

REPORT ON BOILERS.

No. 101186

Received at London Office

72 APR 1943

Date of writing Report

19

When handed in at Local Office

14. 4. 1943

Port of

NEWCASTLE-ON-TYNE

No. in Survey held at
Reg. Book.

Newcastle on Tyne

Date, First Survey

17 June 1942

Last Survey

8 April

19 43

on the

M.V. "BRITISH RESPECT."

(Number of Visits)

Tons

Gross 8479

Net 4967

Built at Newcastle

By whom built Swan, Hunter & Wigham Richardson

Yard No. 1724 When built 1943

Engines made at ditto

By whom made

ditto

Engine No. 1726 When made "

Boilers made at ditto

By whom made

ditto

Boiler No. 1724 When made "

Nominal Horse Power 235.

Owners British Tanker Co. Ltd

Port belonging to London

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

Manufacturers of Steel The Steel Company of Scotland

(Letter for Record

S.

Total Heating Surface of Boilers 3530 sq ft

Is forced draught fitted Yes

Coal or Oil fired

oil fired

No. and Description of Boilers Two Single ended

Working Pressure

150 lb

Tested by hydraulic pressure to 275 Date of test 6/2/43 No. of Certificate 1032

Can each boiler be worked separately Yes

Area of Firegrate in each Boiler

oil fired

No. and Description of safety valves to each boiler

Two 2 1/2 dia Cockburns Imp High Lift

Area of each set of valves per boiler

per Rule 7.56 sq in

as fitted 7.95

Pressure to which they are adjusted 150 lb

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 Blm

Smallest distance between boilers or uptakes and bunkers or woodwork

fuel bunker

2' 3"

Is oil fuel carried in the

tank

Yes

Smallest distance between shell of boiler and tank top plating

2' 3"

Is the bottom of the boiler insulated

Yes

Largest internal dia. of boilers

12' 4 3/8"

Length 11' 0"

Shell plates: Material

Steel

Tensile strength

30 to 34 tons

Thickness 1 3/16"

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

end D.R. overlap

inter. none

long. seams T.R. Dbl butt straps

Diameter of rivet holes in

circ. seams 15/16

long. seams 7/8"

Pitch of rivets

3.08

6 3/16 (Rule max = 6 1/2)

Percentage of strength of circ. end seams

plate 69.59

rivets 42.24

Percentage of strength of circ. intermediate seam

plate none

rivets

Percentage of strength of longitudinal joint

plate 85.85

rivets 85.96

combined 88.91

Thickness of butt straps

outer 5/8"

inner 3/4"

No. and Description of Furnaces in each Boiler

Two Deighton Corrugated

Material Steel

Tensile strength

26 to 30 tons

Smallest outside diameter

3' 7 1/16"

Length of plain part

top

Thickness of plates

crown 15/32

bottom

Description of longitudinal joint

Fire welded

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

None

End plates in steam space: Material

Steel

Tensile strength

26 to 30 tons

Thickness

15/16

Pitch of stays 17 3/4" x 14 5/8"

How are stays secured Nuts inside & outside.

Tube plates: Material

front Steel

back

Tensile strength

26 to 30 tons

Thickness

15/16"

3/4"

Mean pitch of stay tubes in nests

7 1/2" x 11 1/4"

Pitch across wide water spaces

13 1/2"

Girders to combustion chamber tops: Material

Stl.

Tensile strength

28 to 32 tons

Depth and thickness of girder

at centre 7 3/4" x 5/8" x two

Length as per Rule

30 1/2"

Distance apart

9"

No. and pitch of stays

in each Two @ 9 3/8"

Combustion chamber plates: Material

Stl.

Tensile strength

26 to 30 tons

Thickness: Sides

5/8"

Back

3/4"

Top

5/8"

Bottom

5/8"

Pitch of stays to ditto: Sides

9 3/8" x 9"

Back

7 1/2" x 9"

Top

9 3/8" x 9"

Are stays fitted with nuts or riveted over

NOTED. both ends

Front plate at bottom: Material

Steel

Tensile strength

26 to 30 tons

Thickness

15/16"

Lower back plate: Material

Stl.

Tensile strength

26 to 30 tons

Thickness

15/16"

Pitch of stays at wide water space

13 1/2" x 9"

Are stays fitted with nuts or riveted over

with nuts

Main stays: Material

Steel

Tensile strength

28 to 32 tons

Diameter

At body of stay, 2 3/8"

Over threads

No. of threads per inch

6.

Screw stays: Material

Steel

Tensile strength

26 to 30 tons

Diameter

At body of stay, 1 1/2"

Over threads

No. of threads per inch

9.

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Conts P.T.O.

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Are the stays drilled at the outer ends No ✓ ✓ ✓
Margin stays: Diameter { At turned off part. 1 5/8" + 1 3/4"
Over threads
No. of threads per inch 9 ✓
Tubes: Material Wootton ✓ External diameter { Plain 2 1/2"
Stay
Thickness { 10 W.G. ✓
1/4" + 5/16" No. of threads per inch 9 ✓
Pitch of tubes 3 3/4" x 3 3/4" ✓ Manhole compensation: Size of opening in
shell plate 20" x 16" ✓ Section of compensating ring 17 1/2" x 13/16" plus flanging ✓ No. of rivets and diameter of rivet holes 38 g 1 1/8 dia ✓
Outer row rivet pitch at ends 8" ✓ Depth of flange if manhole/flanged 2 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 _____ 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 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 _____
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,
G. J. Tweedy Manufacturer.
28/5/42

Dates of Survey { During progress of work in shops - - -
while building { During erection on board vessel - - -
See Machy Rpt 46
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. British Character Two Rpt 100073.
(SH+HB Yards 1698)

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

These Donkey Boilers have been constructed under Special Survey in accordance with the Approved plans and the Society's Rules, and the materials and workmanship are good.
The Boilers have been efficiently fitted on board and tested under steam under working conditions with satisfactory results.
See also Machy Rpt 46.

Survey Fee ... £ See Machy Rpt 46
Travelling Expenses (if any) £
When applied for, 19
When received, 19

A. Watt.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 11 MAY 1943
Assigned See FR machy rpt