

REPORT ON BOILERS.

No. 32675

Hull 2133871

Received at London Office

WED. 22 JUN. 1921

Date of writing Report 19 When handed in at Local Office 21/6 19 21 Port of Hull.

No. in Survey held at Hull. Date, First Survey 19. 11. 20 Last Survey 17. 6. 19 21.

Reg. Book. 78208 on the Main boiler No 1237 for the S.S. "BROOKSIDE". (Number of Visits 28) Gross 581.32 Tons Net 252.32

Master Built at Goole By whom built Goole S.B. & R. Co. Ltd. When built 1922.

Engines made at Cothbridge By whom made W. Beardmore & Co. Ltd. When made 1922.

Boilers made at Hull By whom made Charles D. Holmes & Co. Ltd. When made 1922.

Registered Horse Power Owners J. Roe Port belonging to Sunderland.

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Wm Beardmore & Co. Ltd.

(Letter for record S) Total Heating Surface of Boilers 1530 sq ft Is forced draft fitted no. No. and Description of Boilers One cyl multi S.E. Working Pressure 180 lbs. Tested by hydraulic pressure to 360 lbs. Date of test 17/6/21.

No. of Certificate 3486. Can each boiler be worked separately Area of fire grate in each boiler 47.5 sq ft No. and Description of safety valves to each boiler 2 spring loaded Area of each valve 5.93 sq in Pressure to which they are adjusted 180 lbs.

Are they fitted with easing gear yes 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 9" Mean dia. of boilers 15 9/16" Length 10-8"

Material of shell plates Steel Thickness 1 3/8" Range of tensile strength 28-32 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams D.R.L. long. seams T.R. D.B.S. Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 5 1/8"

Lap of plates or width of butt straps 15 3/8" Per centages of strength of longitudinal joint rivets 87.8% plate 84.5% Working pressure of shell by rules 180 lbs

Size of manhole in shell 16 x 12 Size of compensating ring 7 x 1 1/2" No. and Description of Furnaces in each boiler Three plain. Material Steel Outside diameter 39 1/2" Length of plain part top 80" bottom 69" Thickness of plates crown 3/8" bottom 3/4"

Description of longitudinal joint Welded. No. of strengthening rings Working pressure of furnace by the rules 183 Combustion chamber plates: Material Steel Thickness: Sides 1/8" Back 1/8" Top 1/8" Bottom 1/8" Pitch of stays to ditto: Sides 10 x 9" Back 10 x 8 1/2"

Top 10 x 8 If stays are fitted with nuts or riveted heads Nuts. Working pressure by rules 181 Material of stays Steel Area at smallest part 2.07 sq in Sides 90° Sides 207° Sides 218° W.W. Working pressure by rules 218 lbs

Pitch of stays 18 x 17 How are stays secured D.N.S.W. Working pressure by rules 185 Material of stays Steel Area at smallest part 6.79

Area supported by each stay 306 sq in Working pressure by rules 190 Material of Front plates at bottom Steel Thickness 7/8" Material of Lower back plate Steel Thickness 3/8" Greatest pitch of stays 14 x 8 1/2" Working pressure of plate by rules 186 Diameter of tubes 3 1/2"

Pitch of tubes 4 1/8 x 5 Material of tube plates Steel Thickness: Front 7/8" Back 7/8" Mean pitch of stays 11.2" Pitch across wide water spaces 14 x 8 1/2 Working pressures by rules 222 lbs

Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 10 x 1 1/2 Length as per rule 32.47 Distance apart 10" Number and pitch of Stays in each 3 @ 8"

Working pressure by rules 234 Steam dome: description of joint to shell % 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

The foregoing is a correct description,
FOR CHARLES D. HOLMES & CO. LTD. Manufacturer.

Dates of Survey During progress of work in shops 1920: - Nov. 19 Dec 26 24 Jan 4 20 24 Feb 14 17
while building During erection on board vessel 12. 19. 23. June 8-9 1921.

Is the approved plan of boiler forwarded herewith yes.

Total No. of visits 28.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey, the materials & workmanship are good. On completion the boiler was tested by hydraulic pressure to 360 lbs & found sound & tight. The boiler has been properly fitted & secured on board the S.S. Brookside, and its safety valves adjusted under steam.

Survey Fee ... £ 10-4-0 When applied for, 21/6/19 21
Travelling Expenses (if any) £ : : When received, 31/7/19 21.

P. Fitzgerald.
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute Assigned See Hull 2E 33811

FRI. 10 NOV. 1922

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