

# REPORT ON BOILERS.

lnk 15346  
No. 26332

TUES. 17 MAR 1908  
TUES. 7 APR 1908

Date of writing Report 7th Mar 1908 When handed in at Local Office 7th Mar 1908 Port of Glasgow  
 No. in Survey held at Glasgow Date, First Survey 10th May 1908 Last Survey 6th March 1908  
 Reg. Book. 642 on the S.S. Scotsman (Number of Visits 53) Gross 181 Tons Net 70  
 Master J. H. Gilmore Built at Levine By whom built J. H. Gilmore When built 1894-7  
 Engines made at Glasgow By whom made Wm. Houston when made 1894  
 Boilers made at Pollacksham By whom made J. & W. Dalglisk (No 280) when made 1908  
 Registered Horse Power British Country S.S. Co. Ltd. Port belonging to Glasgow

MULTITUBULAR BOILERS—MAIN, ~~ASSEMBLY OR DONKEY~~.—Manufacturers of Steel H. Budden & Co., Cobble.

(Letter for record S) Total Heating Surface of Boilers 753 sq ft Is forced draft fitted  No. and Description of Boilers One, Single Ended Working Pressure 130 lbs Tested by hydraulic pressure to 260 Date of test 6/3/08  
 No. of Certificate 8497 Can each boiler be worked separately  Area of fire grate in each boiler 29 sq ft No. and Description of safety valves to each boiler Two Direct Spring Area of each valve 3.98 sq in Pressure to which they are adjusted 125 lbs  
 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 9" Inside diam. of boilers 9'-6" Length 9'-0"  
 Material of shell plates Steel Thickness 2 1/32" Range of tensile strength 28/32 Are the shell plates welded or flanged No  
 Descrip. of riveting: cir. seams D.R. Lap long. seams 3.R. Butt Diameter of rivet holes in long. seams 7/8" Pitch of rivets 4 5/8"  
 Lap of plates on width of butt straps 9 1/4" Per centages of strength of longitudinal joint rivets 88.6 Working pressure of shell by rules 81.0  
 Size of manhole in shell 16" x 12" Size of compensating ring 6" x 2 1/32" No. and Description of Furnaces in each boiler Two, plain Material Steel Outside diameter 36" Length of plain part 69" Thickness of plates 9 1/16"  
 Description of longitudinal joint Welded No. of strengthening rings one Working pressure of furnace by the rules 130 Combustion chamber plates: Material Steel Thickness: Sides 17/32" Back 17/32" Top 17/32" Bottom 17/32" Pitch of stays to ditto: Sides 8" x 7 1/2" Back 8" x 7 1/2"  
 Top 8" x 7" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 144 Material of stays Steel Diameter at smallest part 1.5" dia Area supported by each stay 62 sq in Working pressure by rules 134 End plates in steam space: Material Steel Thickness 2 5/32"  
 Pitch of stays 1 1/2" x 1 1/2" How are stays secured to nuts Working pressure by rules 130 Material of stay Steel Diameter at smallest part 2.660"  
 Area supported by each stay 175 sq in Working pressure by rules 132 Material of Front plates at bottom Steel Thickness 2 5/32" Material of Lower back plate Steel Thickness 2 5/32" Greatest pitch of stays 13" Working pressure of plate by rules 182 Diameter of tubes 3"  
 Pitch of tubes 4" Material of tube plates Steel Thickness: Front 2 5/32" Back 1 9/32" Mean pitch of stays 10" Pitch across wide water spaces 13" Working pressures by rules 130 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 6 1/4" x 1" Length as per rule 23 7/8" Distance apart 7" Number and pitch of Stays in each two, 8"  
 Working pressure by rules 145 lbs 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 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

\* July 18. 31 Aug 5. 15. 19. Sep 5. 12. 28. Oct 4. 8. 12. 15. 16. Nov 11. 21. The foregoing is a correct description, 1908. Mar 4. 6. A. & N. Dalglisk Manufacturer.

Dates of Survey During progress of work in shops -- 1906. May 10. 19 June 1. 12. 13. 21. 26. 29. July 23 Is the approved plan of boiler forwarded herewith   
 while building board vessel -- Aug 3. 11. 16. 24. 28 Sep 6. 17. Oct 2. 9. 10. 24. Nov 6. 30. Total No. of visits 53  
Dec 7. 1907 to 11. 23. 29. Feb 16. 27. Mar 6. April 12. 25. May 16. 18. 24. June 13. 20

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey. The materials and workmanship are of good quality and on completion was tested by hydraulic pressure to 260 pounds per square inch & was found tight and sound at that pressure. It is to be fitted on board the S.S. Scotsman now at Port Glasgow.

Survey Fee ... £ 2 : 10 : } When applied for, 11/3/1908  
 Travelling Expenses (if any) £ : : } When received, 27/3/1908  
George Murdoch  
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Glasgow 16 MAR 1908  
 Committee's Minute  
 Assigned Transmit to London See minute on lnk. No. 15346  
 Lab for 20.3.08

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THE MARGIN.

No. sent with Report now attached 710

