

Identification  
Marks below.

Rpt. 5a.

# REPORT ON BOILERS.

Sl. No. 34560

Run No. 103944

Date of writing Report

10

When handed in at Local Office

12 SEP 1946

Received at London Office

13 SEP 1946

Port of

NEWCASTLE-ON-TYNE

No. in  
Reg. Book  
SUPPLEMENT

Survey held at

Wallsend on Tyne

Date, First Survey

28<sup>th</sup> JUNE, 1946

Last Survey

3<sup>rd</sup> SEPTEMBER, 1946

1946

on the

Motor Tanker

"BRITISH ROSE"

(Number of Visits)

Gross 6160

Net 3390

Master

Built at SUNDERLAND.

By whom built

J. L. THOMPSON & SONS. LTD.

Yard No.

646. When built 1946

By whom made

N. E. Mar. Eng. Co. (1938) Ltd.

Engine No.

3133. When made 1946

By whom made

ditto.

Boilers No.

3133. When made 1946

Nominal Horse Power  
of Boilers

267.

Owners

British Tanker Co. Ltd.

Port belonging to

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

Manufacturers of Steel

Plates by Appleby & Frodingham  
Bars "The Steel Company of Scotland."

Total Heating Surface of Boilers

4004 sq. ft. 4044

Is forced draught fitted

Yes.

(Letter for Record

S.

No. and Description of Boilers

2. Single Ended.

Coal or Oil fired

oil fuel or  
exh. waste gas.

Working Pressure

150 lbs./sq. in.

Tested by hydraulic pressure to

275 lbs.

Date of test

13-6-46

No. of Certificate

N°1208.

Can each boiler be worked separately

Yes.

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler

2 of 3 1/2" dia. GRANT'S. Ord. Spring loaded.

Area of each set of valves per boiler

per Rule 15.32 sq. in.

as fitted 16.59 "

Pressure to which they are adjusted

150 lbs./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

No main Boilers.

Smallest distance between boilers or uptakes and bunkers or woodwork

NONE.

Is oil fuel carried in the double bottom under boilers

No.

Smallest distance between shell of boiler and tank top plating

Yes (TWEEN ON.)

Is the bottom of the boiler insulated

Yes

Largest internal dia. of boilers

12'-10 3/16"

Length

11'-6"

Shell plates: Material

STEEL.

Tensile strength

29-33 tons.

Thickness

29/32"

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

end Double rivet

long. seams

T.R. Skt butt straps

Diameter of rivet holes in

circ. seams 1 1/8"

long. seams 1 1/16"

Pitch of rivets

3 1/4"

Percentage of strength of circ. end seams

plate 65.5

rivets 53.4

Percentage of strength of circ. intermediate seam

plate

rivets

Percentage of strength of longitudinal joint

plate 84.8

rivets 103.8

combined 90.5

Working pressure of shell by Rules

156 lbs.

Thickness of butt straps

outer 3/4"

inner 7/8"

No. and Description of Furnaces in each Boiler

2 C.f. (Deighton type)

Material

Steel

Tensile strength

26-30 tons

Smallest outside diameter

3'-8 3/16"

Length of plain part

top

bottom

Thickness of plates

crown 15/32"

bottom 1/32"

Description of longitudinal joint

Fire weld.

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

Working pressure of furnace by Rules

Yes

End plates in steam space: Material

Stl.

Tensile strength

26-30 tons

Thickness

1 3/8"

Pitch of stays

30" x 16"

How are stays secured

Nutted inside & outside.

Working pressure by Rules

Yes

Tube plates: Material

front Stl.

back Stl.

Tensile strength

26-30 tons

Thickness

front 27/32"

back 3/4"

Mean pitch of stay tubes in nests

9 3/8"

Pitch across wide water spaces

14 1/2"

Working pressure

front 182 lbs./sq. in.

back 227 lbs./sq. in.

Girders to combustion chamber tops: Material

Stl.

Tensile strength

29 1/2 33 tons

Depth and thickness of girder

at centre

9" x 3 1/4" x two.

Length as per Rule

2'-10"

Distance apart

10 3/4"

No. and pitch of stays

in each

2 at 10 3/4"

Working pressure by Rules

176 lbs.

