

## REPORT ON BOILERS.

No. 101656

18 NOV 1943

Received at London Office

Date of writing Report 115 NOV 1943

When handed in at Local Office

115 NOV 1943

Port of

NEWCASTLE-ON-TYNE

No. in Survey held at  
Reg. Book.

Wallaseed.

Date, First Survey

28 January 1943

Last Survey

4 November 1943

(Number of Visits

12

Gross

9795

Tons

Net

5782

39912 on the SS 'THAMESFIELD'

Built at

Sunderland

By whom built

Sir J. Laing &amp; Sons Ltd

Yard No. 750

When built 1943

Engines made at

Wallaseed.

By whom made

H.E. Marine Eng Co (1938) Ltd

Engine No. 3066 When made 1943

Boilers made at

"

By whom made

"

Boiler No. 3012 When made 1943

Nominal Horse Power

Owners

Hunting &amp; Sons Ltd.

Port belonging to Newcastle

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

Manufacturers of Steel

Colvilles Ltd

(Letter for Record S

Total Heating Surface of Boilers

10020 sq ft

Is forced draught fitted

yes

Coal or Oil fired

oil

No. and Description of Boilers

3 SB

Working Pressure 220

Tested by hydraulic pressure to

380

Date of test

30.7.43

No. of Certificate

1060

Can each boiler be worked separately

yes

Area of Firegrate in each Boiler

✓

No. and Description of safety valves to each boiler

8.88

1 Double Improved high lift 2 1/2"

Area of each set of valves per boiler

per Rule

8.88

Pressure to which they are adjusted

225

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

yes

Smallest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

yes

Largest internal dia. of boilers

16'-2 3/8"

Length

12'-6"

Shell plates: Material

S

Tensile strength

30-34

Thickness

1 3/16"

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

end

DK

long. seams

TR DBS

Diameter of rivet holes in

circ. seams

1 9/16"

Pitch of rivets

4 3/8"

inter.

10 1/4"

Percentage of strength of circ. end seams

plate

62.1

rivets

47

Percentage of strength of circ. intermediate seam

plate

rivets

Percentage of strength of longitudinal joint

plate

84.75

rivets

88.7

combined

87.4

Thickness of butt straps

outer 1 7/32"

inner 1 9/32"

No. and Description of Furnaces in each Boiler

3 Cf.

Material

S

Tensile strength

26-30

Smallest outside diameter

47 23/32"

Length of plain part

top

✓

bottom

Thickness of plates

crown

47/64"

bottom

Description of longitudinal joint

weld.

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

End plates in steam space: Material

S

Tensile strength

26-30

Thickness

1 13/32"

Pitch of stays 22 1/4 x 18 1/2"

How are stays secured

Double nuts

Tube plates: Material

front

S

back

Tensile strength

26-30

Thickness

15/16"

7/8"

Mean pitch of stay tubes in nests

8.7

Pitch across wide water spaces

14 1/2 x 7 1/4"

Girders to combustion chamber tops: Material

S

Tensile strength

29-33

Depth and thickness of girder

at centre

11 3/4 x 1" Double

Length as per Rule

46 1/2"

Distance apart

8 1/2 wing

9" Centre

No. and pitch of stays

in each

3 @ 11 1/8"

Combustion chamber plates: Material

S.

Tensile strength

26-30

Thickness: Sides

1 13/16"

Back

2 3/32"

Top

1 13/16"

Bottom

29/32"

Pitch of stays to ditto: Sides

11 1/8" x 8 1/2"

Back

9 3/4" x 8"

Top

11 1/8" x 9"

Are stays fitted with nuts or riveted over

nuts

Front plate at bottom: Material

S

Tensile strength

26-30

Thickness

15/16"

Lower back plate: Material

S

Tensile strength

26-30

Thickness

15/16"

Pitch of stays at wide water space

15 1/8" x 8"

Are stays fitted with nuts or riveted over

nuts

Main stays: Material

S

Tensile strength

28-32

Diameter

At body of stay,

3 1/4" &amp; 3 1/2"

or

Over threads

No. of threads per inch

6

Screw stays: Material

S

Tensile strength

26-30

Diameter

At turned off part,

1 3/4" &amp; 2"

or

Over threads

No. of threads per inch

9



Are the stays drilled at the outer ends no Margin stays: Diameter { At turned off part, or Over threads 2" x 2 1/8"  
No. of threads per inch 9  
Tubes: Material L.W. Steel External diameter { Plain 2 1/2 Thickness { 8 W.G. No. of threads per inch 9  
Stay 2 1/2 7/16 3/8 x 7/16  
Pitch of tubes 4" x 3 7/8 Manhole compensation: Size of opening in  
shell plate none 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 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 Thickness of crown No. and diameter of  
stays Inner radius of crown  
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 H.E.M. Combustion Chamber

Manufacturers of { Tubes Stewarts & Lloyds  
Steel forgings Readers  
Steel castings Stewarts & Lloyds  
Number of elements 36 Material of tubes S.D. Steel Internal diameter and thickness of tubes 1.273 x 7 W.G.  
Material of headers SD Steel Tensile strength 26-28 Thickness 1/4 Can the superheater be shut off and  
the boiler be worked separately no Is a safety valve fitted to every part of the superheater which can be shut off from the boiler yes  
Area of each safety valve 3 1/4 Are the safety valves fitted with easing gear yes  
Pressure to which the safety valves are adjusted 225 lbs. Hydraulic test pressure:  
tubes 1500 forgings and castings 660 and after assembly in place 440 Are drain cocks or  
valves fitted to free the superheater from water where necessary yes

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with yes

THE NORTH LONDON MARINE ENGINEERS' SOCIETY

John Neill

Manufacturer.

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

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

Total No. of visits

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

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) these boilers & superheaters have been constructed under Special Survey in accordance with the approved Plans & the Requirements of the Rules.  
The materials & workmanship are good & the boilers & superheaters proved sound & tight under hydraulic test & satisfactory under steam

Survey Fee ... £  
Travelling Expenses (if any) £

See Mch Rpt.

When applied for, 19  
When received, 19

R. C. Moffitt  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUES. 30 NOV 1940

Assigned

see minute on J.E. Rpt.



© 2021

Lloyd's Register  
Foundation