Rpt. 5a.

REPORT ON BOILERS. No. 55242.

Received at London Office   13 NOV 1948

Date of writing Report _____ 19   When handed in at Local Office 11 NOV 1948 19   Port of ___ HULL.

No. in Reg. Book.   Survey held at ___ HULL.   Date, First Survey 20·9·48 Last Survey 29 · 10 · 1948
(Number of Visits 19)

52369 on the S.S. "BALTRADER".   Tons { Gross 1846 / Net 990

Master ___ —   Built at Hamburg   By whom built Deutsche Werft A.G. Yard No. —   When built 1945

Engines made at Hamburg   By whom made Ottensener Eisenwerk A.G.   Engine No. —   When made 1945

Boilers made at —   By whom made —   Boiler No. —   When made —

Nominal Horse Power M.N. 318   Owners United Baltic Corporation Ltd.   Port belonging to London

S.13 Water tube and

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.
Combined

Manufacturers of Steel ___   (Letter for Record —)

Total Heating Surface of Boilers 5275 (blr.3660, Spt.1615)   Is forced draught fitted Yes   Coal or Oil fired coal

No. and Description of Boilers 2 Capus Type.   **Working Pressure** 216 lbs.

Tested by hydraulic pressure to —   Date of test —   No. of Certificate —   Can each boiler be worked separately Yes

Area of Firegrate in each Boiler 46.3 sq.ft. per boiler.   No. and Description of safety valves to each boiler 2 - Spring Loaded.

Area of each set of valves per boiler { per Rule — / as fitted 14 sq.in.   Pressure to which they are adjusted 225 lbs 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 or woodwork 11"   Is oil fuel carried in the double bottom under boilers No

Smallest distance between shell of boiler and tank top plating 21"   Is the bottom of the boiler insulated Yes

Largest internal dia. of boilers 12'9"   Length 13'0"   **Shell plates:** Material steel   Tensile strength —

Thickness 1.1/4"   Are the shell plates welded or flanged —   Description of riveting : circ. seams { end double riveted / inter.

long. seams Double butt strap. Treble riveted   Diameter of rivet holes in { circ. seams — / long. seams —   Pitch of rivets { 4½" 110% / 4½" 210%

Percentage of strength of circ. end seams { plate — / rivets —   Percentage of strength of circ. intermediate seam { plate — / rivets —

Percentage of strength of longitudinal joint { plate — / rivets — / combined —   Working pressure of shell by Rules

Thickness of butt straps { outer 1.1/4" / inner 1.1/4"   **No. and Description of Furnaces in each Boiler** 3 corrugated

Material steel   Tensile strength —   Smallest outside diameter 36.11/16"

Length of plain part { top — / bottom —   Thickness of plates { crown 5/8" / bottom 5/8"   Description of longitudinal joint welded.

Dimensions of stiffening rings on furnace or c.c. bottom none   Working pressure of furnace by Rules —

End plates in steam space : Material steel   Tensile strength —   Thickness 2.1/16"   Pitch of stays 17¼ x 16"

How are stays secured screwed with external nuts & washers.   Working pressure by Rules —

Tube plates : Material { front steel / back -do-   Tensile strength { — / —   Thickness { 1.1/16" / 1.1/16"

Mean pitch of stay tubes in nests 8¼" x 8¼"   Pitch across wide water spaces 14¼" 360%   Working pressure { front — / back —

Girders to combustion chamber tops : Material —   Tensile strength —   Depth and thickness of girder

at centre —   Length as per Rule —   Distance apart —   No. and pitch of stays

in each —   Working pressure by Rules —   **Combustion chamber plates :** Material —

Tensile strength —   Thickness : Sides —   Back —   Top —   Bottom —

Pitch of stays to ditto : Sides —   Back —   Top —   Are stays fitted with nuts or riveted over —

Working pressure by Rules —   **Front plate at bottom :** Material steel   Tensile strength —

