

REPORT ON BOILERS.

No. 42830.

WED. JUN. 20 1923

Received at London Office

Date of writing Report 15th June 1923 When handed in at Local Office 15th June 1923 Port of Glasgow

No. in Survey held at Parkhead, Glasgow Date, First Survey 12th March Last Survey 14th June 1923

Reg. Book. Single Ended Marine Boiler No. 130 (S. WHEATBLADE) (Number of Visits 6) Gross Tons Net Tons

Master Built at Bideford, Devon By whom built Hansen S. & S. R. Co. Ltd Yard No. 8 When built 1923

Engines made at Coatbridge By whom made Wm Beardmore & Co. Ltd Engine No. 591 When made 1923

Boilers made at Parkhead By whom made Wm Beardmore & Co. Ltd Boiler No. 130 When made 1923

Nominal Horse Power Owners Man Spiller & Baker Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Wm Beardmore & Co. Ltd D. Colville & Sons Ltd J. Spencer & Sons Ltd (Letter for Record S.)

Total Heating Surface of Boilers 1331 Square Feet Is forced draught fitted No Coal or Oil fired Coal

No. and Description of Boilers One Single Ended Return Tube Working Pressure 130 lbs

Tested by hydraulic pressure to 245 lbs Date of test 14.6.23 No. of Certificate 16282 Can each boiler be worked separately

Area of Firegrate in each Boiler 40.25 sq ft No. and Description of safety valves to each boiler 2 Spring loaded

Area of each set of valves per boiler per Rule 10.6 as fitted 11.86 Pressure to which they are adjusted 130 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 Is oil fuel carried in the double bottom under boilers

Smallest distance between shell of boiler and tank top plating Is the bottom of the boiler insulated

Largest internal dia. of boilers 12'-0" Length 10'-6" Shell plates: Material Steel Tensile strength 28/32 TONS

Thickness 3/4" Are the shell plates welded or flanged No Description of riveting: circ. seams end D.R. inter. 55"

long. seams T.R. D.B.S. Diameter of rivet holes in circ. seams 15" long. seams 13/16" Pitch of rivets 6 1/8"

Percentage of strength of circ. end seams plate 43.59 rivets 42.56 Percentage of strength of circ. intermediate seam plate 86.7 rivets 87.1 combined 117.9

Percentage of strength of longitudinal joint plate 86.7 rivets 87.1 Working pressure of shell by Rules 135

Thickness of butt straps outer 11/16" inner 11/16" No. and Description of Furnaces in each Boiler 2 Plain

Material Steel Tensile strength 26/30 TONS Smallest outside diameter 43 3/8"

Length of plain part top 86" bottom 86" Thickness of plates top 11" bottom 11/16" Description of longitudinal joint Weld.

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 134

End plates in steam space: Material Steel Tensile strength 26/30 TONS Thickness 29/32" Pitch of stays 14 x 15 3/4

How are stays secured Double Nuts & Thin Washers Working pressure by Rules 146

Tube plates: Material front Steel back Steel Tensile strength 26/30 TONS Thickness 29/32" 3/4"

Mean pitch of stay tubes in nests 11.56" Pitch across wide water spaces 14 1/2" Working pressure front 222 back 150

Girders to combustion chamber tops: Material Steel Tensile strength 28/32 TONS Depth and thickness of girder

at centre 6 3/4" x 5/8" double Length as per Rule 28 21/32" Distance apart 9" No. and pitch of stays

in each 2 @ 10" Working pressure by Rules 140 Combustion chamber plates: Material Steel

Tensile strength 26/30 TONS Thickness: Sides 19/32" Back 19/32" Top 19/32" Bottom 19/32"

Pitch of stays to ditto: Sides 10" x 9" Back 9 1/4" x 10" Top 10 x 9" Are stays fitted with nuts or riveted over Nuts

Working pressure by Rules 130 Front plate at bottom: Material Steel Tensile strength 26/30 TONS

Thickness 29/32" Lower back plate: Material Steel Tensile strength 26/30 TONS Thickness 29/32"

Pitch of stays at wide water space 14 1/2" x 9 1/4" Are stays fitted with nuts or riveted over Nuts

Working Pressure 138 Main stays: Material Steel Tensile strength 28/32 TONS

Diameter At body of stay, 2 3/8" Over threads 2 3/8" No. of threads per inch 6 Area supported by each stay 254 sq in

Working pressure by Rules 153 Screw stays: Material Steel Tensile strength 26/30 TONS

Diameter At turned off part, 1 1/2" & 1 3/8" Over threads 1 1/2" & 1 3/8" No. of threads per inch 9 Area supported by each stay 93.28 sq in

002289-002297-0158

Lloyd's Register
Marine Insurance

Working pressure by Rules 134. Are the stays drilled at the outer ends no. Margin stays: Diameter ^{At turned off part.} 1 5/8" or Over threads 1 5/8"
 No. of threads per inch 9. Area supported by each stay 120 ^{sq. in.} Working pressure by Rules 130
 Tubes: Material Cap'd. Iron. External diameter ^{Plain} 3 1/2 Thickness ^{Stay} 3 1/2 9 L.S. 9 No. of threads per inch 9
 Pitch of tubes 4 7/8" x 4 7/8" Working pressure by Rules 165. Manhole compensation: Size of opening in shell plate 16" x 12" Section of compensating ring 4 7/8" x 1" No. of rivets and diameter of rivet holes 42 - 15/16"
 Outer row rivet pitch at ends 4" Depth of flange if manhole flanged 3 5/8" Steam Dome: Material None fitted
 Tensile strength 8 Thickness of shell 3 5/8" Description of longitudinal joint 8
 Diameter of rivet holes 8 Pitch of rivets 8 Percentage of strength of joint ^{Plate} 8 ^{Rivets} 8
 Internal diameter 8 Working pressure by Rules 8 Thickness of crown 8 No. and diameter of stays 8
 Inner radius of crown 8 Working pressure by Rules 8
 How connected to shell 8 Size of doubling plate under dome 8 Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell 8

Type of Superheater 8 Manufacturers of ^{Tubes} 8 ^{Steel castings} 8
 Number of elements 8 Material of tubes 8 Internal diameter and thickness of tubes 8
 Material of headers 8 Tensile strength 8 Thickness 8 Can the superheater be shut off and the boiler be worked separately 8
 Is a safety valve fitted to every part of the superheater which can be shut off from the boiler 8
 Area of each safety valve 8 Are the safety valves fitted with easing gear 8 Working pressure as per Rules 8
 Pressure to which the safety valves are adjusted 8 Hydraulic test pressure: tubes 8 castings 8 and after assembly in place 8 Are drain cocks or valves fitted to free the superheater from water where necessary 8
 Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with 8

The foregoing is a correct description.

For WILLIAM BEARDMORE & CO. LIMITED Manufacturer. W. Blake

Dates of Survey ^{During progress of} 1923 Mar 12 Apr 5-17-27 May 14 Jun 8 Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) 8
^{while building} ^{During erection on} ^{board vessel} 8 Total No. of visits 6

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The Boiler has been built under Special Survey in accordance with the Approved Plan & Rules of the Society. The materials & Workmanship are good. The Boiler is being dispatched to Bideford to be fitted on board the Vessel.
This boiler has been fitted & secured on board, exam'd under steam & its safety valve adjusted

Survey Fee £ 8 : 16 : 0. When applied for 192
 Travelling Expenses (if any) £ : : When received 192

John Barr & Wm. L. Lyne
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 19 JUN 1923

FRI. 5 OCT. 1923

Assigned

TRANSMIT TO LONDON



© 2020

Lloyd's Register Foundation