

# REPORT ON BOILERS.

No. 34036.  
WED. MAY. 27. 1914  
WED. JUL. 15. 1914

Date of writing Report 101 When handed in at Local Office 14/57 1014 Port of Glasgow  
 Received at London Office  
 No. in Survey held at Glasgow Date, First Survey 9. 5. 13. Last Survey 1. 5. 1914  
 Reg. No. 10 Sup on the Boiler 23359 for s.s. "BIDDY" (Number of Visits 28) Gross Tons }  
 Master Richardson Built at Larne By whom built Larne Shipbuilding Co. (No. 64) built 1914. Net Tons }  
 Engines made at Glasgow By whom made Sautter Lillier & Co. Engine 126 When made 1914  
 Boilers made at do By whom made James Neilson & Son Ltd When made 1914  
 Registered Horse Power 64 Owners The Premier Ins. Co Ltd Port belonging to Hull

## MULTITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY. - Manufacturers of Steel Steel Co. of Scotland Ltd

Letter for record (5) Total Heating Surface of Boilers 1230 sq ft Is forced draft fitted No No. and Description of Boilers One Single Ended Working Pressure 130 lbs Tested by hydraulic pressure to 260 lbs Date of test 1/5/14  
 No. of Certificate 12691 Can each boiler be worked separately Area of fire grate in each boiler 49 sq ft No. and Description of Safety valves to each boiler Pair spring loaded Area of each valve 404 sq in Pressure to which they are adjusted 135 lbs  
 Are they fitted with casing 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 6'-8" Mean dia. of boilers 12'-0" Length 10'-0"  
 Material of shell plates steel Thickness 2 7/32" Range of tensile strength 28432 Are the shell plates welded or flanged No  
 Descrip. of riveting: cir. seams D. R. L. / long. seams S. B. S Diameter of rivet holes in long. seams 13/16" Pitch of rivets 5 3/4"  
 Spacing of plates or width of butt straps 12 3/4" Per centages of strength of longitudinal joint rivets 86 Working pressure of shell by rules 137 Size of manhole in shell 16 x 12 Size of compensating ring 7 x 27/32 No. and Description of Furnaces in each boiler 3 plain Material steel Outside diameter 37" Length of plain part top 75" Thickness of plates crown 19/32" bottom 11/16" Working pressure of furnace by the rules 130 Combustion chamber description of longitudinal joint weld No. of strengthening rings per ft Working pressure of furnace by the rules 130  
 Material of tubes: Material steel Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 9/16" Pitch of stays to ditto: Sides 4 x 8 Back 3 x 9 3/8  
 Spacing of stays 10 x 4 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 135 Material of stays steel Diameter at smallest part 1-24 Area supported by each stay 76" Working pressure by rules 130 End plates in steam space: Material steel Thickness 27/32" Pitch of stays 16 x 15 How are stays secured? Nuts Working pressure by rules 133 Material of stays steel Diameter at smallest part 3.67 Area supported by each stay 240 Working pressure by rules 160 Material of Front plates at bottom steel Thickness 2 3/32" Material of cover back plate steel Thickness 2 1/32" Greatest pitch of stays 12 1/2 Working pressure of plate by rules 130 Diameter of tubes 3 1/2"  
 Pitch of tubes 4 3/8 x 2 1/2 Material of tube plates steel Thickness: Front 2 3/32" Back 2 1/32" Mean pitch of stays 11 1/6 Pitch across wide tubes 13 1/4 Working pressures by rules 130 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 6 3/4 x 1 1/2 Length as per rule 2'-2" Distance apart 10" Number and pitch of Stays in each 2 at 4 Working pressure by rules 130 Superheater or Steam chest: how connected to boiler None 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

Pitch of rivets	Working pressure of shell by rules	Diameter of flue	Material of flue plates	Thickness

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 casing gear

Survey request form 1267 attached  
 The foregoing is a correct description, For JAMES NEILSON & SON, Ltd. Manufacturer.  
 Is the approved plan of boiler forwarded herewith Yes  
 Total No. of visits 28.  
 Dates: During progress of work in shops - 1913. May 9-21. Aug 4-13. 20-25. Sept 15-21. 22.  
 During erection on board vessel - 1914 March 20-25. April 2-9. 20-24. May 1.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler was constructed under Special Survey & is of good materials & workmanship.  
 This boiler has been securely fitted aboard and its safety valves adjusted under steam.

Survey Fee ... £ 4 : 2 : } When applied for, 22/57 1914.  
 Travelling Expenses (if any) £ : : } When received, 26/57 1914.  
 Committee's Minute  
 Signed  
 Glasgow 26 MAY. 1914  
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.  
 FRI. JUL. 24. 1914  
 See minute on Gls. Rpt. No. 34226  
 P. J. Smith  
 Lloyd's Register Foundation

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