

REPORT ON BOILERS

JUN 17 1911

Date of writing Report 15th June 1911 When held in at Local Office 15th June 1911 Port of Newcastle on Tyne
 No. in Survey held at South Shields Date, First Survey 21st July 1911 Last Survey 6th July 1911
 Reg. Book. on the Steel S.S. Wergelia (Number of Visits) } Gross Tons }
 Master Built at Selby By whom built Gochrane Sons When built 1911
 Engines made at Glyff By whom made C D Holmes & Co Ltd when made 1911
 Boilers made at Shields By whom made Jos J. Cunningham & Co when made 1911
 Registered Horse Power Owners Boiler No 1690. Port belonging to

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

(Letter for record 7) Total Heating Surface of Boilers 1384 sq ft Is forced draft fitted ✓ No. and Description of Boilers One Single Ended Working Pressure 180 lb Tested by hydraulic pressure to 360 lb Date of test 30/5/11

No. of Certificate 8146 Can each boiler be worked separately ✓ Area of fire grate in each boiler No. and Description of safety valves to each boiler ✓ 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 ✓ Inside diam. of boilers 12'-9" Length 10'-3"

Material of shell plates Steel Thickness 1/32" Range of tensile strength 29/33 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams 2 R Lap long. seams 5 Rivets Butt Diameter of rivet holes in long. seams 1/8" Pitch of rivets 8"

Leak of plates or width of butt straps 15 3/4" Per centages of strength of longitudinal joint rivets 89.6. Working pressure of shell by rules 185 lb Size of manhole in shell 16" x 12" Size of compensating ring 7 1/2" x 1 1/2" No. and Description of Furnaces in each boiler 3 Plain Material Steel Outside diameter 39" Length of plain part top 72" Thickness of plates crown 7/16" bottom 1/8"

Description of longitudinal joint Welded No. of strengthening rings None Working pressure of furnace by the rules 180 lb Combustion chamber plates: Material Steel Thickness: Sides 2 1/32" Back 2 1/32" Top 2 1/32" Bottom 1" Pitch of stays to ditto: Sides 10 1/2" x 7 1/2" Back 9" x 9"

Top 16" x 8" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 150 Material of stays Iron Diameter at smallest part 5.560" Area supported by each stay 510" Working pressure by rules 183 End plates in steam space: Material Steel Thickness 1 3/32"

Pitch of stays 18" x 17 1/2" How are stays secured Nuts Working pressure by rules 182 Material of stays Steel Diameter at smallest part 5.560"

Area supported by each stay 310" Working pressure by rules 186 Material of Front plates at bottom Steel Thickness 1" Material of Lower back plate Steel Thickness 7/8" Greatest pitch of stays 14 1/2" Working pressure of plate by rules 181 Diameter of tubes 3 1/4"

Pitch of tubes 4 1/2" Material of tube plates Steel Thickness: Front 1 1/32" Back 1 3/16" Mean pitch of stays 11 1/4" Pitch across wide water spaces 14 1/4" Working pressures by rules 193 lb Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 9 1/4" x 1 3/4" Length as per rule 34 1/2" Distance apart 10" Number and pitch of Stays in each Three, 8"

Working pressure by rules 181 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 holes 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. Cunningham Manufacturer.

Dates of Survey During progress of work in shops - - - 1911 Feb. 21-25-27-28 Mar. 13-16 Apr. 18-26 May 16-24-29-30 Is the approved plan of boiler forwarded herewith Yes enclosed
 while building (During erection on board vessel - - -) Jun 7-8.
 Total No. of visits 14 +

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey & on completion was tested by hydraulic pressure to 360 lb per sq ft & was found tight & sound at that pressure. It has been built to the order of Messrs C D Holmes (Hull) Ltd and has been forward to Hull to be fitted on board.

Survey Fee ... £ 4 : 12 : : When applied for JUN 16 1911
 Travelling Expenses (if any) £ : : : When received, 11 1/2 1911

George Murdoch & John Houston
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI JUL 14 1911



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