

# REPORT ON BOILERS.

No. 25836

JUL 30 1937

Received at London Office

Date of writing Report

192

When handed in at Local Office

192

Port of ROTTERDAM.

No. in Survey held at

Rotterdam

Date, First Survey 13/7/37

Last Survey 23/7/37

on the S/s "MOUNT ATHOS"

(Number of Visits 3)

Gross Tons  
Net

ster

Built at

By whom built

Yard No.

When built

ines made at

By whom made

Engine No.

When made

rs made at

Sunderland

By whom made

N.E. Mar. Eng. Co. Ltd.

Boiler No.

When made

nal Horse Power

50

Owners

Port belonging to

## LTITUBULAR BOILERS ~~MAIN, AUXILIARY, OR DONKEY.~~

ufacturers of Steel

(Letter for Record

1 Heating Surface of Boilers

749 sq. ft.

Is forced draught fitted

No

Coal or Oil fired

Coal

and Description of Boilers

One single-ended Scotch type

Working Pressure

90 lb/sq. in.

ed by hydraulic pressure to

180 lb/sq. in.

Date of test

21/7/37

No. of Certificate

Can each boiler be worked separately

of Firegrate in each Boiler

No. and Description of safety valves to each boiler

2 at 3 1/4"  $\phi$  Spring-loaded

of each set of valves per boiler

per Rule

8.9 sq. in.

as fitted

Pressure to which they are adjusted

90 lb/sq. in.

Are they fitted with easing gear

Yes

se of donkey boilers, state whether steam from main boilers can enter the donkey boiler

No

lest distance between boilers or uptakes and bunkers or woodwork

as with original donkey boilers

Is oil fuel carried in the double bottom under boilers

No

lest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

Yes

est internal dia. of boilers

9' 10 15/16"

Length

90' ext.

Shell plates: Material

Steel

Tensile strength

28-32 tons/sq. in.

ness

17/32"

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

end

D.R. Lap.

seams

Double-riveted lap

Diameter of rivet holes in

circ. seams

27/32"

long. seams

Pitch of rivets

3 7/16"

centage of strength of circ. end seams

plate

74.0%

rivets

56.7%

Percentage of strength of circ. intermediate seam

plate

73.6%

rivets

86.7%

centage of strength of longitudinal joint

plate

73.6%

rivets

86.7%

combined

Working pressure of shell by Rules

92 lb/sq. in.

ness of butt straps

outer

inner

No. and Description of Furnaces in each Boiler

2 - Beighton section

rial

Steel

Tensile strength

26-30 tons/sq. in.

Smallest outside diameter

2' 8 1/4"

th of plain part

top

10 1/2"

Thickness of plates

crown

3/8"

bottom

Description of longitudinal joint

Welded

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

Working pressure of furnace by Rules

164 lb/sq. in.

plates in steam space: Material

Steel

Tensile strength

26-30 tons/sq. in.

Thickness

27/32"

Pitch of stays

18" x 15 1/2"

are stays secured

Nuts inside, nuts + washers outside

Working pressure by Rules

98 lb/sq. in.

plates: Material

front

back

Steel

Tensile strength

26-30 tons/sq. in.

Thickness

27/32"

1 1/16"

pitch of stay tubes in nests

13 1/2" x 11 1/4"

Pitch across wide water spaces

14"

Working pressure

front 91.5 lb/sq. in.

back 107 lb/sq. in.

ers to combustion chamber tops: Material

Steel

Tensile strength

28-32 tons/sq. in.

Depth and thickness of girder

entre

7" x 9"

Length as per Rule

28-28"

Distance apart

9"

No. and pitch of stays

ch

2 - 9"

Working pressure by Rules

148 lb/sq. in.

Combustion chamber plates: Material

Steel

ile strength

26-30 tons/sq. in.

Thickness: Sides

17/32"

Back

17/32"

Top

17/32"

Bottom

3/4"

ch of stays to ditto: Sides

9" x 10 3/4"

Back

9 1/2" x 11 1/8"

Top

9" x 9"

Are stays fitted with nuts or riveted over

Nuts

rking pressure by Rules

90 lb/sq. in. (min.)

