

REPORT ON BOILERS.

Received at London Office 16 NOV 1927

Date of writing Report 8th Nov. 1927 When handed in at Local Office 11. 11. 1927 Port of Glasgow

No. in Survey held at Glasgow Date, First Survey 16. 6. 27 Last Survey 2. 11. 1927

on the TSS VYNER BROOK (Number of Visits 19) Tons {Gross 1669.76 Net 712.52

Master Built at Luth By whom built Ramage & Ferguson Ltd Yard No. 264 When built 1928

Engines made at Luth By whom made Ramage & Ferguson Ltd Engine No. 264 When made 1928

Boilers made at Glasgow By whom made Jessie Barclay & Co Ltd Boiler No. RF.3 When made 1924

Nominal Horse Power 297 Owners Sarawak S.S. Co Ltd Port belonging to Kuching

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Wm Beardmore & Co Ltd (Letter for Record S)

Total Heating Surface of Boilers 4390 sq ft Is forced draught fitted yes Coal or Oil fired oil

No. and Description of Boilers 2 Steel return tubes 2SB Working Pressure 180 lbs

Tested by hydraulic pressure to 320 lbs Date of test 2-11-27 No. of Certificate 17664 Can each boiler be worked separately no

Area of Firegrate in each Boiler 60.48 No. and Description of safety valves to each boiler per Rule

Area of each set of valves per boiler as fitted Pressure to which they are adjusted per Rule Are they fitted with easing gear no

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 60" Is oil fuel carried in the double bottom under boilers no

Smallest distance between shell of boiler and tank top plating 60" Is the bottom of the boiler insulated no

Largest internal dia. of boilers 14'-9" Length 11'-6" Shell plates: Material S Tensile strength 28-32 tons

Thickness 1 1/32" Are the shell plates welded or flanged no Description of riveting: circ. seams {end DR. overlap inter. 3/8"

long. seams 20s. 3R. 5 units in pitch Diameter of rivet holes in {circ. seams 1 1/2" long. seams 1 1/4" Pitch of rivets {8 1/16"

Percentage of strength of circ. end seams {plate 67.4 rivets 42.4 Percentage of strength of circ. intermediate seam {plate 86.0 rivets 86.7 combined 89.2

Percentage of strength of longitudinal joint {plate 86.0 rivets 86.7 combined 89.2 Working pressure of shell by Rules 183

Thickness of butt straps {outer 1 1/16" inner 1 1/16" No. and Description of Furnaces in each Boiler 3 Duglons

Material S Tensile strength 26-30 tons Smallest outside diameter 45-125"

Length of plain part {top 6" bottom 6" Thickness of plates {crown 9 1/16" bottom 9 1/16" Description of longitudinal joint weld

Dimensions of stiffening rings on furnace or c.c. bottom per Rule Working pressure of furnace by Rules 182

End plates in steam space: Material S Tensile strength 26-30 tons Thickness 1" Pitch of stays 14x14 1/4"

How are stays secured double nuts & washers Working pressure by Rules 225 lbs

Tube plates: Material {front S back S Tensile strength {26-30 tons Thickness {1 1/16" 13 1/16"

Mean pitch of stay tubes in nests 9.425 Pitch across wide water spaces 18 1/2" Working pressure {front 201 back 267

Girders to combustion chamber tops: Material S Tensile strength 28-32 tons Depth and thickness of girder at centre 9 1/4 x 1 1/2" Length as per Rule 3'-0" Distance apart 8 1/2" No. and pitch of stays in each 3 @ 4 1/2" Working pressure by Rules 192 Combustion chamber plates: Material S

Tensile strength 26-30 tons Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 3/8"

Pitch of stays to ditto: Sides 9 1/2 x 1 1/2" Back 8 3/4 x 8 1/2" Top 8 1/2 x 7 1/2" Are stays fitted with nuts or riveted over nuts

Working pressure by Rules 181 Front plate at bottom: Material S Tensile strength 26-30 tons

