

Rpt. 5a.

REPORT ON BOILERS.

No. 68837
FRI. 16 JUN. 1916

Received at London Office

Date of writing Report 13 June 1916 When handed in at Local Office JUN 15 1916 Port of NEWCASTLE ON TYNE
 No. in Survey held at Newcastle on Tyne Date, First Survey 1st Febry 1916 Last Survey 28 Aug 1917
 Reg. Book. on the Screw Steamer "Beaumaris" By whom built J. A. Eltringham & Co. L^{td} (Number of Visits) } Gross 2372
 } Net 1460
 Master Built at Newcastle on Tyne By whom built J. A. Eltringham & Co. L^{td} When built 1916
 Engines made at Newcastle on Tyne By whom made J. A. Eltringham & Co. L^{td} When made 1916
 Boilers made at Hebburn on Tyne By whom made Palmer's S.S. & C. Coy. L^{td} When made 1916
 Registered Horse Power Owners Jurress Wither & Co. L^{td} Port belonging to London

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel J. Spencer & Sons L^{td}

(Letter for record S.V.) Total Heating Surface of Boilers 3750 sq. ft. Is forced draft fitted No. No. and Description of Boilers Two: Cylind^{al} hull^l Single Working Pressure 180 lb Tested by hydraulic pressure to 360 lb Date of test 5/6/16

No. of Certificate 8864 Can each boiler be worked separately Yes Area of fire grate in each boiler 58 sq. ft. No. and Description of safety valves to each boiler Two Spring Area of each valve 5.94 sq. in. Pressure to which they are adjusted 185 lb

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

Smallest distance between boilers or uptakes and bunkers or woodwork 9" Mean dia. of boilers 14' 6 1/2" Length 10' 6"

Material of shell plates Steel Thickness 1 1/8" Range of tensile strength 39 to 42 tons Are the shell plates welded or flanged No.

Descrip. of riveting: cir. seams Lap Double long. seams S.S. Double Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 8' 1/4" 4' 3/8"

Lap of plates or width of butt straps 1 1/8" Per centages of strength of longitudinal joint 88.7 Working pressure of shell by rules 85.6

Size of manhole in shell 16" x 12" Size of compensating ring 4" x 1 1/8" No. and Description of Furnaces in each boiler 3: Deighton's Material Steel Outside diameter 45 1/2" Length of plain part top } 9" Thickness of plates bottom } 7/8"

Description of longitudinal joint Weld No. of strengthening rings None Working pressure of furnace by the rules 192 lb Combustion chamber plates: Material Steel Thickness: Sides 2 1/32" Back 2 1/32" Top 2 1/32" Bottom 7/16" Pitch of stays to ditto: Sides 9 1/2" x 8 1/2" Back 9" x 9"

Top 8 1/2" x 8" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 154 lb Material of stays Steel Diameter at smallest part 2 1/8" Area supported by each stay 81" Working pressure by rules 225 lb End plates in steam space: Material Steel Thickness 1 1/4"

Pitch of stays 20" x 20" How are stays secured Double nuts & washers Working pressure by rules 185 lb Material of stays Steel Diameter at smallest part 8' 1/4"

Area supported by each stay 400" Working pressure by rules 220 lb Material of Front plates at bottom Steel Thickness 1" Material of Lower back plate Steel Thickness 1 5/16" Greatest pitch of stays 14 1/2" Working pressure of plate by rules 209 lb Diameter of tubes 3 1/2"

Pitch of tubes 4 1/4" x 4 3/4" 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 222 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 3 1/2" Distance apart 8" Number and pitch of Stays in each 2: 8 1/2"

Working pressure by rules 231 lb Superheater or Steam chest: how connected to boiler None Can the superheater be shut off and the boiler worked separately Yes

holes 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

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

The foregoing is a correct description,
J. Cameron
 Manager, Boiler Shop Dept. Manufacturer.

Dates of Survey } During progress of } Feb. 1. 10. 15. 24. Mar. 1. 3. 8. 22. 24. Apr. 3 Is the approved plan of boiler forwarded herewith Yes
 } work in shops } 10. 19. May. 1. 10. 12. 16. 20. 22. 29. Jun. 5.
 while building } During erection on } See Newcastle Report 70199 Total No. of visits 20+
 } board vessel }

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 as required by the Rules and found tight and sound.

Survey Fee ... £ 10 : 16 : 8. When applied for, JUN 15 1916
 Travelling Expenses (if any) £ : : When received, 28/7/16

Wm. Austin & Field
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute TUE. SEP. 11 1917.
 Assigned

