

REPORT ON BOILERS.

No. 17739

Date of writing Report 13th Nov. 1920 When handed in at Local Office 13/11/1920 Port of Greenock
 No. in Survey held at Port. Glasgow Date, First Survey 19th July, 1920 Last Survey 12th Nov 1920
 Reg. Book. on the Steel Screw Steamship "ELLEN STUB" (Number of Visits 15) Tons { Gross 2637 Net 1545
 Master C. J. Myers Built at Port. Glasgow By whom built Ferguson Brothers (Port Glasgow) Ltd When built 1920
 Engines made at Do By whom made Do When made 1920
 Boilers made at Do By whom made The Clyde Shipbuilding & Engine Works Ltd When made 1920
 Registered Horse Power 183 Owners K. J. A. & D. Stub Port belonging to Christiana

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

(Letter for record S) Total Heating Surface of Boilers 3876 Sq. Ft. Is forced draft fitted No No. and Description of Boilers Two, single ended Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Dates of test 28/9/20 & 5/10/20
 No. of Certificates 1497 & 1501 Can each boiler be worked separately Yes Area of fire grate in each boiler 60.4 Sq. Ft. No. and Description of safety valves to each boiler Two, spring loaded Area of each valve 5.93 Sq. In. Pressure to which they are adjusted 185 lbs.
 Are they fitted with easing gear Yes 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 15" Inside Mean dia. of boilers 14'-9" Length 10'-6"
 Material of shell plates Steel Thickness 3/16" Range of tensile strength 48/52 tons Are the shell plates welded or flanged No
 Descrip. of riveting: cir. seams Y.R. Add. straps long. seams Double riveted Diameter of rivet holes in long. seams 3/16" Pitch of rivets 8 1/2"
 Lap of plates or width of butt straps 17 1/2" Per centages of strength of longitudinal joint rivets 85/91 Working pressure of shell by rules 180 lbs Size of manhole in shell 16" x 12" Size of compensating ring 33" x 27" x 1 1/2" No. and Description of Furnaces in each boiler 3 Deighton Material Steel Outside diameter 48 1/4" Length of plain part top 10'-0" Thickness of plates crown 9/16" bottom 9/16"
 Description of longitudinal joint Welded No. of strengthening rings 0 Working pressure of furnace by the rules 180 lbs Combustion chamber plates: Material Steel Thickness: Sides 7/8" Back 7/8" Top 7/8" Bottom 3/4" Pitch of stays to ditto: Sides 8 3/8" x 8 1/2" Back 8 1/2" x 8 1/2" Top 8 1/2" x 8 1/2" stays are fitted with nuts or riveted heads Nuts Working pressure by rules 192 lbs Material of stays Steel Area at smallest part 1.73 sq. in. Area supported by each stay 7.1 sq. in. Working pressure by rules 219 lbs End plates in steam space: Material Steel Thickness 1 1/2"
 Pitch of stays 17 1/2" x 15 1/2" How are stays secured With nuts & washers Working pressure by rules 181 lbs Material of stays Steel Area at smallest part 5.27 sq. in. Area supported by each stay 27.625 sq. in. Working pressure by rules 198 lbs Material of Front plates at bottom Steel Thickness 1/2" Material of Lower back plate Steel Thickness 3/2" Greatest nitch of stays 14" Working pressure of plate by rules 186 lbs Diameter of tubes 3 1/2"
 Pitch of tubes 4 1/2" Material of tube plates Steel Thickness: Front 3/16" Back 3/16" Mean pitch of stays 9" Pitch across wide water spaces 14 1/4" Working pressures by rules 188 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 9" x 1 1/4" Length as per rule 31 5/8" Distance apart 8 3/8" Number and pitch of Stays in each 3 - 8 1/8"
 Working pressure by rules 183 lbs 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,
James Murray Manufacturer.

Dates of Survey { During progress of work in shops - - } 1920 July 19-20-23-27. Aug. 12-17-25-31. Is the approved plan of boiler forwarded herewith Yes.
 while building { During erection on board vessel - - } Sept. 3-10-22-27-28 Oct. 5 Nov. 12. Total No. of visits 15

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) Workmanship good.
These Main Boilers have been constructed under Special Survey, and in accordance with the Society's rules & the approved plan, tested by hydraulic pressure and found tight & sound.

Survey Fee £ : : When applied for, 191
 Travelling Expenses (if any) £ : : When received, 191

Committee's Minute Glasgow 16 NOV 1920
 Assigned See attached machinery report

Graham Robertson 2020
 Engineer Surveyor to Lloyd's Register of Shipping.

If not stated whether, and when, one will be sent