Thickness 13/16" Lower back plate: Material S Tensile strength 26-30 tons Thickness 2 1/2"

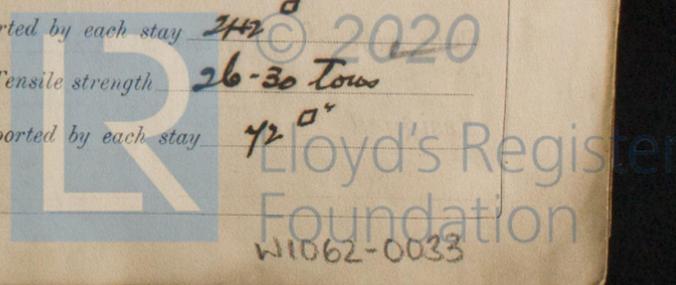
Pitch of stays at wide water space 18 1/2" Are stays fitted with nuts or riveted over nuts

Working Pressure 228 Main stays: Material S Tensile strength 28-32 tons

Diameter {At body of stay, or Over threads 3 1/8" No. of threads per inch 6 Area supported by each stay 242 sq in

Working pressure by Rules 205 Screw stays: Material S Tensile strength 26-30 tons

Diameter {At turned off part, or Over threads 1 5/8" No. of threads per inch 9 Area supported by each stay 72 sq in



47574

Working pressure by Rules 212 Are the stays drilled at the outer ends No. Margin stays: Diameter { At turned off part, or Over threads 1 3/4 + 1/8 ✓

No. of threads per inch 9 Area supported by each stay 93" Working pressure by Rules 194

Tubes: Material Iron External diameter { Plain 2 1/2 ✓ Stay 2 1/2 ✓ Thickness { 9.9.139 ✓ 16.28 + 3/16 ✓ No. of threads per inch 9 ✓

Pitch of tubes 3 3/4 Working pressure by Rules 230 Manhole compensation: Size of opening in shell plate 19 1/2 x 15 1/2 Section of compensating ring 2-11" x 2-7" ✓ No. of rivets and diameter of rivet holes 32 @ 1 3/8 ✓

Outer row rivet pitch at ends 8 5/16 ✓ Depth of flange if manhole flanged 3 1/2 ✓ 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

Number of elements Material of tubes Manufacturers of { Tubes Steel castings Internal diameter and thickness of tubes

Material of headers Tensile strength Thickness Can the superheater be shut off and the boiler be worked separately

Area of each safety valve Is a safety valve fitted to every part of the superheater which can be shut off from the boiler

Rules Pressure to which the safety valves are adjusted Working pressure as per tubes castings and after assembly in place Hydraulic test pressure: 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

FOR BARCLAY, CURRIE & CO., LTD.
John Alexander
ENGINE WORKS MANAGER

The foregoing is a correct description,
Manufacturer:

Dates of Survey { During progress of work in shops 1927 Jun 16-20-28 July 7-13 Aug 3-9-16-19 Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)

while building { During erection on board vessel Sep 2-12-19-27 Oct 3-10-18-25-31 Nov 2 Total No. of visits 19

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

These Boilers have been built under special Survey and in accordance with the Rules. The materials and workmanship are good and on completion they were tested by hydraulic pressure with satisfactory results.

The tubes are stated to have been forwarded to Leith.

These Boilers have now been securely fitted on board & found satisfactory under steam & the safety valves adjusted under steam to 180 lbs pressure.

Survey Fee ... £ 24 : 3 : -

Travelling Expenses (if any) £ ... : ... : -

When applied for, 11. 1927

When received, 21. 2. 1928

John Alexander
Engineer Surveyor to Lloyd's Register of Shipping.

Ernan Edwards
for A.T. Thomas

Committee's Minute **GLASGOW 15 NOV 1927**

Assigned **TRANSMIT TO LONDON**

TUES. 21 FEB 1928

See h/ths 9-6 x/ths
No. 17329

© 2020
Lloyd's Register
Foundation