Distance apart

11"

No. and pitch of stays

in each

3 - 8 1/4"

Working pressure by Rules

Combustion chamber plates: Material

Steel

Tensile strength

26-30 Tons

Thickness: Sides

5/8"

Back

9/16"

Top

5/8"

Bottom

5/8"

Pitch of stays to ditto: Sides

8 1/4" x 10 1/2"

Back

8 1/4" x 9 1/2"

Top

8 1/4" x 11"

Are stays fitted with nuts or riveted over

Yes

Working pressure by Rules

Front plate at bottom: Material

Steel

Tensile strength

26-30 Tons

Thickness

13 1/8"

Lower back plate: Material

Steel

Tensile strength

26-30 Tons

Thickness

13 1/8"

Pitch of stays at wide water space

13 1/2"

Are stays fitted with nuts or riveted over

Yes

Working Pressure

Main stays: Material

Steel

Tensile strength

28-32 Tons

Diameter

At body of stay,

2 1/4"

or

Over threads

No. of threads per inch

6

Area supported by each stay

Working pressure by Rules

Screw stays: Material

Steel

Tensile strength

26-30 Tons

Diameter

At turned off part,

1 1/2"

or

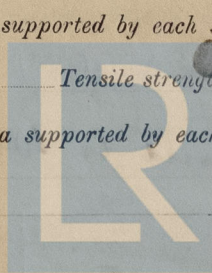
Over threads

No. of threads per inch

9

Area supported by each stay

-



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Working pressure by Rules — Are the stays drilled at the outer ends ☒ Margin stays: Diameter { At turned off part, 18" or Over threads 15 7/8"  
No. of threads per inch 9 ✓ Area supported by each stay — Working pressure by Rules —  
Tubes: Material SD Steel ✓ External diameter { Plain 2 3/4" Thickness { 10.58" No. of threads per inch 9 ✓  
Pitch of tubes 4" x 3 7/8" ✓ Working pressure by Rules — Manhole compensation: Size of opening in  
shell plate 16 1/2" x 20 1/2" Section of compensating ring 1' 3 1/2" x 1" No. of rivets and diameter of rivet holes 48 - 1 1/2" ✓  
Outer row rivet pitch at ends 7 1/2" ✓ Depth of flange if manhole flanged 3 1/2" ✓ Steam Dome: Material None.  
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 — 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 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 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

The foregoing is a correct description,

R. M. Arthur

FOR JOHN THOMPSON (MARINE BOILERS) LTD. Manufacturer.

Dates { During progress of work in shops - - - 1943 Dec 2 1944 Jan 25 Apr 5-11-17-20-24 May 3-10-16-23-30 Jun 1-14-27-29 July 4-6-13-27 Aug 3-10-18-22-29 -  
of Survey { While building { 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 32

Is this Boiler a duplicate of a previous case Yes. If so, state Vessel's name and Report No. Gls. Report N° 67304.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been constructed under Special Survey, in accordance with the Society's Rules, the approved plans and the Specification.

The material and workmanship are good.

The boiler is intended for Messrs. Fellows & Co Ltd, Great Yarmouth for installation in Dumb mooring light N° 354.

Survey Fee Spec. ... £ 17 : 5 : 4

Travelling Expenses (if any) £ : : 12. 15. 0

Supervision of specification Balance

When applied for, 12 DEC 1944  
When received, 24/12/44

M. Dale

Engineer Surveyor to Lloyd's Register of Shipping.

FRI 23 MAY 1947

Committee's Minute GLASGOW 12 DEC 1944

Assigned Transmit to Wokingham

For minute see  
see J.E. Kelly RLB Jp. 114938

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