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REPORT ON BOILERS.

No. 18556

Received at London Office

-2 JUN 1926

Date of writing Report 26/4/1926 When handed in at Local Office 26/5/1926 Port of Glasgow
 No. in Survey held at Glasgow Date, First Survey 25th September, 1925 Last Survey 24th May, 1926
 Reg. Book. S/S "Vitruvia" (Number of Visits 53)
 on the S/S "Vitruvia" Tons } Gross
 } Net
 Built at Glasgow By whom built R Duncan & Co (370) When built 1926
 Engines made at Glasgow By whom made Rankin & Blackmore (417) When made 1926
 Boilers made at ditto By whom made ditto (417) When made 1926
 Registered Horse Power Voreda Steamship Co & Co Port belonging to Glasgow

MULTITUBULAR BOILERS DONKEY - Manufacturers of Steel Bolville Steel Co of Scotland
 Letter for record S Total Heating Surface of Boilers 13104 Is forced draft fitted No No. and Description of Boilers one Single Ended
 Working Pressure 120 Tested by hydraulic pressure to 230 Date of test 26.3.26
 No. of Certificate 1419 Can each boiler be worked separately Yes Area of fire grate in each boiler 38.04 No. and Description of Safety valves to each boiler Double Spring Area of each valve 8.29 Pressure to which they are adjusted 125
 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 9 dia. of boilers 12 0" Length 11 0"
 Material of shell plates S Thickness 23/32 Range of tensile strength 28/32 Are the shell plates welded or flanged -
 Description of riveting: cir. seams DR long. seams DR.DBS Diameter of rivet holes in long. seams 15/16 Pitch of rivets 4.95
 Width of butt straps 10 3/8 Per centages of strength of longitudinal joint rivets 89.5 Working pressure of shell by rules 122
 Size of manhole in shell 16 1/2 Size of compensating ring 2 3/4 No. and Description of Furnaces in each boiler 2 plain
 Material S Outside diameter 3 8 1/2 Length of plain part 36 6 3/8 Thickness of plates crown 3 11/16 bottom 3 11/16
 Description of longitudinal joint weld No. of strengthening rings 1 Working pressure of furnace by the rules 133 Combustion chamber plates: Material S Thickness: Sides 1 1/32 Back 1 1/32 Top 1 1/32 Bottom 1 5/16 Pitch of stays to ditto: Sides 8 3/4 + 4 1/8 Back 8 7/8
 If stays are fitted with nuts or riveted heads Yes Working pressure by rules 122 Material of stays S Area at smallest part 22 208
 Area supported by each stay 64 Working pressure by rules 158 End plates in steam space: Material S Thickness 5 9/64
 How are stays secured DN+W Working pressure by rules 125 Material of stays S Area at smallest part 4 3 3/8
 Area supported by each stay 288 Working pressure by rules 156 Material of Front plates at bottom S Thickness 1 5/16 Material of lower back plate S Thickness 1 1/16 Greatest pitch of stays 14 Working pressure of plate by rules 145 Diameter of tubes 3 1/4
 Pitch of tubes 4 1/2 + 4 3/8 Material of tube plates S Thickness: Front 1 5/16 Back 1 1/16 Mean pitch of stays 10 1/8 Pitch across wide water spaces 14 Working pressures by rules 145 Girders to Chamber tops: Material S Depth and thickness of girder at centre 8 1/2 + 5 1/8 (2) Length as per rule 34 36 Distance apart 9 1/4 Number and pitch of Stays in each 4 at 4"
 Working pressure by rules 132 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,
RANKIN & BLACKMORE, LTD.,
 Director, Manufacturer.

Dates } During progress of }
 Survey } work in shops - - }
 while } During erection on }
 building } board vessel - - - }
 See Machinery Report
 Is the approved plan of boiler forwarded herewith Yes
 Total No. of visits "Vandara"

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This Boiler has been built under Special Survey in accordance with the approved plan the workmanship & material are of good quality. It is now securely fitted on board. This Rept. accompanies trial of the Machinery

Survey Fee ... £ 4 : 4 : : When applied for, 27th May, 1926
 Travelling Expenses (if any) £ : : : When received, 28th May, 1926

W. Gordon-Mackenzie
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 1-JUN 1926
 Signed See accompanying machinery report

