

REPORT ON BOILERS.

No. 40,050

Received at London Office WED. JUN 9 1920

Date of writing Report 191 When handed in at Local Office 5.6.20 Port of Glasgow
 No. in Survey held at Carfin Date, First Survey 27/2/20 Last Survey 31st May 1920
 Req. Book. on the Single-Ended Marine Boiler No. 2302. (Number of Visits 7) Tons } Gross
 } Net
 Master Built at By whom built When built
 Engines made at By whom made When made
 Boilers made at Carfin By whom made Anderson & Sons Ltd. When made 1920.
 Registered Horse Power Owners Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel D. G. Blair & Sons Ltd.

(Letter for record S.) Total Heating Surface of Boilers 615 sq ft Is forced draft fitted No. and Description of Boilers One Return Tube. Working Pressure 150. Tested by hydraulic pressure to 300. Date of test 31.5.20

No. of Certificate 15315. Can each boiler be worked separately Area of fire grate in each boiler 29 sq ft. 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 1/8 dia. of boilers 9'0" Length 8'6"

Material of shell plates Steel Thickness 1/16" Range of tensile strength 28/32 TONS Are the shell plates welded or flanged No
 Descrip. of riveting: cir. seams DR Lap long. seams TR.D.B.S Diameter of rivet holes in long. seams 13/16" Pitch of rivets 5"

Gap of plates or width of butt straps 12" Per centages of strength of longitudinal joint rivets 90% Working pressure of shell by rules 153. Size of manhole in shell 16" x 12" Size of compensating ring 6 1/2" x 1 1/8" plate 83.75% No. and Description of Furnaces in each boiler 2 Plain Material Steel. Outside diameter 36" Length of plain part top 5'4 1/2" Thickness of plates crown 19" bottom 5'2" bottom 13 1/2"

Description of longitudinal joint Weld. No. of strengthening rings 1. Working pressure of furnace by the rules 155. Combustion chamber plates: Material Steel. Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 1/16" Pitch of stays to ditto: Sides 8" x 8 1/2" Back 8 1/2" x 8 1/2"

Top 8" x 4 1/2" If stays are fitted with nuts or riveted heads Nuts. Working pressure by rules 151. Material of stays Stays Area at smallest part 1.45 sq in Area supported by each stay 72.25 sq in Working pressure by rules 160 End plates in steam space: Material S. Thickness 25/32"

Pitch of stays 15" x 12" How are stays secured D N T W. Working pressure by rules 163 Material of stays Steel Area at smallest part 2.87 sq in Area supported by each stay 184.5 sq in Working pressure by rules 161. Material of Front plates at bottom Steel. Thickness 25/32" Material of Lower back plate Steel. Thickness 25/32" Greatest pitch of stays 15 1/2" x 13" Working pressure of plate by rules 186. Diameter of tubes 3 1/4"

Pitch of tubes 4 3/8" x 4 1/4" Material of tube plates S Thickness: Front 25/32" Back 1/16" Mean pitch of stays 8 3/4" x 8 1/2" Pitch across wide water spaces 13" Working pressures by rules 204. Girders to Chamber tops: Material Steel. Depth and thickness of girder at centre 6" x 1/16" double. Length as per rule 22 3/4" Distance apart 7 1/2" Number and pitch of Stays in each 2 @ 8"

Working pressure by rules 161. Steam dome: description of joint to shell None. % 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 None. 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

Survey request form No. 2367 attached

The foregoing is an accurate description of the boiler as built by Messrs Anderson & Sons, Ltd. Manufacturer.

Dates of Survey During progress of work in shops - 1920 Feb 27, Apr 7, 22, 29, May 5, 18, 31 Is the approved plan of boiler forwarded herewith Yes.
 while building During erection on board vessel - - - Total No. of visits 7

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 and Workmanship are good throughout. The boiler is built to the order of Messrs. Brown & Somerville Leith and has been dispatched there.

Survey Fee ... £ 2 : 2 : : When applied for, 8.6.1920
 Travelling Expenses (if any) £ : : : When received, 26.6.1920 Lon.

Committee's Minute GLASGOW 8 - JUN 1920
 Assigned TRANSMIT TO LONDON

John J. Barr. Engineer Surveyor to Lloyd's Register of Shipping. Lloyd's Register Foundation