

S.S. HOMEWOOD REPORT ON BOILERS.

No. 45935
Attached to 46270
8 SEP 1926
26 JAN 1927

Received at London Office

1926 When handed in at Local Office 3-9-1926 Port of **Glasgow**

Survey held at **Glasgow** Date, First Survey 2-2-26 Last Survey 31-8-1926

on the **1/2 S. Homewood** (Number of Visits 9) Tons {Gross Net

Built at **Workington** By whom built **R. Williamson & Sons** Yard No. **240** When built **1926**

Made at **Coatbridge** By whom made **Wm Beardmore & Co. Ld** Engine No. **629** When made **1926**

Made at **Glasgow** By whom made **D. Rowan & Co. Ld** Boiler No. **341** When made **1926**

Original Power Owners Port belonging to

TUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY

Makers of Steel **Henschel & Sohn of Hattingen** (Letter for Record **(5)**)

Rating Surface of Boilers **1960 sq ft** Is forced draught fitted **no** Coal or Oil fired **-**

Description of Boilers **one single ended** Working Pressure **200**

Hydraulic pressure to **350** Date of test **31-8-26** No. of Certificate **17198** Can each boiler be worked separately **✓**

Firegrate in each Boiler **538 sq ft** No. and Description of safety valves to each boiler **2 Spring loaded**

Each set of valves per boiler (per Rule as fitted) **59° 2 3/4" dia** Pressure to which they are adjusted **200 lb** Are they fitted with easing gear **yes**

If donkey boilers, state whether steam from main boilers can enter the donkey boiler **no**

Distance between boilers or uptakes and bunkers or woodwork **well clear** Is oil fuel carried in the double bottom under boilers **no**

Distance between shell of boiler and tank top plating **-** Is the bottom of the boiler insulated **-**

Internal dia. of boilers **14'-4"** Length **10'-6"** Shell plates: Material **steel** Tensile strength **28-32 tons**

Thickness **1 19/64"** Are the shell plates welded or flanged **no** Description of riveting: circ. seams {end inter.} **OR**

Material **WBS. TR** Diameter of rivet holes in {circ. seams **F 1 3/16 B 1 3/8** Pitch of rivets {**F 3-21 B 3-18** }
{long. seams **1 3/8"** }
Pitch of rivets {**9 13/32"** }

Percentage of strength of circ. end seams {plate **63** rivets **43.8** } Percentage of strength of circ. intermediate seam {plate **83.3** rivets **93.5** }
{combined **89.4** } Working pressure of shell by Rules **200**

Percentage of strength of longitudinal joint {plate **83.3** rivets **93.5** }
{combined **89.4** }

Material of butt straps {outer **6 3/4"** inner **1 5/4"** } No. and Description of Furnaces in each Boiler **3 Deighton corrugated**

Material **steel** Tensile strength **26-30 tons** Smallest outside diameter **3'-6 3/16"**

Thickness of plates {crown **1 19/32"** bottom **1 19/32"** } Description of longitudinal joint **welded**

Working pressure of furnace by Rules **200**

Material in steam space: Material **steel** Tensile strength **26-30 tons** Thickness **1 7/32"** Pitch of stays **18 1/4" x 18 3/4"**

Working pressure by Rules **202**

Material {front **steel** back **"** } Tensile strength {**26-30 tons** } Thickness {**2 9/32"** }
{**2 5/32"** }

Pitch of stay tubes in nests **10"** Pitch across wide water spaces **14 1/2"** Working pressure {front **202** back **208** }

Material **steel** Tensile strength **28-32 tons** Depth and thickness of girder

Material **2 @ 9 1/2" x 7/8"** Length as per Rule **34 11/16"** Distance apart **9 3/4"** No. and pitch of stays

Material **3 @ 8 1/2"** Working pressure by Rules **200** Combustion chamber plates: Material **steel**

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

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

Working pressure by Rules **201** Front plate at bottom: Material **steel** Tensile strength **26-30 tons**

