

REPORT ON BOILERS.

No. 102339

NEWCASTLE-ON-TYNE No. 102524

Received at London Office

14 SEP 1944

22 DEC 1944

of writing Report

19

When handed in at Local Office

19

Port of NEWCASTLE-ON-TYNE

in Survey held at

Wallsend, Newcastle

Date, First Survey

5 Jan 44

Last Survey

5 July 44

Book

on the

'NAVICELLA' (Motor Tanker)

(Number of Visits 23)

Gross 8255

Net 4765

at Newcastle

By whom built

Hawthorn, Leslie & Co Ld

Yard No. 663

When built 1944

Lines made at

"

By whom made

Hawthorn, Leslie & Co Ld

Engine No. 4003

When made 1944

ers made at

"

By whom made

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

Boiler No. 3073

When made 1944

inal Horse Power

277

Owners

Anglo-Saxon Petroleum Co Ld

Port belonging to

London

ULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

ufacturers of Steel

The Steel Company of Scotland

(Letter for Record

S.

l Heating Surface of Boilers

4160 sq. ft

Is forced draught fitted

Yes

Coal or Oil fired

Oil.

and Description of Boilers

2 D.B.

Working Pressure

180 lbs

ed by hydraulic pressure to

320 lbs

Date of test

3-7-44

No. of Certificate

1114

Can each boiler be worked separately

Yes

of Firegrate in each Boiler

No. and Description of safety valves to each boiler

Two - 2 1/2" Cockburns Imp High lift

of each set of valves per boiler

per Rule

8.0 sq. in

Pressure to which they are adjusted

180 lbs

Are they fitted with easing gear

Yes

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

Yes

llest distance between boilers or uptakes and bunkers or woodwork

Is oil fuel carried in the double bottom under boilers

No

llest distance between shell of boiler and tank top plating

Blks on flat in E. Run.

Is the bottom of the boiler insulated

Yes

est internal dia. of boilers

13'0"

Length

12'4"

Shell plates: Material

Steel

Tensile strength

29 & 33 tons

ickness

1 3/4

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

end

D.R.

seams

T.R. D.R. butt straps

Diameter of rivet holes in

circ. seams

1 1/8"

Pitch of rivets

3 1/4

7 13/16

centage of strength of circ. end seams

plate

65.4

rivets

46.3

Percentage of strength of circ. intermediate seam

plate

85.6

rivets

90.2

centage of strength of longitudinal joint

plate

85.6

rivets

90.2

combined

89.2

ickness of butt straps

outer

13/16

inner

15/16

No. and Description of Furnaces in each Boiler

2 c.f. masonry type

erial

S.

Tensile strength

26-30 tons

Smallest outside diameter

3'8 3/8"

gth of plain part

top

bottom

Thickness of plates

crown

9/16"

Description of longitudinal joint

fire weld.

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

Yes

plates in steam space: Material

S.

Tensile strength

26-30 tons

Thickness

1 9/32"

Pitch of stays

1'11" x 1'5"

are stays secured

Nuts inside & outside.

e plates: Material

front

back

S.

Tensile strength

26-30 tons

Thickness

29/32"

25/32"

n pitch of stay tubes in nests

9 7/8"

Pitch across wide water spaces

13 3/4" x 7 3/4"

lers to combustion chamber tops: Material

S.

Tensile strength

29-33 tons

Depth and thickness of girder

entre

10" x 27/32" dbl

Length as per Rule

3'1 33/64"

Distance apart

10 1/2"

No. and pitch of stays

ach

3 @ 9"

Combustion chamber plates: Material

S.

ile strength

26-30 tons

Thickness: Sides

45/64

Back

45/64

Top

45/64

Bottom

1"

h of stays to ditto: Sides

9" x 6 7/8"

Back

7 1/4" x 8 3/8"

Top

9" x 10 1/2"

Are stays fitted with nuts or riveted over

marginal-nutted others-riveted

nt plate at bottom: Material

S.

Tensile strength

26-30 tons

ickness

29/32"

Lower back plate: Material

S.

Tensile strength

26-30 tons

Thickness

7/8"

h of stays at wide water space

15" x 8 3/8"

Are stays fitted with nuts or riveted over

marginal with nuts others-riveted

a stays: Material

S.

Tensile strength

28-32 tons

meter

At body of stay,

3"

or

3 1/4"

Over threads

No. of threads per inch

6

w stays: Material

S.

Tensile strength

meter

At turned off part,

1 1/2"

or

1 1/2"

Over threads

No. of threads per inch

9

Conto P.T.O.

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Are the stays drilled at the outer ends No. ✓ Margin stays: Diameter { At turned off part, or Over threads 1 3/4" + 2" ✓
No. of threads per inch 9. ✓
Tubes: Material L.W. IRON External diameter { Plain 2 3/4" ✓ Stay 2 3/4" ✓ Thickness { 9/16" ✓ 5/16" ✓ No. of threads per inch 9. ✓
Pitch of tubes 4" x 3 7/8" ✓ Manhole compensation: Size of opening 34 of 1 1/2" ✓
shell plate 20 1/2" x 16 1/2" Section of compensating ring 8 1/2" x 1 1/8" No. of rivets and diameter of rivet holes 34 of 1 1/2" ✓
Outer row rivet pitch at ends 10 1/2" ✓ Depth of flange if manhole flanged 3 3/4" ✓ 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 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 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 _____
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 NORTH EASTERN MARINE ENGINEERING CO. (1938) LTD.
The foregoing is a correct description,
John Neill ✓ Manufactured by
DIRECTOR, 8/11/

Dates of Survey { During progress of work in shops - - - Jan. 5. 28 Mar. 18. 20 23. 28 Apr. 21. 25. 26. 28. May 5. 10. 25. June 1. 5. 6. 13. 19. 21. 22. 28. July 3. 5. Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) 8/11/
while building { During erection on board vessel - - - Total No. of visits 23.

Is this Boiler a duplicate of a previous case Yes ✓ If so, state Vessel's name and Report No. NEVERITA. NMC. RPT. NEME. BIRN 3051.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
These 2 Donkey Boilers have been constructed under special supervision in accordance with the approved plans & the Society's Rules, and the materials and workmanship are good.

Survey Fee £ 26-7-. When applied for, 13 SEP 1944
Travelling Expenses (if any) £ : : When received, 19

Aulatt.

Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute FRI. 5 JAN 1945
Assigned see minute
M. B. Macky Rpt.



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