

REPORT ON BOILERS.

Received at London Office

28 MAY 1929

Date of writing Report 1929 When handed in at Local Office 24.5.1929 Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 11.9.28 Last Survey 21.5.1929
 Reg. Book. on the new steel 9/5 "ROMNEY"
 (Number of Visits 781 x 30 Tons) Net
 Master Built at Port Glasgow By whom built Robert Duncan & Co. Ltd. Yard No. 390 When built 1929
 Engines made at Glasgow By whom made David Rowan & Co. Ltd. Engine No. 893 When made 1929
 Boilers made at Glasgow By whom made David Rowan & Co. Ltd. Boiler No. 893 When made 1929
 Nominal Horse Power 557 Owners Shakespeare Shipping Co. Ltd. Port belonging to London

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Jas Dunlop & Co. Ltd. David Colville & Sons Ltd. (Letter for Record (s))

Total Heating Surface of Boilers 8334 sq ft Is forced draught fitted yes Coal or Oil fired coal

No. and Description of Boilers three single ended 3.S.E. Working Pressure 180

Tested by hydraulic pressure to 320 Date of test 21-3-29 No. of Certificate 10237 Can each boiler be worked separately yes

Area of Firegrate in each Boiler 6 1/4 sq ft No. and Description of safety valves to each boiler two direct spring

Area of each set of valves per boiler (per Rule 17.8070 as fitted 19.240) Pressure to which they are adjusted 185 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 9" Is oil fuel carried in the double bottom under boilers no

Smallest distance between shell of boiler and tank top plating 2-6" Is the bottom of the boiler insulated yes

Longest internal dia. of boilers 16-3" Length 11-6" Shell plates: Material steel Tensile strength 29-33 tons

Thickness 1 9/32" Are the shell plates welded or flanged no Description of riveting: circ. seams end WR

long. seams WR & TR Diameter of rivet holes in circ. seams F 1 3/16" B 1 5/16" Pitch of rivets F-3.19" B 3.66"

Percentage of strength of circ. end seams (plate F 62.7 B 64.4 rivets F 43 B 46) Percentage of strength of circ. intermediate seam (plate rivets)

Percentage of strength of longitudinal joint (plate 85.5 rivets 86.6 combined 88.3) Working pressure of shell by Rules 182

Thickness of butt straps (outer 3/16" inner 1/32") No. and Description of Furnaces in each Boiler three Deighton

Material steel Tensile strength 26-30 tons Smallest outside diameter 3-11 1/2"

Length of plain part (top bottom) Thickness of plates (crown 1 1/8" bottom 1 3/32") Description of longitudinal joint welded

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 180

End plates in steam space: Material steel Tensile strength 26-30 tons Thickness 1 7/16" Pitch of stays 23 3/8" x 23"

How are stays secured WN Working pressure by Rules 181

Tube plates: Material (front back) steel Tensile strength (" ") Thickness (2 1/8" 4 1/4")

Mean pitch of stay tubes in nests 10 1/2" Pitch across wide water spaces 13 1/2" Working pressure (front back) 207 183

Girders to combustion chamber tops: Material steel Tensile strength 26-30 tons Depth and thickness of girder

at centre 2 @ 9 1/8" x 7 1/8" Length as per Rule 36.6" Distance apart 9 1/4" No. and pitch of stays

in each 3 @ 8 3/4" Working pressure by Rules 183 Combustion chamber plates: Material steel

Tensile strength 26-30 tons Thickness: Sides 2 1/32" Back 2 1/32" Top 2 1/32" Bottom 1 3/16"

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

Working pressure by Rules 180 Front plate at bottom: Material steel Tensile strength 26-30 tons

Thickness 2 1/32" Lower back plate: Material steel Tensile strength 26-30 tons Thickness 2 5/32"

