

REPORT ON BOILERS.

No. 67241

Received at London Office

TUE. MAR. 23. 1915

Date of writing Report 8th Jan 1915 When handed in at Local Office 191 Port of Newcastle-on-Tyne
 No. in Survey held at Newcastle Date, First Survey Aug 13. 1914 Last Survey Jan 7. 1915
 Reg. Book. on the S S Blythdonian (Number of Visits 27) Gross 314 Tons Net 118
 Master S Shields Built at S Shields By whom built J. P. Renoldson & Sons Ltd When built 1915
 Engines made at S Shields By whom made J. P. Renoldson & Sons Ltd When made 1915
 Boilers made at Newcastle By whom made Palmer's Co No. 795 When made 1915
 Registered Horse Power Owners Blyth & London P. O. Co. Port belonging to Newcastle

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY. Manufacturers of Steel J. Spence & Sons & Palmer's Co

(Letter for record S) Total Heating Surface of Boilers 1296 sq ft Is forced draft fitted no No. and Description of Boilers One, single-ended Working Pressure 130 lbs Tested by hydraulic pressure to 260 lbs Date of test 7-1-15

No. of Certificate 8748 Can each boiler be worked separately no Area of fire grate in each boiler no No. and Description of safety valves to each boiler no Area of each valve no Pressure to which they are adjusted no

Are they fitted with casing gear no 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 no Mean dia. of boilers 12'-4 3/8" Length 10'-0"

Material of shell plates Steel Thickness 13/16" Range of tensile strength 28-32 Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams S. Lap long. seams S.B.S. J. Riv. Diameter of rivet holes in long. seams 1" Pitch of rivets 5 1/4"

Lap of plates or width of butt straps 15 1/2" Per centages of strength of longitudinal joint 81.6 Working pressure of shell by rules 133 lbs Size of manhole in shell 16" x 12" Size of compensating ring 7" x 13/16" No. and Description of Furnaces in each boiler 3 - plain Material Steel Outside diameter 38" Length of plain part 76" Thickness of plates 5/8"

Description of longitudinal joint Welded No. of strengthening rings no Working pressure of furnace by the rules 140 lbs Combustion chamber plates: Material Steel Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 13/16" Pitch of stays to ditto: Sides 9" x 9" Back 9" x 9"

Top 10" x 8 1/2" stays are fitted with nuts or riveted heads nuts Working pressure by rules 134 lbs Material of stays Steel Diameter at smallest part 1.45" Area supported by each stay 81" Working pressure by rules 143 lbs End plates in steam space: Material Steel Thickness 15/16"

Pitch of stays 18" x 17" How are stays secured S. N. + W. Working pressure by rules 135 lbs Material of stays Steel Diameter at smallest part 4.11"

Area supported by each stay 306" Working pressure by rules 139 lbs Material of Front plates at bottom Steel Thickness 7/8" Material of Lower back plate Steel Thickness 13/16" Greatest pitch of stays 13 1/2" Working pressure of plate by rules 172 lbs Diameter of tubes 3 1/2"

Pitch of tubes 4 3/4" x 4 3/4" Material of tube plates Steel Thickness: Front 7/8" Back 3/4" Mean pitch of stays 10 3/4" Pitch across wide water spaces 14" Working pressures by rules 140 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8 1/4" x 1 3/8" Length as per rule 29 1/2" Distance apart 10" Number and pitch of Stays in each 2 - 8 1/4"

Working pressure by rules 170 lbs Superheater or Steam chest: how connected to boiler None Can the superheater be shut off and the boiler worked separately no Diameter no Length no Thickness of shell plates no Material no Description of longitudinal joint no Diam. of rivet holes no Pitch of rivets no Working pressure of shell by rules no Diameter of flue no Material of flue plates no Thickness no

If stiffened with rings no Distance between rings no Working pressure by rules no End plates: Thickness no How stayed no

Working pressure of end plates no Area of safety valves to superheater no Are they fitted with casing gear no

For Palmer's Shipbuilding & Iron Co., Ltd
 The foregoing is a correct description,
J. C. Carr Manager, Boiler Section Dept.
 Manufacturer.

Dates of Survey 1914 During progress of work in shops - Aug 13, 18, 25, 28, Sep 3, 8, 10, 16, 24, 29, Oct 1, 6, 9, 14, 19, 23, 28 Is the approved plan of boiler forwarded herewith yes
 while building - Nov 6, 10, 13, 20, 26, Dec 3, 14, 23, 29, Jan 7
 During erection on board vessel - see machy. report. Total No. of visits 27

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This main boiler has been constructed under special survey & the materials and workmanship are found to be good

Survey Fee ... £ machinery When applied for, ... 191
 Travelling Expenses (if any) see machinery report When received, ... 191

Thomas Field
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI. MAR. 26. 1915

Assigned

