

REPORT ON BOILERS.

No. 33250

REC'D FEB 25 1914
WED. OCT. 22. 1913

Received at London Office

GLASGOW

Date of writing Report 13-10 1913 When handed in at Local Office 18-10-1913 Port of **GLASGOW**
 No. in Survey held at **Glasgow** Date, First Survey 10-4-13 Last Survey 9-10-1913
 Reg. Book. on the **of barrowdore** (Number of Visits 26) Gross Tons 599 Net Tons 226

Master Built at **Boulogne** By whom built **Scott & Sons 7-14-9** When built
 Engines made at **Glasgow** By whom made **Atkinson & Blair 1883** When made 1913
 Boilers made at **ditto** By whom made **Dunsmuir & Jackson Ltd 1910** When made 1913
 Registered Horse Power Owners **Arthur Guinness & Co. Ltd** Port belonging to **Belfast**

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel **Steuat-Hy & Spencer, Stirling & Co Ltd**

(Letter for record **S**) Total Heating Surface of Boilers **2034** Is forced draft fitted **No** No. and Description of Boilers **one single ended** Working Pressure **180** Tested by hydraulic pressure to **360** Date of test **9-10-13**

No. of Certificate **12352** Can each boiler be worked separately **No** Area of fire grate in each boiler **59 3/4** No. and Description of safety valves to each boiler **Area of each valve Pressure to which they are adjusted**

Are they fitted with easing gear **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 **Mean dia. of boilers 15-1 13/64 Length 10-6**

Material of shell plates **S** Thickness **1 13/64** Range of tensile strength **28/32** Are the shell plates welded or flanged **No**

Descrip. of riveting: cir. seams **DR** long. seams **TRIDBS** Diameter of rivet holes in long. seams **1 1/4** Pitch of rivets **8 3/4**

Gap of plates or width of butt straps **1-6 7/8** Per centages of strength of longitudinal joint rivets **86 5/9** Working pressure of shell by rules **182** Size of manhole in shell **16 1/2** Size of compensating ring **McAuley** No. and Description of Furnaces in each boiler **3 Deighton** Material **S** Outside diameter **3' 11 1/2** Length of plain part **top 9 1/16 bottom** Thickness of plates **9 1/16**

Description of longitudinal joint **weld** No. of strengthening rings **Working pressure of furnace by the rules 183** Combustion chamber plates: Material **S** Thickness: Sides **1 1/16** Back **1 1/16** Top **1 1/16** Bottom **7/8** Pitch of stays to ditto: Sides **10 1/9** Back **9 1/3 1/4**

Top **10 1/8 7/8** If stays are fitted with nuts or riveted heads **Sub** Working pressure by rules **182** Material of stays **S** Diameter at smallest part **1 9/8 2/3** Area supported by each stay **90** Working pressure by rules **220** End plates in steam space: Material **S** Thickness **1 1/4**

Pitch of stays **2 1/4 7/3 1/4** How are stays secured **Sub** Working pressure by rules **186** Material of stays **S** Diameter at smallest part **6 3/32**

Area supported by each stay **37 2/3** Working pressure by rules **181** Material of Front plates at bottom **S** Thickness **1 1/4** Material of Lower back plate **S** Thickness **29/32** Greatest pitch of stays **14 5/9** Working pressure of plate by rules **210** Diameter of tubes **3 1/4**

Pitch of tubes **4 7/8 4 5/8** Material of tube plates **S** Thickness: Front **1 1/64** Back **7/8** Mean pitch of stays **11 3/16** Pitch across wide water spaces **14 1/4** Working pressures by rules **183** Girders to Chamber tops: Material **Iron** Depth and thickness of girder at centre **8 1/2 (2)** Length as per rule **2-7 7/16** Distance apart **8 7/8** Number and pitch of Stays in each **2 at 10'**

Working pressure by rules **184** Superheater or Steam chest: how connected to boiler **Can the superheater be shut off and the boiler worked separately** Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed

Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

Survey request form No. **1195** attached The **DUNSMUIR & JACKSON, Ltd** Glasgow, Manufacturer.

Dates of Survey **1913** During progress of work in shops: **Apr 10-15-23-28** May **1-7-16-26-28** June **2-10-16-24** July **16-31** Aug. **6-14-15-26** Is the approved plan of boiler forwarded herewith **Yes**

while building: During erection on board vessel: **Sep 3-8-12-18-22** Oct **2-9** Total No. of visits **26**

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

This boiler has been built under special survey in accordance with the approved plan & the workmanship & material are of good quality. This boiler will be fitted on board in Glasgow.

Survey Fee ... £ 6 : 16 : } When applied for, **20-10-1913**
 Travelling Expenses (if any) £ : : } When received, **23-10-1913**

Wm. Gordon Muir
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute **GLASGOW 21 OCT. 1913**

Assigned **Transmit to London.** See Glasgow Report No. **33658**

GLASGOW 24 FEB. 1914

Lloyd's Register Foundation

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