

## REPORT ON BOILERS.

No. 41392.

Received at London Office

WED. OCT. 3 1921

Date of writing Report 19. 7. 1921 When handed in at Local Office 1. 10. 1921 Port of Glasgow  
 No. in Survey held at Glasgow  
 Reg. Book. 18935 on the S/S "Diplomat"  
 Date, First Survey 30. 9. 1919 Last Survey 29/9/1921  
 (Number of Visits 104) Gross 8240 Tons Net 5255  
 Master Built at Glasgow By whom built G. Connell & Co. Ltd. When built 1921  
 Engines made at Glasgow By whom made Dunsen & Jackson (482) When made 1921  
 Boilers made at " By whom made " (482) When made 1921  
 Registered Horse Power Owners G. Connell & Co. Ltd. Port belonging to Liverpool.

**MULTITUBULAR BOILERS—MAIN, AUXILIARY OF DONKEY.**—Manufacturers of Steel Steel Co. of Scotland  
 (Letter for record S) Total Heating Surface of Boilers 4680  $\text{ft}^2$  Is forced draft fitted No. and Description of Boilers 2 Single Ended Working Pressure 200 Tested by hydraulic pressure to 350 Date of test 6-10-20  
 No. of Certificate 15525 Can each boiler be worked separately Yes Area of fire grate in each boiler 63.25  $\text{ft}^2$  No. and Description of safety valves to each boiler Double Spring Area of each valve 406.8  $\text{in}^2$  Pressure to which they are adjusted 205  
 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 21" Mean dia. of boilers 15.9" Length 10.6"  
 Material of shell plates S Thickness 1 1/2" Range of tensile strength 20/34 Are the shell plates welded or flanged No  
 Descrip. of riveting: cir. seams DR long. seams TR DBS Diameter of rivet holes in long. seams 19/16" Pitch of rivets 10 1/2"  
 Width of butt straps 23" Per centages of strength of longitudinal joint rivets 84.5% plate 85.7% Working pressure of shell by rules 210 Size of manhole in shell 16 x 12 Size of compensating ring 8 x 1 1/2"  
 No. and Description of Furnaces in each boiler 3 Corrugated Material S Outside diameter 4.0" Length of plain part top 12 1/32" bottom 12 1/32" Thickness of plates crown 1 1/2" bottom 1 1/2"  
 Description of longitudinal joint welded No. of strengthening rings Working pressure of furnace by the rules 213 Combustion chamber plates: Material S Thickness: Sides 3/4" Back 3/4" Top 3/4" Bottom 27/32" Pitch of stays to ditto: Sides 9 1/2" Back 10 1/8"  
 Top 9 1/2" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 203 Material of stays S Area at smallest part 198  $\text{in}^2$  Area supported by each stay 87.89 Working pressure by rules 204 End plates in steam space: Material S Thickness 1 1/4"  
 Pitch of stays 2 1/4" How are stays secured DN Working pressure by rules 212 Material of stays S Area at smallest part 749  $\text{in}^2$   
 Area supported by each stay 334.6 Working pressure by rules 232 Material of Front plates at bottom S Thickness 1 1/8" Material of Lower back plate S Thickness 3/32" Greatest pitch of stays 23 1/2" Working pressure of plate by rules 210 Diameter of tubes 3 1/4"  
 Pitch of tubes 19 1/2" Material of tube plates S Thickness: Front 1 1/8" Back 7/8" Mean pitch of stays 11 1/4" Pitch across wide water spaces 14 1/4" Working pressures by rules 224 Girders to Chamber tops: Material S Depth and thickness of girder at centre 9 x 13/4" Length as per rule 2.534" Distance apart 9 7/16" Number and pitch of Stays in each 2 at 9 3/8"  
 Working pressure by rules 206 Steam dome: description of joint to shell % 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

**UPERHEATER.** Type Schmidt Date of Approval of Plan See Cul. attached Tested by Hydraulic Pressure to 600  
 Date of Test See Cul. attached Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler Yes  
 Diameter of Safety Valve 2" Pressure to which each is adjusted 210 Is Easing Gear fitted Yes  
 The foregoing is a correct description,  
 James Dunsen & Jackson, Ltd. Manufacturer.  
 Dates of Survey During progress of work in shops - - - See Machinery report attached. Is the approved plan of boiler forwarded herewith Yes  
 while building During erection on board vessel - - - Total No. of visits 104

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) These Boilers have been built under Special Survey in accordance with the approved plans. The workmanship, material are of the good quality. They have been securely fitted on board. This Report accompanies that of the Machinery.

Survey Fee ... When applied for, 19  
 Travelling Expenses (if any) ... When received, 19

Committee's Minute

GLASGOW 4-OCT 1921

Engineer Surveyor to Lloyd's Register of Shipping

Assigned See attached machinery report

Lloyd's Register Foundation

3382-0026