

REPORT ON BOILERS.

No. 19294

Received at London Office

Date of writing Report 5.12.30 1930 When handed in at Local Office 30th JAN'y 1931. Port of Greenock

No. in Survey held at Greenock Date, First Survey 1st APRIL 1930. Last Survey 30th JANUARY 1931.

Reg. Book. 515 "British Pride" (Number of Visits) Gross 406.40 Tons Net 4180.14

on the

Master Greenock Built at Pitlochry By whom built Lithgow L^o Yard No. 849 When built 1931

Engines made at Greenock By whom made John Bruce & Co. L^o Engine No. 1762 When made 1931

Boilers made at ditto By whom made ditto Boiler No. 1762 When made 1931

Nominal Horse Power 663 Owners British Tankers L^o Port belonging to London

MULTITUBULAR BOILERS - AUXILIARY.

Manufacturers of Steel W. & A. R. Bergbau Eisenwerke Letter for Record S

W. & A. Metallurgische Anstalt Suhl L^o of Scotland

Total Heating Surface of Boilers 1389 sq ft Is forced draught fitted yes Coal or Oil fired oil

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

Tested by hydraulic pressure to 245 Date of test 1-12-30 No. of Certificate 1992 Can each boiler be worked separately yes

Area of Firegrate in each Boiler oil fuel No. and Description of safety valves to each boiler backbores (double) High Lift 3

Area of each set of valves per boiler per Rule 8.42 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 no

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 yes Description of riveting: circ. seams DR

long. seams TR & DBS Diameter of rivet holes in 15/16" Pitch of rivets 3-096

Percentage of strength of circ. end seams plate 69.6 rivets 45.2 Percentage of strength of circ. intermediate seam plate 86.2 rivets 86.5

Percentage of strength of longitudinal joint plate 86.5 rivets 89.7 Working pressure of shell by Rules 152

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

Material S Tensile strength 26-30 Smallest outside diameter 3-27/8"

Length of plain part top Thickness of plates 7/16" Description of longitudinal joint weld

Dimensions of stiffening rings on furnace or c.c. bottom yes 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 1/4"

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

Tube plates: Material front Steel back Steel Tensile strength 26-30 Thickness 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 x 3 1/4 (3) Length as per Rule 34 5/8" Distance apart 10 1/8" No. and pitch of stays

in each 3 at 8 3/4" 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 8 3/4" x 4 1/2" Back 8 x 8 1/4" Top 10 1/8" x 8 3/4" 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

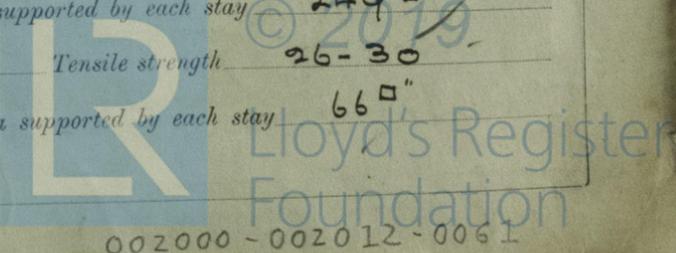
Working Pressure 154 Main stays: Material S Tensile strength 28-32

Diameter At body of stay, 2 3/8" No. of threads per inch 6 Area supported by each stay 249 sq

Working pressure by Rules 158 Screw stays: Material S Tensile strength 26-30

Diameter At turned off part, 1 3/8" No. of threads per inch 9 Area supported by each stay 66 sq

Is a Report also sent on the Heat of the Ship? YES



Working pressure by Rules 153 Are the stays drilled at the outer ends 90 Margin stays: Diameter ^(At turned off part, or Over threads) 1 5/8" ✓
 No. of threads per inch 9 Area supported by each stay 90.45" Working pressure by Rules 164
 Tubes: Material Iron External diameter ^{Plain Stay} 2 3/4" ✓ Thickness ^{10 WG} 5/16" + 1/4" 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 2.85" x 2.45" + 1/16" 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 _____
 Inner radius of crown _____ Working pressure by Rules _____
 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 _____ 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 easing 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 23 inclusive for boilers been complied with yes
 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 - - -} _____
 SEE MACHINERY REPORT
 Are the approved plans of boiler and ~~apparel~~ forwarded herewith yes
 (If not state date of approval.)
 Total No. of visits ✓

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 trial of the Machinery.

Survey Fee charged on Monday _____ When applied for. 192
 Travelling Expenses (if any) £ _____ When received. 192
W. Gordon-Mitchell
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 3 - FEB 1931
 Assigned See Gen. Rpt. No. 19294 SP