Thickness 1.1/16"   **Lower back plate :** Material steel   Tensile strength —   Thickness 1 1/16"

Pitch of stays at wide water space —   Are stays fitted with nuts or riveted over —

Working Pressure —   **Main stays :** Material steel   Tensile strength —

Diameter { At body of stay. 3", 3.3/8" or / Over threads. 3.5/16", 3¼".   No. of threads per inch 6 & 9   Area supported by each stay —

Working pressure by Rules —   **Screw stays :** Material —   Tensile strength —

Diameter { At turned off part, or / Over threads.   No. of threads per inch —   Area supported by each stay —

Working pressure by Rules _____ Are the stays drilled at the outer ends ___ Margin stays: Diameter { At turned off part, - / or Over threads -

No. of threads per inch ___ Area supported by each stay ___ Plain 4½ Working pressure by Rules ___

Tubes: Material Steel ✓ External diameter { Plain 3" / Stay 3" Thickness { 5/16" ✓ / 3/8" No. of threads per inch 9 ✓

Pitch of tubes 4⅛" x 4⅛" ✓ Working pressure by Rules ___ Stay ___ **Manhole compensation:** Size of opening in

shell plate 12½" x 16½" ✓ Section of compensating ring 7½" x 1½" No. of rivets and diameter of rivet holes 26 - 1.7/16"

Outer row rivet pitch at ends 6¾" Depth of flange if manhole flanged ___ **Steam Dome:** Material steel

Tensile strength ___ Thickness of shell 5/8" Description of longitudinal joint ___

Diameter of rivet holes ✓ Pitch of rivets ___ Percentage of strength of joint { Plate ___ / Rivets ___

Internal diameter 2'6½" ✓ Working pressure by Rules ___ Thickness of crown 18" (5/8") No. and diameter of

stays ___ Inner radius of crown 25¼" ✓ Working pressure by Rules ___ Diameter of rivet holes and pitch

How connected to shell double rivetd. ✓ Size of doubling plate under dome ___ of rivets in outer row in dome connection to shell 43" 18ᵈ - 4¼"

Type of Superheater Smoke tube type. Manufacturers of { Tubes ___ / Steel forgings ___ / Steel castings ___

Number of elements 35 Material of tubes steel Internal diameter and thickness of tubes 11/16", 5/32"

Material of headers steel Tensile strength ___ Thickness ___ Can the superheater be shut off and

the boiler be worked separately Yes ✓ Is a safety valve fitted to every part of the superheater which can be shut off from the boiler ✓ Yes

Area of each safety valve 1½ sq.in. ✓ Are the safety valves fitted with easing gear Yes ✓ Working pressure as per

Rules ___ Pressure to which the safety valves are adjusted 216 lb/sq.in. ✓ 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 Yes ✓

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with ___

The foregoing is a correct description,

_____ *Manufacturer.*

Dates of Survey while building { During progress of work in shops ___ } ___ Are the approved plans of boiler and superheater forwarded herewith ___
(If not state date of approval.)

{ During erection on board vessel ___ } Total No. of visits ___

Is this Boiler a duplicate of a previous case Yes If so, state Vessel's name and Report No. "BALTONIA" Grimsby 23140.

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

Water Tube Section (each boiler).

4 steam drums: Internal dia. 18½", thickness 13/16", flanged at ends and E.W. to boiler end plate.

Water tubes: Tube holes dia. 2.1/16", pitch 4.3/16", Ext. dia. 2", thickness 1/4". Number 198.

Water Drums: 2 in number similar scantlings to steam drums.

The boilers have been examined in their entirety together with their mountings and found or placed in good condition.

Boilers afterwards examined under steam and the safety valves adjusted to 216 lb/sq.in.

Survey Fee ... ... £ : : } When applied for, 19
Travelling Expenses (if any) £ : : see report 9 } When received, 19

L. Tait Williams
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute THURS 23 DEC 1948

Assigned See minute a
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