

# REPORT ON BOILERS.

No. 71824

Received at London Office

MON 5-MAY 1919

Date of writing Report 5<sup>th</sup> April 1919 When handed in at Local Office 3.5.1919 Port of NEWCASTLE-ON-TYNE

No. in Survey held at Newcastle-on-Tyne Date, First Survey 27<sup>th</sup> Sept. 1918 Last Survey 4<sup>th</sup> April 1919

Reg. Book. on the Steam Steamer "War Paper" (Number of Visits 20) Gross Tons (Gard No 1101) Net Tons

Master Built at Holland By whom built Swan Hunter Wigham Richardson When built 1919

Engines made at Newcastle-on-Tyne By whom made Swan Hunter Wigham Richardson When made 1919

Boilers made at Newcastle-on-Tyne By whom made Swan Hunter Wigham Richardson When made 1919

Registered Horse Power Owners Port belonging to Liverpool

## WATER-TUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Swan Hunter Wigham Richardson

Number for record 5 Total Heating Surface of Boilers 4668 sq. ft. Is forced draft fitted Yes No. and Description of Boilers 3: Cylindrical built: Single Working Pressure 180 lbs Tested by hydraulic pressure to 260 lbs Date of test 4/4/19

of Certificate 9210 Can each boiler be worked separately Yes Area of fire grate in each boiler 635 sq. ft. No. and Description of valves to each boiler 2: Direct Spring Area of each valve 9.62 sq. in. Pressure to which they are adjusted ✓

they fitted with easing gear ✓ In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler ✓

Least distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers 15'6" Length 11'6"

Material of shell plates Steel Thickness 1 1/4" Range of tensile strength 28/2 tons Are the shell plates welded or flanged No

Direction of riveting: cir. seams Lap Double long. seams Butt Strap Diameter of rivet holes in long. seams 1 7/8" Pitch of rivets 9 1/2" 4 7/8"

of plates or width of butt straps 19 1/2" Per centages of strength of longitudinal joint 87.5 Working pressure of shell by rules 182 lbs Size of manhole in shell 16 x 12 Size of compensating ring plate flanged No. and Description of Furnaces in each boiler 3: 24 tons Material Steel Outside diameter 50 3/4" Length of plain part 7'6" Thickness of plates 1 1/2" crown 1 1/2" bottom 1 3/4"

Description of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 188 lbs Combustion chamber Material Steel Thickness: Sides 3/2" Back 1 1/4" Top 3/2" Bottom 3/2" Pitch of stays to ditto: Sides 9 1/2 x 10 1/2" Back 10 1/2 x 8 1/2"

of stays 10 1/2 x 9 1/2" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 180 lbs Material of stays Steel Diameter at smallest part 2 3/8" Area supported by each stay 98 sq. in. Working pressure by rules 215 lbs End plates in steam space: Material Steel Thickness 1 1/2"

of stays 2 1/2 x 2 1/2" How are stays secured With nuts and washers Working pressure by rules 186 lbs Material of stays Steel Diameter at smallest part 8.29"

supported by each stay 456 sq. in. Working pressure by rules 184 lbs Material of Front plates at bottom Steel Thickness 3/2" Material of back plate Steel Thickness 3/2" Greatest pitch of stays 15 1/8" Working pressure of plate by rules 188 lbs Diameter of tubes 2 3/4"

of tubes 4 x 3 1/2" Material of tube plates Steel Thickness: Front 3/2" Back 3/4" Mean pitch of stays 9.81" Pitch across wide spaces 13 1/8" Working pressures by rules 181 lbs 209 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 10 x 1 1/4" Length as per rule 35 1/2" Distance apart 10 1/8" Number and pitch of Stays in each 3: 9 1/2"

Working pressure by rules 184 lbs Superheater or Steam chest: None Can the superheater be shut off and the boiler worked separately Yes

FOR THE FOREGOING IS A CORRECT DESCRIPTION,  
 SWAN, HURTER & WIGHAM RICHARDSON, LTD.  
 G. J. Stoney, Manufacturer.

During progress of work in shops - - - 1918  
 During erection on board vessel - - - 1919  
 27. Oct. 3. 23. 28. Nov. 20. 25. 26. Dec. 16.  
 2. 1919  
 2. 3. Mar. 4. 7. 12. 14. 20. 25. 28. Apr. 11. 14.

Is the approved plan of boiler forwarded herewith Yes

Total No. of visits 20

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

These Boilers were built under special survey and the materials and workmanship are good. On completion they were tested by hydraulic pressure required by the Rules and found tight and sound.

Survey Fee £ 29: 7: 8 When applied for, 1918

Travelling Expenses (if any) £ 17: 6: 0 When received, 1919

Vessel under B.V. Survey

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

FRI. 27 JUN. 1919

Committee's Minute  
 Assigned



As these boilers are not intended  
for a classed vessel it is submitted  
further action is unnecessary.

HWD

13/5/19



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Foundation