

REPORT ON BOILERS.

No. 19324

Received at London Office 23 JUN 1931

Date of writing Report 23.3 1931 When handed in at Local Office 28th MAY 1931 Port of Greenock

No. in Survey held at Greenock Date, First Survey 15th JULY 1930 Last Survey 27th MAY 1931

on the s/s "British Energy" (Number of Visits ✓) Gross 4208.5k Tons Net 4199.10

Master Built at Greenock By whom built Greenock Dockyard L^d Yard No. 422 When built 1931

Engines made at Greenock By whom made John & Trenchard L^d Engine No. 1167 When made 1931

Boilers made at ditto By whom made ditto Boiler No. 1167 When made 1931

Nominal Horse Power Owners British Tankers L^d Port belonging to London

MULTITUBULAR BOILERS - ~~MAIN~~, AUXILIARY, ~~STEAM~~

Manufacturers of Steel With gutters - Benglan Wankhuttin Union Metallurgique de France, Still L^d of Scotland (Letter for Record S)

Total Heating Surface of Boilers 13894 Is forced draught fitted Yes Oil fired Oil

No. and Description of Boilers one Single ended Working Pressure 150

Tested by hydraulic pressure to 245 Date of test 19.2.31 No. of Certificate 2006 Can each boiler be worked separately Yes

Area of Firegrate in each Boiler Oil Fuel No. and Description of safety valves to each boiler Bockbrun (Double High Lift)

Area of each set of valves per boiler (per Rule 8.42 as fitted 9.85 Pressure to which they are adjusted 155 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 1-6 Is oil fuel carried in the double bottom under boilers No

Smallest distance between shell of boiler and tank top plating 1-6 Is the bottom of the boiler insulated Yes

Largest internal dia. of boilers 11-57/32 Length 11-6 Shell plates: Material S Tensile strength 29/33

Thickness 25/32 Are the shell plates welded or flanged ✓ Description of riveting: circ. seams end OR inter. 3.006

long. seams TR + DBS Diameter of rivet holes in circ. seams 15/16 long. seams 27/32 Pitch of rivets 6.5/32

Percentage of strength of circ. end seams (plate 69.6 rivets 45.2) Percentage of strength of circ. intermediate seam (plate 89.2 rivets 89.7) Working pressure of shell by Rules 152

Percentage of strength of longitudinal joint (plate 89.2 rivets 89.7) combined 89.7

Thickness of butt straps (outer 5/8 inner 3/4) No. and Description of Furnaces in each Boiler 2 Doughtons

Material S Tensile strength 26.30 Smallest outside diameter 3.27/8

Length of plain part (top bottom ✓) Thickness of plates (crown 7/16 bottom 7/16) Description of longitudinal joint weld

Dimensions of stiffening rings on furnace or c.c. bottom ✓ Working pressure of furnace by Rules 160

End plates in steam space: Material S Tensile strength 26.30 Thickness 15/16 Pitch of stays 163/8 + 15/4

How are stays secured DN + Washers Working pressure by Rules 159

Tube plates: Material (front back) Sall Tensile strength 26.30 Thickness (front 29/32 back 11/16)

Mean pitch of stay tubes in nests 10 Pitch across wide water spaces 133/4 Working pressure (front 174 back 167)

Girders to combustion chamber tops: Material S Tensile strength 29.33 Depth and thickness of girder at centre 9 + 3/4 (2) Length as per Rule 34 5/8 Distance apart 10 1/8 No. and pitch of stays in each 3 at 83/4 Working pressure by Rules 164

Combustion chamber plates: Material S Tensile strength 26.30 Thickness: Sides 11/16 Back 11/16 Top 11/16 Bottom 11/16

Pitch of stays to ditto: Sides 83/4 + 7 1/2 Back 8 + 8 1/4 Top 10 1/8 + 83/4 Are stays fitted with nuts or riveted over Riveted

Working pressure by Rules 166 Front plate at bottom: Material S Tensile strength 26.30

Thickness 29/32 Lower back plate: Material S Tensile strength 26.30 Thickness 7/8

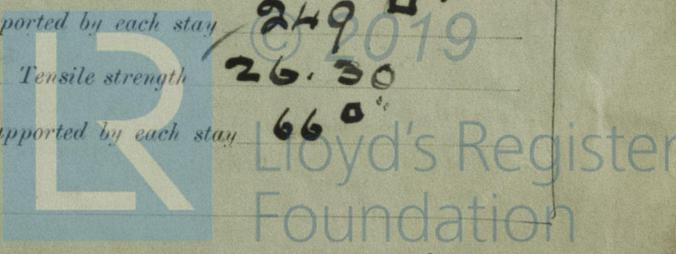
Pitch of stays at wide water space 14 Are stays fitted with nuts or riveted over Riveted + Nuts

Working Pressure 157 Main stays: Material S Tensile strength 28.32

Diameter (At body of stay or Over threads) 29/8 No. of threads per inch 6 Area supported by each stay 249 sq in

Working pressure by Rules 158 Screw stays: Material S Tensile strength 26.30

Diameter (At turned off part or Over threads) 13/8 No. of threads per inch 9 Area supported by each stay 66 sq in



Working pressure by Rules **153** Are the stays drilled at the outer ends **90°** Margin stays: Diameter **1 5/8"** (At turned off part or Over threads)
 No. of threads per inch **9** Area supported by each stay **90.75 sq. in.** Working pressure by Rules **167**
 Tubes: Material **91011** External diameter (Plain Stay) **2 3/4"** Thickness **10 W.G.** No. of threads per inch **9**
 Pitch of tubes **4" x 4"** Working pressure by Rules **163** Manhole compensation: Size of opening in shell plate **16" x 20"** Section of compensating ring **2.8 1/2 x 2.4 1/2 x 1 1/2"** No. of rivets and diameter of rivet holes **38 at 1 7/8"**
 Outer row rivet pitch at ends **8** Depth of flange if manhole flanged **3 1/4"** 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 Working pressure by Rules Thickness of crown No. and diameter of stays
 How connected to shell Inner radius of crown Working pressure by Rules
 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 Manufacturers of (Tubes 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 casing gear Working pressure as per Rules
 Pressure to which the safety valves are adjusted Hydraulic test pressure: tubes 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

The foregoing is a correct description,
 For JOHN G. KINCAID & CO. LIMITED.
 Director. Manufacturer.

Dates of Survey (During progress of work in shops - -) while building (During erection on board vessel - - -) Are the approved plans of boiler ~~and superheater~~ forwarded herewith **yes** (If not state date of approval.)
 Total No. of visits **✓**

SEE MACHINERY REPORT

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **This boiler has been built under Special Survey in accordance with the approved plans & the workmanship & material are of good quality & it is now securely fitted on board.**
This Report accompanies that of the machinery (Boiler duplicate of H 64. "British Prestige" Lark Ref. 9° 19310)

Survey Fee **charged on Machinery Refit** When applied for. 192
 Travelling **any** When received. 192

W. G. Cadou-Mucchi
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 2 - JUN 1931**

Assigned **SEE ACCOMPANYING MACHINERY REPORT.**