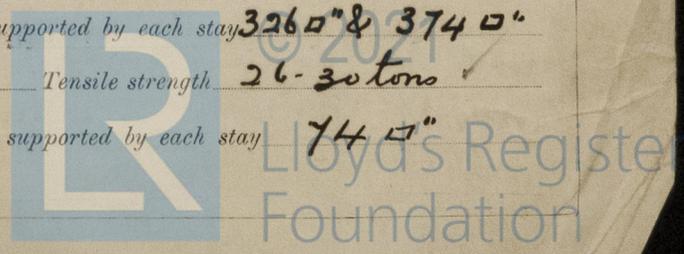
Material **Lower back plate: Material steel** Tensile strength **26-30 tons** Thickness **2 5/32"**

Working pressure by Rules **201** Main stays: Material **steel** Tensile strength **28-32 tons**

At body of stay, **2 3/4" & 3"** No. of threads per inch **6** Area supported by each stay **326 sq in & 374 sq in**

Over threads **-** Screw stays: Material **steel** Tensile strength **26-30 tons**

Working pressure by Rules **201 & 211** At turned off part, **1 5/8"** No. of threads per inch **9** Area supported by each stay **74 sq in**



Working pressure by Rules **206** Are the stays drilled at the outer ends **no** Margin stays: Diameter ^{At turned off part,} **13/4"**
 No. of threads per inch **9** Area supported by each stay **910"** Working pressure by Rules **200**
 Tubes: Material **Iron** External diameter ^{Plain **3 3/4"**} ^{Stay **3 1/2"**} Thickness ^{**8 W.S.**} ^{**1/4 5/16 3/8**} No. of threads per inch **9**
 Pitch of tubes **4 1/2" x 4 5/16"** Working pressure by Rules **230** Manhole compensation: Size of
 shell plate **19 3/4" x 15 1/2"** Section of compensating ring **9 1/4" x 1 5/16"** No. of rivets and diameter of rivet holes **32 @ 1 1/2"**
 Outer row rivet pitch at ends **9 1/2"** Depth of flange if manhole flanged **3"** Steam Dome: Material **none**
 Tensile strength **20000** Thickness of shell **1 1/2"** Description of longitudinal joint
 Diameter of rivet holes **1 1/2"** Pitch of rivets **1 1/2"** Percentage of strength of joint **100%**
 Internal diameter **14 1/2"** Working pressure by Rules **230** Thickness of crown **1 1/2"** No. and
 stays **14** Inner radius of crown **14 1/2"** Working pressure by Rules **230**
 How connected to shell **None** Size of doubling plate under dome **None** Diameter of rivet hole
 of rivets in outer row in dome connection to shell **None**

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

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with **Yes**

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

Dates of Survey ^{During progress of work in shops - - -} **1926 July 4-30 Aug 6-10-13-25-30-31** Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval) **Yes**
 while building ^{During erection on board vessel - - -} **None** Total No. of visits **9**

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
 The materials and workmanship are good
 The boiler has been constructed under special survey in accordance with Rules. It will be fitted on board the vessel in Glasgow.
 This Boiler has now been properly fitted on board the s/s "Homewood," Mr. Jos. Constantine Steamship Line Ltd, Owners, of Middlesbrough.
 The safety valves have been adjusted under steam and thickness of washers noted to be 1/16" each.

Survey Fee £ **13 : 2 : 0** When applied for, **3. 9. 1926**
 Travelling Expenses (if any) £ **0 : 0 : 0** When received, **28. 1. 1927**

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

Committee's Minute **GLASGOW 7 - SEP 1926** **GLASGOW 25 - JAN 1927** **TUES. 8 SEP**
 Assigned **TRANSMIT TO LONDON** **See Gb. R. No. 46270** **FRI. 4 FEB**
FRI. 17 AUG 1928 **TUES. 17 MAY 1927** **FRI. 11 FEB**

A.G.
 3/9/26