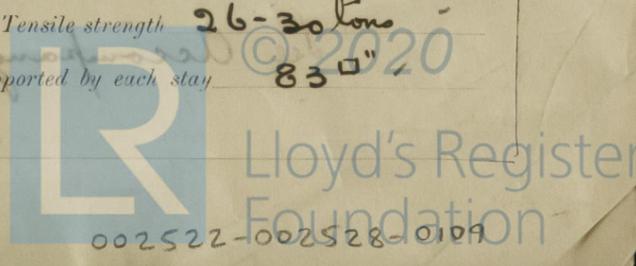
Pitch of stays at wide water space 13 1/2" Are stays fitted with nuts or riveted over nuts

Working Pressure 182 Main stays: Material steel Tensile strength 28-32 tons

Diameter (At body of stay, or Over threads) 3 1/2" & 3 1/2" No. of threads per inch 6 Area supported by each stay 506" & 5590"

Working pressure by Rules 183 & 193 Screw stays: Material steel Tensile strength 26-30 tons

Diameter (At turned off part, or Over threads) 1 7/8" No. of threads per inch 9 Area supported by each stay 830"



Working pressure by Rules **183** Are the stays drilled at the outer ends **no** Margin stays: Diameter ^{(At turned off part,} **178"**
 No. of threads per inch **9** Area supported by each stay **106 sq"** Working pressure by Rules **201**
 Tubes: Material **iron** External diameter ^{Plain} **2 1/2"** Thickness ^{Stay} **9 W.S.** No. of threads per inch **9**
 Pitch of tubes **3 3/4" x 3 5/8"** Working pressure by Rules **184** Manhole compensation: Size of opening
 shell plate **15 1/2" x 19 1/2"** Section of compensating ring **9 1/4" x 19 1/2"** No. of rivets and diameter of rivet holes **32 @ 1 3/8"**
 Outer row rivet pitch at ends **9 1/2"** Depth of flange if manhole flanged **3"** Steam Dome: Material **none**
 Tensile strength **etc** Thickness of shell **etc** Description of longitudinal joint
 Diameter of rivet holes **etc** Pitch of rivets **etc** Percentage of strength of joint ^{Plate} **etc**
 Internal diameter **etc** Working pressure by Rules **etc** Thickness of crown **etc** No. and diameter of
 stays **etc** Inner radius of crown **etc** Working pressure by Rules **etc**
 How connected to shell **etc** Size of doubling plate under dome **etc** Diameter of rivet holes and pitch
 of rivets in outer row in dome connection to shell **etc**

Type of Superheater **none** Manufacturers of ^{Tubes} **etc**
 Number of elements **etc** Material of tubes **etc** Internal diameter and thickness of tubes **etc**
 Material of headers **etc** Tensile strength **etc** Thickness **etc** Can the superheater be shut off and
 the boiler be worked separately **etc** Is a safety valve fitted to every part of the superheater which can be shut off from the boiler
 Area of each safety valve **etc** Are the safety valves fitted with easing gear **etc** Working pressure as per
 Rules **etc** Pressure to which the safety valves are adjusted **etc** Hydraulic test pressure
 tubes **etc** castings **etc** and after assembly in place **etc** Are drain cocks or valves fitted
 to free the superheater from water where necessary **etc**

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

The foregoing is a correct description,
 For David Rowan & Co. Ltd. Manufacturer
 Arch. W. Grierson

Dates of Survey ^(During progress of work in shops - -) **See Accompanying** Are the approved plans of boiler and superheater forwarded herewith
 while building ^(During erection on board vessel - - -) **machy Report** (If not state date of approval.)
 Total No. of visits **78**

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
The materials and workmanship are good
The boilers have been constructed under special survey in accordance with the Rules, satisfactorily fitted in the vessel and their safety valves adjusted under steam.

Job.
24.5.29

Survey Fee **...** When applied for, **192**
 Travelling Expenses (if any) **...** When received, **192**

S. C. Davis
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **GLASGOW 28 MAY 1929**
 Assigned **See Accompanying machy Report**

Rpt. 13.
 RE
 Date of writi
 No. in
 Reg. Boole
 91912.
 Built at
 Owners
 Electric L
 System of
 Pressure of
 Direct or A
 If alternating
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