

## REPORT ON BOILERS.

No. 9208

28 JAN 1925

Date of writing Report 191 When handed in at Local Office 8/10/1924 Port of Belfast.  
 No. in Survey held at Belfast.  
 Reg. Book. on the Donkey Boiler for the H.S. "CLYDEBANK" (6649).  
 Master Built at Glasgow. By whom built Harland & Wolff Ltd. When built 1924.  
 Engines made at Glasgow. By whom made Harland & Wolff Ltd. When made 1924.  
 Boilers made at Belfast. By whom made Harland & Wolff Ltd. When made 1924.  
 Registered Horse Power Owners Messrs Andrew Weir & Co (Bank Ltd) Port belonging to

**MULTITUBULAR BOILERS** ~~MAIN, AUXILIARY OR DONKEY.~~ Manufacturers of Steel D. Bolville & Sons.  
 (Letter for record 5) Total Heating Surface of Boilers 1510 Is forced draft fitted No. and Description of Boilers One single ended. Working Pressure 110 lbs Tested by hydraulic pressure to 215 lbs Date of test 29-9-24  
 No. of Certificate 844 Can each boiler be worked separately EQUIVALENT Area of fire grate in each boiler 44 No. and Description of safety valves to each boiler 2 SPRING LOADED Area of each valve 9.62 Pressure to which they are adjusted 110 lbs/sq  
 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 2'-1" INSIDE dia. of boilers 13'-0" Length 11'-0"  
 Material of shell plates Steel Thickness 3/4" Range of tensile strength 28132 Are the shell plates welded or flanged No  
 Descrip. of riveting: cir. seams D.R. long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 15/16" Pitch of rivets 6'-8"  
 Lap of plates or width of butt straps 1'-2 1/4" Per centages of strength of longitudinal joint rivets 116 Working pressure of shell by rules 120 lbs Size of manhole in shell 16 x 12 Size of compensating ring 2 @ 30 x 2'-8" x 3/4" thick oval  
 boiler 3 Corrugated Material Steel Outside diameter 3'-4 1/8" Length of plain part top Thickness of plates crown 3/16" bottom 1/16"  
 Description of longitudinal joint weld. No. of strengthening rings Working pressure of furnace by the rules 156 lbs Combustion chamber plates: Material Steel Thickness: Sides 9/16" Back 7/16" Top 7/16" Bottom 3/4" Pitch of stays to ditto: Sides 8'-4" x 8'-2" Back 9'-8" x 8'-2"  
 Top 9'-8" x 8'-2" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 154 lbs Material of stays Steel Area at smallest part 1.22 Area supported by each stay 46.5 Working pressure by rules 143 lbs End plates in steam space: Material Steel Thickness 1/8"  
 Pitch of stays 8'-8" How are stays secured Nut & Washer Working pressure by rules 130 lbs Material of stays Steel Area at smallest part 4.118  
 Area supported by each stay 324 Working pressure by rules 140 lbs Material of Front plates at bottom Steel Thickness 3/4" Material of Lower back plate Steel Thickness 3/4" Greatest pitch of stays 12'-4" x 8'-2" Working pressure of plate by rules 193 lbs Diameter of tubes 3'-4"  
 Pitch of tubes 4'-2" x 4'-8" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 8'-9" Pitch across wide water spaces 1'-2 1/4" Working pressures by rules 130 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 2 @ 4" x 3/4" length as per rule 2'-6" Distance apart 9'-2" Number and pitch of Stays in each 3 @ 8'-4"  
 Working pressure by rules 141 lbs Steam dome: description of joint to shell none % of strength of joint  
 Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes  
 Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

**SUPERHEATER.** Type none Date of Approval of Plan Tested by Hydraulic Pressure to  
 Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler  
 Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

The foregoing is a correct description,  
 FOR HARLAND AND WOLFF, LIMITED.  
 J. E. Tebbelck Manufacturer.

Dates of Survey During progress of work in shops - 14, 18, June 14, 16, 24, July 3, 10, 23, Aug 20, 21, Sept 1, 5, 9, 24. Is the approved plan of boiler forwarded herewith yes  
 while building During erection on board vessel - - -  
 Total No. of visits

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) This Boiler has been built under Special Survey, materials & workmanship good. Hydraulic test satisfactory. It is being shipped to Glasgow for installation in the vessel. This boiler has now been fitted on board the above vessel in an efficient manner, examined under steam and safety valves adjusted to 110 lbs/sq. Washer F 7/16" A 5/8" B.

Survey Fee ... £ 10 : 2 : 0 When applied for, 8/10/1924  
 Travelling Expenses (if any) £ 1 : 1 : 0 When received, 1/12/24

Committee's Minute GLASGOW 27 JAN 1925

Assigned # D.B. 125 D.B. - 1106

William Bates & Co. Connick.  
 Engineer Surveyors to Lloyd's Register of Shipping.

002639-002646-0319

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