

Rpt. 5a.

NEWCASTLE-ON-TYNE

70199

## REPORT ON BOILERS.

No. 9477

SAT. 7-OCT. 1916

Date of writing Report 4<sup>th</sup> Sept 1917 When handed in at Local Office 5/10/16 191 Port of Middlesbrough  
 No. in Survey held at Stockton-on-Tees Date, First Survey 1915 May 19 Last Survey 1916 Oct 2  
 Reg. Book. on the S. S. "Beaumaris" (Number of Visits 13) Gross 2372 Tons Net 1460  
 Master Built at S. Shields By whom built J. T. Edtringham & Co When built 1917  
 Engines made at By whom made When made  
 Boilers made at Stockton By whom made Messrs Thos Hudnott & Co (No 3699) When made 1916  
 Registered Horse Power Owners J. Furness Witty & Co Ltd Port belonging to London

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Messrs J. Spencer & Sons

(Letter for record (S)) Total Heating Surface of Boilers 604 sq ft Is forced draft fitted no No. and Description of Boilers One single ended Working Pressure 100 Tested by hydraulic pressure to 200 Date of test 2.10.16  
 No. of Certificate 5690 Can each boiler be worked separately ✓ Area of fire grate in each boiler 26½ sq ft No. and Description of safety valves to each boiler Two spring Area of each valve 11.04 sq in Pressure to which they are adjusted 105 lbs  
 Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler no  
 Smallest distance between boilers or uptakes and bunkers or woodwork 9" External dia. of boilers 9'-0" Length 9'-0"  
 Material of shell plates steel Thickness ¾" Range of tensile strength 29-33 Are the shell plates welded or flanged no  
 Descrip. of riveting: cir. seams S. lap long. seams 3 Riv lap Diameter of rivet holes in long. seams 15/16" Pitch of rivets 3½"  
 Lap of plates or width of butt straps 6½" Per centages of strength of longitudinal joint rivets 89.6 plate 73.14 Working pressure of shell by rules 103 Size of manhole in shell 16" x 12" Size of compensating ring 5½" x ¾" No. and Description of Furnaces in each boiler 2 plain Material steel Outside diameter 33" Length of plain part 70" Thickness of plates 1/2" crown 1/2" bottom 5/8" mean  
 Description of longitudinal joint weld No. of strengthening rings none Working pressure of furnace by the rules 106 Combustion chamber plates: Material steel Thickness: Sides 17/32" Back 17/32" Top 17/32" Bottom 11/16" Pitch of stays to ditto: Sides 9½" one Back 8½" x 9"  
 Top 8½" one If stays are fitted with nuts or riveted heads nuts Working pressure by rules 110 Material of stays steel Area at smallest part 1.19 Area supported by each stay 81 Working pressure by rules 117 End plates in steam space: Material steel Thickness 25/32"  
 Pitch of stays 15½" x 16½" How are stays secured nuts & washers Working pressure by rules 109 Material of stays steel Area at smallest part 2.66  
 Area supported by each stay 256 Working pressure by rules 108 Material of Front plates at bottom steel Thickness 25/32" Material of Lower back plate steel Thickness 25/32" Greatest pitch of stays 13" x 9" Working pressure of plate by rules 168 Diameter of tubes 3"  
 Pitch of tubes 4½" x 4½" Material of tube plates steel Thickness: Front 25/32" Back 19/32" Mean pitch of stays 10" Pitch across wide water spaces 13½" Working pressures by rules 120 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 6" x 1½" Length as per rule 22½" Distance apart 8½" Number and pitch of Stays in each one  
 Working pressure by rules 148 Steam dome: description of joint to shell none % 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

SUPERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to  
 Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler  
 Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

SURVEY REQUEST  
NO. 1140 ATTACHED.

The foregoing is a correct description,

Manufacturer.

Dates of Survey: During progress of work in shops 1915 May 19 Jun 10-15 Oct 13 Nov 5-24 Dec 7 Is the approved plan of boiler forwarded herewith yes  
 while building: During erection on board vessel 1916 Mar 7 Apr 4 May 12-23 Jun 7 Oct 2 Total No. of visits 13

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under Special Survey: is of good material and workmanship and on completion was tested by hydraulic pressure with satisfactory results

Survey Fee ... £ 2-2-0  
 Travelling Expenses (if any) £

When applied for Monthly P/c.  
 When received, 191

Wm Morrison & Co  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE SEP 11 1917.

Assigned