Combustion chamber plates: Material

Stl.

Tensile strength

26-30 tons

Thickness: Sides

3/4"

Back

3/4"

Top

3/4"

Bottom

3/4"

Pitch of stays to ditto: Sides

10 3/4" x 7 1/2"

Back

10 3/4" x 7 1/2"

Top

10 3/4" x 10 3/4"

Are stays fitted with nuts or riveted over

marginal & top plate

are NUTTED.

Remainder - riveted over.

Working pressure by Rules

154 lbs.

Front plate at bottom: Material

Stl.

Tensile strength

26-30 tons

Thickness

27/32"

Lower back plate: Material

Stl.

Tensile strength

26-30 tons

Thickness

13/16"

Pitch of stays at wide water space

14 1/2"

Are stays fitted with nuts or riveted over

marginal are NUTTED.

Remainder "riveted over.

Working Pressure

201 lbs.

Main stays: Material

Stl.

Tensile strength

28-32 tons

Diameter

At body of stay, 3"

Over threads 3 1/4"

No. of threads per inch

6.

Area supported by each stay

Working pressure by Rules

163.5 lbs.

Screw stays: Material

Stl.

Tensile strength

26-30 tons

Diameter

At turned off part, 1 1/2"

Over threads 1 1/2"

No. of threads per inch

9.

Area supported by each stay

Working pressure by Rules

163.5 lbs.

Screw stays: Material

Stl.

Tensile strength

26-30 tons

Diameter

At turned off part, 1 1/2"

Over threads 1 1/2"

No. of threads per inch

9.

Area supported by each stay

CONTINUED OVER.

002449-002456-0084



Working pressure by Rules 156<sup>th</sup>. Are the stays drilled at the outer ends No Margin stays: Diameter { At turned off part, 15/8" + 1 3/4" or Over threads }  
No. of threads per inch 9. Area supported by each stay ✓ Working pressure by Rules 160<sup>th</sup>.  
Tubes: Material S.D. steel External diameter { Plain 2 1/2" Stay } Thickness { 10. W.F. 5/16", 3/8" } No. of threads per inch 9. ✓  
Pitch of tubes 3 3/4" x 3 3/4" Working pressure by Rules ✓ Manhole compensation: Size of opening in shell 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 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 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 NIL.  
Number of elements Material of tubes Manufacturers of Tubes { Steel forgings Steel castings }  
Material of headers Tensile strength Thickness Internal diameter and thickness of tubes  
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 casing gear Working pressure as per Rules  
Pressure to which the safety valves are adjusted Hydraulic test pressure: 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 NORTH EASTERN MARINE ENGINEERING CO. (1938) LTD.

The foregoing is a correct description,

DIRECTOR & RESIDENT MANAGER, Manufacturer.

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

PLEASE SEE MACHINERY REPORT 48.

Are the approved plans of boiler and superheater forwarded herewith 28/9/45. (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. Furness Yard No 390 NEM. (R-W) BLR 2764. HWR Rpt 103881.

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

These 2 Donkey Boilers have been constructed and fitted on board in accordance with the approved plan and the Society's Rules, and the materials and workmanship are good.

The Vessel has been towed back to the builders yard at Sunderland for completion of fitting out. The S.V.s of these Boilers require to be adjusted under steam.

See also Machy Rpt 48.

Survey Fee £ 25: 17: Travelling Expenses (if any) £ See Rpt 48.

When applied for, 19 When received, 19

12 SEP 1946

A. Watt.

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 22 NOV 1946

Assigned See F.E. nchy. nph.



© 2020

Lloyd's Register Foundation

Rpt. 13.

Date of writing R

No. in St Reg. Boo 88852

Built at

Owners

Electrical In

Is vessel fi

Have plans be

Heating

has the gover

trip switch as

if not compo

arranged to r

neg

test for mach

of the genera

on Tairick

near unprot

injury and d

contact

are they in a

and oil

material is u

semi-insulat

Is the constr

to pilot and

side of switch

for equ

devices

and for each

double

Are compar

ammeters

equaliser con

Switches,

per Rule

protection de

did they op

Cables, are

state maxim

square inch a