

REPORT ON BOILERS.

No. 23198.

Received at London Office

Report 21st Dec 1945. When handed in at Local Office 22nd Dec 1945. Port of **GREENOCK**
 Survey held at **GREENOCK** Date, First Survey 8th JANUARY 1945. Last Survey 15th Dec. 1945
 Name of the **EMPIRE TRINIDAD** (Number of Visits ☒) Gross 8217.08 Tons Net 4766
 Glasgow By whom built **BLYTHSWOOD SHIP^B. CO L^D** Yard No. 80 When built 1945
 Made at **GREENOCK** By whom made **JOHN G. KINCAID & CO L^D** Engine No. 1170 When made 1945
 Made at **do.** By whom made **do** Boiler No. 1170 When made 1945
 Horse Power Owners **M. O. W. T.** Port belonging to

TUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Boilers of Steel **Colvilles L^D** (Letter for Record (S) ☒
 Heating Surface of Boilers **3302 sq. ft.** Is forced draught fitted **Yes** Coal or Oil fired **Oil with fan.**
 Description of Boilers **2 S.E. cylindrical** Working Pressure **150 lbs.**
 Hydraulic pressure to **275 lb.** Date of test **15/9/44** No. of Certificate **2388** Can each boiler be worked separately **Yes**
 Firegrate in each Boiler **6.25** No. and Description of safety valves to each boiler **2" double opening I.H.L.**
 Each set of valves per boiler **6.28** Pressure to which they are adjusted **150 lb.** Are they fitted with easing gear **Yes**
 For donkey boilers, state whether steam from main boilers can enter the donkey boiler ☒
 Distance between boilers or uptakes and bunkers or woodwork ☒ Is oil fuel carried in the double bottom under boilers **No**
 Distance between shell of boiler and tank top plating **On tween deck** Is the bottom of the boiler insulated **Yes**
 Internal dia. of boilers **12' 5 1/8"** Length **11' 0"** Shell plates: Material **S.** Tensile strength **29/33 tons**
7/8" Are the shell plates welded or flanged **No** Description of riveting: circ. seams **DR.**
T.R.DBS. Diameter of rivet holes in **15/16"** Pitch of rivets **2.873"**
15/16" Percentage of strength of circ. intermediate seam **6.75"**
 Plate **67.36** Rivets **43.7** Plate **86.1** Rivets **86.8**
 Combined **89.5**
 S of butt straps **2 1/32"** No. and Description of Furnaces in each Boiler **Two Doughton corrugated**
S Tensile strength **26/30 tons** Smallest outside diameter **3-9"**
 Thickness of plates **1/2"** Description of longitudinal joint **Weld.**
 Stays of stiffening rings on furnace or c.c. bottom ☒
 Stays in steam space: Material **S.** Tensile strength **26/30 tons** Thickness **1 1/32"** Pitch of stays **19 x 16 1/2"**
 Stays secured **D.N.** Thickness **15/16"**
 Plates: Material **S.** Tensile strength **26/30 tons** Thickness **15/16"**
 Pitch of stay tubes in nests **9.5"** Pitch across wide water spaces **13 1/2"**
 Stays to combustion chamber tops: Material **S.** Tensile strength **29/33 tons** Depth and thickness of girder
8 3/4 x 1 1/2 Length as per Rule **2-9 1/16"** Distance apart **8 1/2"** No. and pitch of stays
3 @ 8" Combustion chamber plates: Material **S.**
 Strength **26/30 tons** Thickness: Sides **5/8"** Back **5/8"** Top **5/8"** Bottom **3/4"**
 Stays to ditto: Sides **9 x 8"** Back **9 x 9"** Top **8 1/2 x 8"** Are stays fitted with nuts or riveted over **Nuts.**
 Plate at bottom: Material **S.** Tensile strength **26/30 tons**
 Thickness **15/16"** Lower back plate: Material **S.** Tensile strength **26/30 tons** Thickness **7/8"**
 Stays at wide water space **14 x 9"** Are stays fitted with nuts or riveted over **Nuts**
 Stays: Material **S.** Tensile strength **28/32 tons**
 At body of stay, **2 1/2** No. of threads per inch **9**
 Over threads **2 7/8** Tensile strength **26/30 tons**
 Stays: Material **S.** Tensile strength **26/30 tons**
 At turned off part, **1 1/2 x 15/8** No. of threads per inch **9**
 Over threads

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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"
No. of threads per inch 9
Tubes: Material S External diameter { Plain 2 1/2" Thickness { 9/32" No. of threads per inch 9
Pitch of tubes 3 7/8 x 3 3/4 Section of compensating ring 2' 9" x 2' 5" x 1" Manhole compensation: Size of shell plate 16 x 20" No. of rivets and diameter of rivet holes 38 - 1 1/8"
Outer row rivet pitch at ends 8" 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 _____ Thickness of crown _____ No. and diameter of stays _____
How connected to shell _____ Size of doubling plate under dome _____ Diameter of rivet holes _____
of rivets in outer row in dome connection to shell _____

Type of Superheater

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 from the boiler?
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 _____
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 _____

For JOHN G. KINCAID & CO. LTD. The foregoing is a correct description,
W. C. Cuthbert Director

Dates of Survey { During progress of work in shops - - - SEE MACHINERY REPORT. Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)
while building { During erection on board vessel - - - 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 constructed under special survey in accordance with Rules, approved plans and M.O.W.T specification. The materials & workmanship are sound & good. They have been efficiently installed in the vessel and their safety valves adjusted under steam 150 lbs/sq. in.
For recommendations please see machinery report

Survey Fee ... £ : : When applied for, 19
Travelling Expenses (if any) £ : : When received, 19
machinery

Charles J. Hunter
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute

Assigned

GLASGOW 28 DEC 1945

SEE ACCOMPANYING MACHINERY REPORT.



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