

# REPORT ON BOILERS.

No. 69214  
TUE. 3-OCT. 1916

2-OCT 1916

Received at London Office

Port of Newcastle-on-Tyne.  
No. in Survey held at Hellburn-on-Tyne. Date, First Survey 24 Mar Last Survey 29 Sep 1916  
Reg. Book. S. S. Jarvis. (Number of Visits 18) Gross 425  
on the S. S. Jarvis. mess' Palmers & Co. Ltd. 841 Bala Tons Net  
Built at By whom built When built  
Engines made at Mr. Shields By whom made Shields Eng. & Dry Dock Coy Ltd when made 1916  
Boilers made at Hellburn on Tyne By whom made Palmers & Co. Ltd. 637 Bala when made 1916  
Registered Horse Power Owners Humber Steam Boats Co Ltd Port belonging to Hull

**MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.**—Manufacturers of Steel J. Spencer & Sons Ltd  
Letter for record S. Total Heating Surface of Boilers 1175 sq. ft. Is forced draft fitted No. No. and Description of  
Boilers One: Cylind<sup>r</sup> 4 multi<sup>r</sup> Single Working Pressure 180 lb Tested by hydraulic pressure to 360 lb Date of test 29/9/16.  
No. of Certificate 8900. Can each boiler be worked separately ✓ Area of fire grate in each boiler No. and Description of  
Safety valves to each boiler 2: Direct Spring. Area of each valve Pressure to which they are adjusted  
Are they fitted with easing gear 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 Mean dia. of boilers 12' 5" Length 10' 0"  
Material of shell plates Steel Thickness 1" Range of tensile strength 29/30 tons Are the shell plates welded or flanged No.  
Description of riveting: cir. seams Lap Double long. seams RTB. Strap Triple Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 7 1/8" 2/18.  
No. of plates or width of butt straps 18 3/8" Per centages of strength of longitudinal joint rivets 88.6. Working pressure of shell by  
plate 85.4.  
No. of plates 184 lb Size of manhole in shell 16" x 12" Size of compensating ring 4" x 1" No. and Description of Furnaces in each  
Boiler 2: Plain Material Steel Outside diameter 43 3/8" Length of plain part top 5' 10" Thickness of plates crown 25"  
bottom 8' 5" bottom 32"  
Description of longitudinal joint Weld. No. of strengthening rings None Working pressure of furnace by the rules 181 lb Combustion chamber  
Material Steel Thickness: Sides 5" Back 5" Top 5" Bottom 1" Pitch of stays to ditto: Sides 8 1/2" x 8 1/2" Back 8 1/2" x 8 1/2"  
Area 8 1/2" x 8 1/2" If stays are fitted with nuts or riveted heads Auto. Working pressure by rules 186 lb Material of stays Steel Diameter at  
smallest part 2.03" Area supported by each stay 42 1/4" Working pressure by rules 253 lb End plates in steam space: Material Steel Thickness 1 1/2"  
Pitch of stays 14 1/2" x 14 1/2" How are stays secured Black nuts & washers Working pressure by rules 185 lb Material of stays Steel Diameter at smallest part 6.1"  
Area supported by each stay 306" Working pressure by rules 206 lb Material of Front plates at bottom Steel Thickness 1" Material of  
lower back plate Steel Thickness 8" Greatest pitch of stays 14" Working pressure of plate by rules 194 lb Diameter of tubes 5 1/2"  
Pitch of tubes 4 1/4" x 4 1/4" Material of tube plates Steel Thickness: Front 1" Back 3/4" Mean pitch of stays 9 1/2" Pitch across wide  
water spaces 14" Working pressures by rules 182 lb Girders to Chamber tops: Material Steel Depth and thickness of  
girder at centre 8 1/2" x 1 1/8" Length as per rule 31" Distance apart 8 1/2" Number and pitch of Stays in each 2: 8 1/2"  
Working pressure by rules 213 lb 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 easing gear

For The foregoing is a correct description,  
A. Cameron for SHB Manufacturer.

Dates During progress of work in shops - - - 1916 Mar. 24 Jun 9-13-21. Jul. 4-10-17-25 31. Aug. 9-14-22. Is the approved plan of boiler forwarded herewith With accompanying  
Survey while building During erection on board vessel - - - See Newcastle No. 69644 Total No. of visits 18. Report on 841 Bala

## GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

The Boiler of this vessel was built under special survey and the materials and workmanship are good. On completion it was tested as required by the Rules and found tight and sound.

Survey Fee ... £ 3 : 18 : - When applied for. 2-OCT 1916  
Travelling Expenses (if any) £ : : When received. 26 OCT 1916

Wm. R. Austin.  
Engineer-Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI.-2 MAR. 1917

Assigned



W399-0042