

# REPORT ON BOILERS.

No. 29131.

Received at London Office JUL 27 1910

Date of writing Report July 1910 When handed in at Local Office 18/7/10 Port of Glasgow  
 Safety No. in Survey held at Glasgow Date, First Survey 22<sup>nd</sup> Sept 09 Last Survey 14 July 1910  
 Reg. Book. J. I. "Den of Glamis" (Number of Visits 47) Gross 5191.35  
 Sup<sup>r</sup> on the J. I. "Den of Glamis" Tons Net 3317.92  
 Master P. Singer Built at Glasgow By whom built Napier & Miller When built 1910  
 Engines made at Glasgow By whom made David Rowan & Co when made 1910  
 Boiler made at do By whom made do when made 1910  
 Registered Horse Power Owners C. Bann & Son. Port belonging to Glasgow Dundee.

## MULTITUBULAR BOILERS MAIN, AUXILIARY OR DONKEY. — Manufacturers of Steel James Dunlop & Co Ltd.

Letter for record (5) Total Heating Surface of Boilers 1105 <sup>sq</sup> Is forced draft fitted no No. and Description of

Boilers One Single Ended Working Pressure 120 <sup>lb</sup> Tested by hydraulic pressure to 240 <sup>lb</sup> Date of test 3/6/10

No. of Certificate 10435 Can each boiler be worked separately no Area of fire grate in each boiler 35 <sup>sq</sup> No. and Description of

safety valves to each boiler Cockburns Double Area of each valve 5.9 <sup>sq</sup> Pressure to which they are adjusted 125

Are they fitted with easing gear yes 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 9 1/2 <sup>in</sup> Mean dia. of boilers 11-0 <sup>in</sup> Length 10-6 <sup>in</sup>

Material of shell plates slit Thickness 23/32 Range of tensile strength 286-31.7 Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams D.B.L. long. seams D.B.S. Diameter of rivet holes in long. seams 5/16 <sup>in</sup> Pitch of rivets 4.8125 <sup>in</sup>

Gap of plates or width of butt straps 10 <sup>in</sup> Per centages of strength of longitudinal joint rivets 89 Working pressure of shell by rules 127 <sup>lb</sup>

Size of manhole in shell 16x12 Size of compensating ring Flanged No. and Description of Furnaces in each boiler 2 plain

Description of longitudinal joint weld No. of strengthening rings none Working pressure of furnace by the rules 125 Combustion chamber plates: Material slit Thickness: Sides 1/2 <sup>in</sup> Back 1/2 <sup>in</sup> Top 1/2 <sup>in</sup> Bottom 3/32 <sup>in</sup>

Pitch of stays to ditto: Sides 7 1/2 x 6 1/2 <sup>in</sup> Back 7 1/2 x 7 3/4 <sup>in</sup> Top 7 1/2 x 7 3/8 <sup>in</sup> If stays are fitted with nuts or riveted heads none Working pressure by rules 123 <sup>lb</sup> Material of stays slit Diameter at smallest part 1.22 <sup>in</sup> Area supported by each stay 16.3 <sup>sq</sup> Working pressure by rules 120 <sup>lb</sup> End plates in steam space: Material slit Thickness 7/8 <sup>in</sup>

Pitch of stays 16x15 How are stays secured D. rule Working pressure by rules 143 Material of stays slit Diameter at smallest part 3.97 <sup>in</sup>

Area supported by each stay 2.40 <sup>sq</sup> Working pressure by rules 143 Material of Front plates at bottom slit Thickness 13/16 <sup>in</sup> Material of Lower back plate slit Thickness 25/32 <sup>in</sup> Greatest pitch of stays 12 <sup>in</sup> Working pressure of plate by rules 120 <sup>lb</sup> Diameter of tubes 3 <sup>in</sup>

Pitch of tubes 4 1/4 x 4 1/2 <sup>in</sup> Material of tube plates slit Thickness: Front 13/16 <sup>in</sup> Back 5/8 <sup>in</sup> Mean pitch of stays 10 1/2 <sup>in</sup> Pitch across wide water spaces 13 <sup>in</sup> Working pressures by rules 127 <sup>lb</sup> Girders to Chamber tops: Material slit Depth and thickness of girder at centre 7 7/8 x 9 1/16 x 2 Length as per rule 31 7/8 <sup>in</sup> Distance apart 7 7/8 <sup>in</sup> Number and pitch of Stays in each 3-7 1/2 <sup>in</sup>

Working pressure by rules 127 <sup>lb</sup> Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked separately no

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

The foregoing is a correct description.

for David Rowan & Co Manufacturer.

Dates of Survey See accompanying machinery report. Is the approved plan of boiler forwarded herewith yes  
 while building See accompanying machinery report. Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been constructed under Special Survey & is of good materials and workmanship. It has been fitted on board as stated Rpt. H.

Survey Fee ... £ : When applied for, 19...  
 Travelling Expenses (if any) £ : : When received, 19...

F. H. Gardner-Smith Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute **GLASGOW** 26 JUL 1910

Assigned See minute on accompanying machinery report.



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