

REPORT ON BOILERS.

No. 63500

FEB 27 1941

Received at London Office

Date of writing Report

When handed in at Local Office

25: 2: 19 41

Port of GLASGOW

No. in Reg. Book.

Survey held at Glasgow

Date, First Survey

18: 7: 40

Last Survey

11th Feb. 1941

on the S/S

"NASPRITE"

(Number of Visits)

Gross 965
Net 306

Built at

Glasgow

By whom built

Blythwood SB Co. Ltd.

Yard No. 65

When built 1941

Engines made at

-do-

By whom made

David Brown & Co. Ltd.

Engine No. 1067

When made 1941

Boilers made at

-do-

By whom made

-do-

Boiler No. 1067

When made 1941

Nominal Horse Power

162

Owners

The Admiralty

Port belonging to

London

MULTITUBULAR BOILERS - MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

The Steel Company of Scotland, Ltd.

(Letter for Record S)

Total Heating Surface of Boilers

2624 sq ft

Is forced draught fitted

Yes

Coal or Oil fired

Oil

No. and Description of Boilers

2 Single-ended

Working Pressure

190 lb.

Tested by hydraulic pressure to

335 lb.

Date of test

25-10-40

No. of Certificate

20660

Can each boiler be worked separately

Yes

Area of Firegrate in each Boiler

-

No. and Description of safety valves to each boiler

2-1 3/4" L.H.L.

Area of each set of valves per boiler

per Rule 40" as fitted 4.80"

Pressure to which they are adjusted

190 lb.

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

6'-6"

Is oil fuel carried in the double bottom under boilers

Yes

Smallest distance between shell of boiler and tank top plating

18"

Is the bottom of the boiler insulated

Yes

Largest internal dia. of boilers

11'-0"

Length

11'-6"

Shell plates: Material

steel

Tensile strength

29/33 tons

Thickness

15/16"

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

and inter.

long. seams

DBS TR

Diameter of rivet holes in

circ. seams 1 1/16" long. seams 1"

Pitch of rivets

2.78" 7 1/4"

Percentage of strength of circ. end seams

plate 61.8 rivets 53.9

Percentage of strength of circ. intermediate seam

plate rivets

Percentage of strength of longitudinal joint

plate 86.2 rivets 86 combined 89.5

Thickness of butt straps

outer 2 3/32" inner 2 7/32"

No. and Description of Furnaces in each Boiler

2 Straight

Material

steel

Tensile strength

26/30 tons

Smallest outside diameter

3'-2 1/32"

Length of plain part

top bottom

Thickness of plates

crown 33/64 bottom 1/4"

Description of longitudinal joint

welded

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

-

End plates in steam space: Material

steel

Tensile strength

26/30 tons

Thickness

15/16"

Pitch of stays

12" x 16"

How are stays secured

DN

Tube plates: Material

front back steel

Tensile strength

26/30 tons

Thickness

15/16" 3/4"

Mean pitch of stay tubes in nests

9.87"

Pitch across wide water spaces

13 3/4"

Girders to combustion chamber tops: Material

steel

Tensile strength

28/32 tons

Depth and thickness of girder

at centre

2 @ 6 1/2" x 7/8"

Length as per Rule

2'-4 9/16"

Distance apart

8 1/2"

No. and pitch of stays

in each

2 @ 9 1/4"

Combustion chamber plates: Material

steel

Tensile strength

26/30 tons

Thickness: Sides

1 1/16"

Back

1 1/16"

Top

1 1/16"

Bottom

1 1/16"

Pitch of stays to ditto: Sides

9 1/4" x 8 3/8"

Back

9" x 8 1/2"

Top

9 1/4" x 8 1/2"

Are stays fitted with nuts or riveted over

nuts

Front plate at bottom: Material

steel

Tensile strength

26/30 tons

Thickness

15/16"

Lower back plate: Material

steel

Tensile strength

26/30 tons

Thickness

15/16"

Pitch of stays at wide water space

13 1/2"

Are stays fitted with nuts or riveted over

nuts

Main stays: Material

steel

Tensile strength

28/32 tons

Diameter

At body of stay, 2 1/4" Over threads -

No. of threads per inch

6

Crew stays: Material

steel

Tensile strength

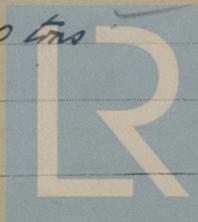
26/30 tons

Diameter

At turned off part, 1 5/8" Over threads -

No. of threads per inch

9



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Foundation

Are the stays drilled at the outer ends no

Margin stays: Diameter { At turned off part, ✓
or
Over threads 1 3/4"

No. of threads per inch 9

Tubes: Material Iron External diameter { Plain 2 3/4" ✓
Stay 2 3/4" ✓ Thickness { 9 W.G. ✓
5/16" + 3/8" No. of threads per inch 9

Pitch of tubes 4" x 3 7/8" Manhole compensation: Size of opening in shell plate 15 1/2" x 19 1/2" Section of compensating ring 6 1/4" x 1 5/16" No. of rivets and diameter of rivet holes 36 @ 1 1/4"

Outer row rivet pitch at ends 7 1/4" Depth of flange if manhole flanged 3" Steam Dome: Material Iron

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,
For David Rowan & Co. Ltd.
Arch. W. Grierson Manufacturer.

Dates of Survey { During progress of work in shops - - } Are the approved plans of boiler and superheater forwarded herewith Yes
{ while building } { During erection on board vessel - - - }
SEE ACCOMPANYING MACHINERY REPORT.
Total No. of visits _____

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

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been built under special survey in accordance with the Rules and approved plans, and the materials and workmanship are good. They have been satisfactorily installed in the vessel and the safety valves have been adjusted to the working pressure.

25/2/41

Survey Fee £ _____ When applied for, _____ 19
Travelling Expenses (if any) £ See memo. p. 1 : _____ When received, _____ 19

W. J. Brown
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW** 25 FEB 1941

Assigned _____

SEE ACCOMPANYING MACHINERY REPORT.



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