

REPORT ON BOILERS.

No. 10742.

Received at London Office TUE. JUL. 13 1920

Date of writing Report 9th July 1920 When handed in at Local Office 12th July 1920 Port of MIDDLESBRO
 No. in Survey held at Stochton-on-Sea. Date, First Survey 30th Sept 1919 Last Survey 8th July 1920
 Ref. Book. S.S. Mary Aston II (Number of Visits) 20 Gross Tons Net Tons
 Master Built at Gr Yarmouth By whom built Grattice & Co Ltd When built 1921
 Engines made at Gr Yarmouth By whom made Messrs Engstrom & Co When made 1921
 Boilers made at Stochton By whom made Messrs Jhos Sudon & Co Ltd (4263) When made 1920
 Registered Horse Power Owners The A. Steamship Co Ltd Port belonging to Scarborough

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel John Spencer & Sons.
 Letter for record 5 Total Heating Surface of Boilers 1183 sq ft Is forced draft fitted No No. and Description of boiler One Single ended Working Pressure 130 Tested by hydraulic pressure to 245 lbs Date of test 8-4-20
 No. of Certificate 6141 Can each boiler be worked separately Yes Area of fire grate in each boiler 37.14 sq ft No. and Description of safety valves to each boiler 2 Direct Spring Area of each valve 4.9 sq in Pressure to which they are adjusted 132 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 10" External diam. of boiler 11-6" Length 10-0"
 Material of shell plates Steel Thickness 3/4" Range of tensile strength 29-33 Are the shell plates welded or flanged No
 Descrip. of riveting: cir. seams 2. Rlap. Long. seams 2 b. 2 riv Diameter of rivet holes in long. seams 15/16" Pitch of rivets 5"
 Width of butt straps 10" x 3/4 in Per centages of strength of longitudinal joint rivets 82.2 Working pressure of shell by rules 81.2
 Size of manhole in shell 16" x 12" Size of compensating ring 5 1/2" x 1" No. and Description of Furnaces in each boiler 2 plain Material Steel Outside diameter 42" Length of plain part top 46" Thickness of plates crown 1/8" bottom 3/4" mean
 Description of longitudinal joint weld No. of strengthening rings none Working pressure of furnace by the rules 139 Combustion chamber plates: Material Steel Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 1/8" Pitch of stays to ditto: Sides 9" x 8" Back 9 1/2" x 9"
 Top 8" x 8" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 131 Material of stays Steel Area at smallest part 1.45 sq in Area supported by each stay 93.25 sq in Working pressure by rules 139 End plates in steam space: Material Steel Thickness 13/16"
 Pitch of stays 16" x 15" How are stays secured Washers Working pressure by rules 130 Material of stays Steel Area at smallest part 3.43 sq in
 Area supported by each stay 236 sq in Working pressure by rules 151 Material of Front plates at bottom Steel Thickness 27/32" Material of lower back plate Steel Thickness 3/4" Greatest pitch of stays 14 3/4" x 9" Working pressure of plate by rules 130 Diameter of tubes 3 1/2"
 Pitch of tubes 4 3/4" x 5/8" Material of tube plates Steel Thickness: Front 27/32" Back 23/32" Mean pitch of stays 11 1/16" Pitch across wide water spaces 14" Working pressures by rules 130 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 6 3/4" x 1 1/2" Length as per rule 28 1/8" Distance apart 8" Number and pitch of Stays in each 2 @ 8"
 Working pressure by rules 135 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

PERHEATER. 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

SURVEY REQUEST NO. 1554 ATTACHED
 The foregoing is a correct description, THOMAS DIXON & CO. LIMITED. A. W. Johnston Manufacturer.
 Dates During progress of 1919. Sep 30. Oct 15. 28. Nov 24. Dec 3. 1920. Jan Is the approved plan of boiler forwarded herewith Yes
 Survey work in shops - - - 7. 20. 30. Feb 6. 12. 19. 25. Mar 24. Apr 15. 21. May 31.
 While (During erection on) Total No. of visits 20
 Building (board vessel - - -) plus 9. 16. 29. July 8.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey: is of good material and workmanship and on completion was tested by hydraulic pressure with satisfactory results.

Survey Fee £ 3 : 19. : : When applied for, Monthly ac
 Travelling Expenses (if any) £ : : When received, 19
W. Morrison & Thomas Miller,
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 11 MAR. 1921.
 Assigned
A. G. Farmer
 Lloyd's Register Foundation
 005377-005386-0153

