

# REPORT ON BOILERS.

No. 8405  
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Received at London Office

Report 16<sup>th</sup> Oct 1920 When handed in at Local Office 19 Port of Belfast  
 Survey held at Belfast Date, First Survey 4<sup>th</sup> Sep 1919 Last Survey 7<sup>th</sup> Oct 1920  
 the S.S. Donheur (Number of Visits 76) Gross 5327 Tons Net 3170  
Lagton Built at Belfast By whom built Harland & Wolff L<sup>d</sup> When built 1920  
 de at Belfast By whom made - When made -  
 le at - By whom made - When made -  
 Horse Power ✓ Owners Liverpool Brazil & River Plate Steam Navigation Co L<sup>d</sup> Port belonging to Liverpool

## TUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel D. Colville & Sons L<sup>d</sup>

record S. Total Heating Surface of Boilers 1432 sq ft. Is forced draft fitted No No. and Description of  
Single End Cylindrical Working Pressure 120 lbs Tested by hydraulic pressure to 240 lbs Date of test 20-4-20  
 Certificate 568 Can each boiler be worked separately ✓ Area of fire grate in each boiler oil fuel No. and Description of  
 valves to each boiler 2 Direct Spring Area of each valve 7.07 sq" Pressure to which they are adjusted 125 lbs  
 fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No  
 distance between boilers or uptakes and bunkers or woodwork About 22' Sub dia. of boilers 12'-6" Length 10'-6"  
 shell plates Steel Thickness 3/4" Range of tensile strength 28-32 tons Are the shell plates welded or flanged No  
 riveting: cir. seams Lap long. seams Butt Diameter of rivet holes in long. seams 7/16" Pitch of rivets 5 3/8"  
14 1/2" width of butt straps 14 1/2" Per centages of strength of longitudinal joint rivets 116.6 Working pressure of shell by  
 plate 84.0  
2 lbs Size of manhole in shell 16" x 12" Size of compensating ring No No. and Description of Furnaces in each  
8 Material Steel Outside diameter 44 1/2" Length of plain part top 4" Thickness of plates crown 3/4"  
 bottom 8" bottom 3/4"  
6 of longitudinal joint Weld No. of strengthening rings ✓ Working pressure of furnace by the rules 128 lbs Combustion chamber  
 material Steel Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 3/4" Pitch of stays to ditto: Sides 10" x 8 3/4" Back 9 3/4" x 9"  
8 3/4" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 125 lbs Material of stays Steel Area at  
 top 1475 sq in supported by each stay 87 1/2 sq in Working pressure by rules 129 lbs plates in steam space: Material Steel Thickness 3/32"  
 stays 17 1/2" x 1 1/2" How are stays secured Nuts & screwed into plates Working pressure by rules 129 lbs Material of stays Steel Area at smallest part 5.06 sq in  
 supported by each stay 341 1/2 sq in Working pressure by rules 153 lbs Material of Front plates at bottom Steel Thickness 1/8" Material of  
 plates Steel Thickness 3/4" Greatest pitch of stays 13 1/2" Working pressure of plate by rules 139 lbs Diameter of tubes 3 1/2"  
 tubes 4 1/2" x 4 1/2" Material of tube plates Steel Thickness: Front 1/8" Back 3/4" Mean pitch of stays 9" x 9" Pitch across wide  
 plates 14 1/2" Working pressures by rules 125 lbs Girders to Chamber tops: Material Steel Depth and thickness of  
 centre 6" x (3/8" + 2)" Length as per rule 28 1/2" Distance apart 8 3/4" Number and pitch of Stays in each 2-10"  
 pressure by rules 141 lbs Steam dome: description of joint to shell ✓ % of strength of joint

Thickness of shell plates \_\_\_\_\_ Material \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ Diam. of rivet holes \_\_\_\_\_  
 Working pressure of shell by rules \_\_\_\_\_ Crown plates \_\_\_\_\_ Thickness \_\_\_\_\_ How stayed \_\_\_\_\_  
 SUPERHEATER. Type ✓ Date of Approval of Plan \_\_\_\_\_ Tested by Hydraulic Pressure to \_\_\_\_\_  
 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler \_\_\_\_\_  
 Safety Valve \_\_\_\_\_ Pressure to which each is adjusted \_\_\_\_\_ Is Easing Gear fitted \_\_\_\_\_

**CAL DONKEY BOILER**— No. \_\_\_\_\_ Description \_\_\_\_\_ Manufacturers of steel \_\_\_\_\_  
 By whom made \_\_\_\_\_ When made \_\_\_\_\_ Where fixed \_\_\_\_\_ Working pressure \_\_\_\_\_  
 Hydraulic pressure to \_\_\_\_\_ Date of test \_\_\_\_\_ No. of Certificate \_\_\_\_\_ Fire grate area \_\_\_\_\_ Description of safety valves \_\_\_\_\_  
 Area of each \_\_\_\_\_ Pressure to which they are adjusted \_\_\_\_\_ If fitted with easing gear \_\_\_\_\_ If steam from main boilers can  
 enter donkey boiler \_\_\_\_\_ Dia. of donkey boiler \_\_\_\_\_ Length \_\_\_\_\_ Material of shell plates \_\_\_\_\_ Thickness \_\_\_\_\_ Range of tensile  
 strength \_\_\_\_\_ Descrip. of riveting long. seams \_\_\_\_\_ Dia. of rivet holes \_\_\_\_\_ Whether punched or drilled \_\_\_\_\_ Pitch of rivets \_\_\_\_\_  
 Per centage of strength of joint Rivets \_\_\_\_\_ Working pressure of shell by rules \_\_\_\_\_ Thickness of shell crown plates \_\_\_\_\_  
 No. of Stays to do. \_\_\_\_\_ Dia. of stays \_\_\_\_\_ Diameter of furnace Top \_\_\_\_\_ Bottom \_\_\_\_\_ Length of furnace \_\_\_\_\_  
 Description of joint \_\_\_\_\_ Working pressure of furnace by rules \_\_\_\_\_ Thickness of furnace crown \_\_\_\_\_  
 Radius of do. \_\_\_\_\_ Stayed by \_\_\_\_\_ Diameter of uptake \_\_\_\_\_ Thickness of uptake plates \_\_\_\_\_

The foregoing is a correct description,  
 For HARLAND & WOLFF L<sup>d</sup> Manufacturer.  
J. E. Rebeck

During progress of work in shops - - - See other sheet  
 During erection on board vessel - - - \_\_\_\_\_  
 Total No. of visits \_\_\_\_\_ Is the approved plan of main boiler forwarded herewith \_\_\_\_\_  
 " " " donkey " " " \_\_\_\_\_



