

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 22nd Sept 09 Last Survey 14 July 1910
 Reg. Book. S. I. "Den of Hams" (Number of Visits 47) Gross 5191.35
 Tons Net 3317.92
 Master P. Singer Built at Glasgow By whom built Hapkin & 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. Barrie & 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 ^{sq} Is forced draft fitted no No. and Description ofBoilers One Single Ended Working Pressure 120 ^{lb} Tested by hydraulic pressure to 240 ^{lb} Date of test 3/6/10No. of Certificate 10435 Can each boiler be worked separately no Area of fire grate in each boiler 35 ^{sq} No. and Description ofsafety valves to each boiler Cockburns Double Area of each valve 5.9 ^{sq} Pressure to which they are adjusted 125Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler noSmallest distance between boilers or uptakes and bunkers or woodwork 9 1/2 ⁱⁿ ^{2nd} ^{Mean} dia. of boilers 11-0 Length 10-6Material of shell plates slit Thickness 2 3/32 Range of tensile strength 286-31.7 Are the shell plates welded or flanged noDescrip. of riveting: cir. seams D. B. L. long. seams D. B. S. Diameter of rivet holes in long. seams 5 1/16 Pitch of rivets 4-8 1/25Lap of plates or width of butt straps 10 ⁱⁿ Per centages of strength of longitudinal joint rivets 89 Working pressure of shell by plate 80.5rules 127 ^{lb} Size of manhole in shell 16 x 12 Size of compensating ring Flanged No. and Description of Furnaces in eachboiler 2 plain Material slit Outside diameter 3-3 5/8 Length of plain part ^{top} 77 Thickness of plates ^{crowd} 2 1/32 ^{bottom} 2 1/32 ^{2 3/32}Description of longitudinal joint weld No. of strengthening rings none Working pressure of furnace by the rules 125 Combustion chamberplates: Material slit Thickness: Sides 1/2 Back 1/2 Top 1/2 Bottom 3 1/32 Pitch of stays to ditto: Sides 7 1/2 x 6 1/2 Back 7 1/2 x 7 1/4Top 7 1/2 x 7 1/2 If stays are fitted with nuts or riveted heads rule Working pressure by rules 123 Material of stays slit ^{area} ^{Diameter} atsmallest part 1-22 Area supported by each stay 163 Working pressure by rules 120 End plates in steam space: Material slit Thickness 7/8Pitch of stays 16 x 15 How are stays secured D. rule Working pressure by rules 143 Material of stays slit ^{area} ^{Diameter} at smallest part 3-97Area supported by each stay 240 Working pressure by rules 143 Material of Front plates at bottom slit Thickness 1 3/16 Material ofLower back plate slit Thickness 2 5/32 Greatest pitch of stays 12 Working pressure of plate by rules 120 Diameter of tubes 3Pitch of tubes 4 1/4 x 4 1/2 Material of tube plates slit Thickness: Front 1 3/16 Back 5/8 Mean pitch of stays 10 1/2 Pitch across widewater spaces 13 Working pressures by rules 127 ^{lb} Girders to Chamber tops: Material slit Depth and thickness ofgirder at centre 7 7/8 x 9 1/16 x 2 Length as per rule 31 7/8 Distance apart 7 7/8 Number and pitch of Stays in each 3-7 1/2Working pressure by rules 127 Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler workedseparately 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
 During progress of work in shops - -
 while building
 During erection on board vessel - - -

See accompanying
 machinery report.

Is the approved plan of boiler forwarded herewith yes
 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...

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.

W1339-0191

Lloyd's Register
 Foundation