Front plate at bottom: Material

Steel

Tensile strength

26-30 tons/sq. in.

ckness

27/32"

Lower back plate: Material

Steel

Tensile strength

26-30 tons/sq. in.

Thickness

27/32"

ch of stays at wide water space

9 1/2" x 16"

Are stays fitted with nuts or riveted over

Nuts

rking Pressure

155 lb/sq. in. (Back)

Main stays: Material

Steel

Tensile strength

28-32 tons/sq. in.

meter

At body of stay,

or

Over threads

2 1/4"

No. of threads per inch

6

Area supported by each stay

18" x 15 1/2"

rking pressure by Rules

124 lb/sq. in.

Screw stays: Material

Steel

Tensile strength

26-30 tons/sq. in.

meter

At turned off part,

or

Over threads

1 1/2"

No. of threads per inch

9

Area supported by each stay

9 1/2" x 11 1/8"



Working pressure by Rules  $118\frac{1}{2}/0$  Are the stays drilled at the outer ends *No* Margin stays: Diameter  $\left\{ \begin{array}{l} \text{At turned off part,} \\ \text{or} \\ \text{Over threads} \end{array} \right. 1\frac{5}{8}"$

No. of threads per inch *9* Area supported by each stay  $13.56" \times 9\frac{1}{2}"$  Working pressure by Rules  $118\frac{1}{2}/0$

Tubes: Material *Wrought Iron* External diameter  $\left\{ \begin{array}{l} \text{Plain} \\ \text{Stay} \end{array} \right. 3\frac{1}{4}"$  Thickness  $\left\{ \begin{array}{l} \text{9 w.g.} \\ \text{5/16" \& 1/4"} \end{array} \right.$  No. of threads per inch *9*

Pitch of tubes  $4\frac{1}{2}" \times 4\frac{1}{2}"$  Working pressure by Rules  $137\frac{1}{2}/0$  Manhole compensation: Size of open shell plate  $19\frac{1}{2}" \times 15\frac{1}{2}"$  Section of compensating ring  $18" \times 3\frac{3}{4}"$  No. of rivets and diameter of rivet holes  $32 \times \frac{27}{32}"$

Outer row rivet pitch at ends  $4\frac{1}{2}"$  Depth of flange if manhole flanged *3"* 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 diam stays Inner radius of crown Working pressure by Rules

How connected to shell Size of doubling plate under dome Diameter of rivet holes and of rivets in outer row in dome connection to shell

Type of Superheater Manufacturers of  $\left\{ \begin{array}{l} \text{Tubes} \\ \text{Steel castings} \end{array} \right.$

Number of elements Material of tubes Internal diameter and thickness of tubes

Material of headers Tensile strength Thickness Can the superheater be shut 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 Rules Pressure to which the safety valves are adjusted Hydraulic test pressure tubes castings and after assembly in place Are drain cocks or valves to free the superheater from water where necessary

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with *Yes*

The foregoing is a correct description,

Manufa

Dates of Survey  $\left\{ \begin{array}{l} \text{During progress of} \\ \text{work in shops - -} \\ \text{while} \\ \text{building} \end{array} \right. \left\{ \begin{array}{l} \text{During erection on} \\ \text{board vessel - - -} \end{array} \right.$

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

Total No. of visits

# GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

This boiler has been examined internally & externally, with all mounting safety valves, manholes, doors & fastenings, & all found in good condition. The scantlings have been checked with the approved plans & found to agree. The boiler has been hydrostatically tested to  $180\text{ lb/p}^2$  & found tight. Identification marks on boiler checked with B.C. certificate - enclosed herewith - found to agree.

Survey Fee ... *£60:-* : When applied for, *29.7.1927*

Travelling Expenses (if any) *£* : When received, *1927*

*E.H. Knowles.*

Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute *FRI 18 AUG 1927*

Assigned See other

*Ref. No. 25836*



© 2020

Lloyd's Register Foundation