

# REPORT ON BOILERS.

No. 50238

Received at London Office 10 MAY 1930

Date of writing Report 19 When handed in at Local Office 17.3.30 Port of Glasgow

No. in Reg. Book 40223 on the new steel s/s "Eskdalegate" Date, First Survey 10.9.29 Last Survey 13.3.1930 (Number of Visits 38) Gross 4250 Tons Net 2634

Master Built at Buntisland By whom built Buntisland SBCs Yard No. 160 When built 1930  
Engines made at Glasgow By whom made David Rowan & Co Ltd Engine No. 928 When made 1930  
Boilers made at Glasgow By whom made David Rowan & Co Ltd Boiler No. 928 When made 1930  
Nominal Horse Power 349 Owners Turnbull Scott Shipping Co Ltd Port belonging to London

## MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Wilkowitz's Bergbau- und Eisenhütten-Gesellschaft in Witkowitz (Letter for Record (S) ✓)

Total Heating Surface of Boilers 11650' Is forced draught fitted no Coal or Oil fired coal Working Pressure 200

No. and Description of Boilers one single ended

Tested by hydraulic pressure to 350 Date of test 24-1-30 No. of Certificate 18596 Can each boiler be worked separately -

Area of Firegrate in each Boiler 360' No. and Description of safety valves to each boiler Two direct spring

Area of each set of valves per boiler {per Rule 6.770" as fitted 7.950"} Pressure to which they are adjusted 205 lbs 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 - 8'-0" 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

Largest internal dia. of boilers 11'-6" Length 10'-6" Shell plates: Material steel Tensile strength 29-33 tons

Thickness 1" Are the shell plates welded or flanged no Description of riveting: circ. seams {end DR inter. -} Pitch of rivets {2.85" 1.76"}

long. seams UBS. TR Diameter of rivet holes in {circ. seams 1 1/16" long. seams 1 1/16"} Percentage of strength of circ. end seams {plate 62.7 rivets 49.1}

Percentage of strength of longitudinal joint {plate 85.95 rivets 86.6 combined 89.2} Working pressure of shell by Rules 200

Thickness of butt straps {outer 3/4" inner 7/8"} No. and Description of Furnaces in each Boiler Two Brighton 201

Material steel Tensile strength 26-30 tons Smallest outside diameter 3'-4 7/8"

Length of plain part {top bottom} Thickness of plates {crown 9/16" bottom 7/16"} Description of longitudinal joint welded

Dimensions of stiffening rings on furnace or c.c. bottom - Working pressure of furnace by Rules 201

End plates in steam space: Material steel Tensile strength 26-30 tons Thickness 1 1/4" Pitch of stays 22 5/8" x 14"

How are stays secured WN steel Working pressure by Rules 203

Tube plates: Material {front steel back} Tensile strength {26-30 tons} Thickness {29/32" 25/32"}

Mean pitch of stay tubes in nests 10.2" Pitch across wide water spaces 14" Working pressure {front 206 back 210}

Girders to combustion chamber tops: Material steel Tensile strength 28-32 tons Depth and thickness of girder

at centre 2 @ 6 3/4" x 7/8" Length as per Rule 2-4.03" Distance apart 8 3/8" No. and pitch of stays

in each 2 @ 8 1/8" Working pressure by Rules 206 Combustion chamber plates: Material steel

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

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

Working pressure by Rules 214 Front plate at bottom: Material steel Tensile strength 26-30 tons

Thickness 29/32" Lower back plate: Material steel Tensile strength 26-30 tons Thickness 13/16"

Pitch of stays at wide water space 13 1/4" Are stays fitted with nuts or riveted over nuts

Working Pressure 209 Main stays: Material steel Tensile strength 28-32 tons

Diameter {At body of stay 3" or Over threads} No. of threads per inch 6 Area supported by each stay 3620"

Working pressure by Rules 222 Screw stays: Material steel Tensile strength 26-30 tons

Diameter {At turned off part 1 5/8" or Over threads} No. of threads per inch 9 Area supported by each stay 760"

If no. state whether, and when, one will be sent? Rules Is a Report also sent on the Hull of the Ship? 7.



Working pressure by Rules **200** Are the stays drilled at the outer ends **no** Margin stays: Diameter <sup>At turned off part.</sup> **1 3/4 & 1 1/8**  
 No. of threads per inch **9** Area supported by each stay **91 & 102 0"** Working pressure by Rules **200 & 209**  
 Tubes: Material **Iron** External diameter <sup>Plain</sup> **3 1/4"** Thickness <sup>Stay</sup> **3/8"** No. of threads per inch **9**  
 Pitch of tubes **4 1/16" x 4 3/8"** Working pressure by Rules **230** Manhole compensation: Size of opening in  
 shell plate **15 1/4" x 19 1/4"** Section of compensating ring **8 x 1"** No. of rivets and diameter of rivet holes **36 @ 1 1/8"**  
 Outer row rivet pitch at ends **7 7/8"** Depth of flange if manhole flanged **3"** Steam Dome: Material **none**  
 Tensile strength \_\_\_\_\_ Thickness of shell \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_  
 Diameter of rivet holes \_\_\_\_\_ Pitch of rivets \_\_\_\_\_ Percentage of strength of joint <sup>Plate</sup> \_\_\_\_\_  
 Internal diameter **85 1/2"** 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 **none** Manufacturers of <sup>Tubes</sup> \_\_\_\_\_  
 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 22 inclusive for boilers been complied with \_\_\_\_\_

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

Dates of Survey <sup>During progress of work in shops - -</sup> **See accompanying** Are the approved plans of boiler and superheater forwarded herewith \_\_\_\_\_  
<sup>while building</sup> **machinery Report** (If not state date of approval.)  
 Total No. of visits **38**

Is this Boiler a duplicate of a previous case **yes** If so, state Vessel's name and Report No. **Skeldergate. Gls Rpt. No. 49991**

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 the Rules.

This Boiler has been efficiently fitted on board & its safety  
 valves have been adjusted under steam.

John Houston.  
 Leith. 1/5/30

Survey Fee £ \_\_\_\_\_ When applied for, \_\_\_\_\_ 10  
 Travelling Expenses (if any) £ \_\_\_\_\_ When received, \_\_\_\_\_ 10

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

Committee's Minute **GLASGOW 18 MAR 1930**

TUE. 6 MAY 1930

Assigned See accompanying machinery report