

REPORT ON BOILERS.

No. 18796

16 NOV 1927

Received at London Office

Date of writing Report 14/10/27 When handed in at Local Office 4th November 1927 Port of Greenock
 No. in Survey held at Greenock Date, First Survey 9th March 1926 Last Survey 4th November 1927
 Reg. Book. S/S "Quercus" (Number of Visits 80) Gross Tons }
 on the Quercus Net Tons }
 Master Built at Glasgow By whom built Lithgow & Co. (493) When built 1927
 Engines made at Greenock By whom made Rankine & Blackmore Ltd (419) When made 1927
 Boilers made at ditto By whom made ditto (419) When made 1927
 Registered Horse Power Owners Arbor Shipping Co. & Port belonging to London

MULTITUBULAR BOILERS—MAIN, ~~MAIN, PORTLAND OR DONKEY.~~ Manufacturers of Steel Gutehoffnungslinje
 (Letter for record S) Total Heating Surface of Boilers 6789 sq ft Is forced draft fitted yes No. and Description of Boilers 3 Single Ended Working Pressure 200 Tested by hydraulic pressure to 350 Date of test 30.3.27
 No. of Certificate 1448 Can each boiler be worked separately yes Area of fire grate in each boiler 58 sq ft No. and Description of safety valves to each boiler 2 Direct Spring Area of each valve 9.62 sq in Pressure to which they are adjusted 205
 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 1-4" Mean dia. of boilers 14-6" Length 11-6"
 Material of shell plates S Thickness 1 5/16" Range of tensile strength 28-32 Are the shell plates welded or flanged —
 Descrip. of riveting: cir. seams DR long. seams TR 10 BS Diameter of rivet holes in long. seams 1 3/8" Pitch of rivets 9 1/2"
~~Length~~ width of butt straps 1-8 1/4" Per centages of strength of longitudinal joint rivets 91.4 plate 85.5 Working pressure of shell by rules 202 Size of manhole in shell 16 x 12 Size of compensating ring 34 1/2 x 20 3/4 x 1 5/16 No. and Description of Furnaces in each boiler 3 Bourgeois Material S Outside diameter 3-9 1/4" Length of plain part top 19 1/2" Thickness of plates bottom 19 1/2"
 Description of longitudinal joint weld No. of strengthening rings — Working pressure of furnace by the rules 205 Combustion chamber plates: Material S Thickness: Sides 23/32 Back 23/32 Top 23/32 Bottom 25/32 Pitch of stays to ditto: Sides 8 1/8 x 10 1/4 Back 9 1/4 x 9 1/2
 Top 10 1/16 x 8 3/4 If stays are fitted with nuts or riveted heads nut Working pressure by rules 201 Material of stays S Area at smallest part 203.27 Area supported by each stay 87.84 Working pressure by rules 209 End plates in steam space: Material S Thickness 1 5/16"
 Pitch of stays 19 1/2 x 18 1/2 How are stays secured DN Working pressure by rules 201 Material of stays S Area at smallest part 724
 Area supported by each stay 260.7 Working pressure by rules 202 Material of Front plates at bottom S Thickness 1" Material of Lower back plate S Thickness 7/8" Greatest pitch of stays 13 1/4" Working pressure of plate by rules 206 Diameter of tubes 2 3/4"
 Pitch of tubes 3 1/8 x 3 7/8 Material of tube plates S Thickness: Front 1" Back 3/4" Mean pitch of stays 9.4 Pitch across wide water spaces 13 1/2" Working pressures by rules 204 Girders to Chamber tops: Material S Depth and thickness of girder at centre 9 3/4 x 13 1/16 (2) Length as per rule 34.62 Distance apart 103/16 Number and pitch of Stays in each 3 at 8 3/4"
 Working pressure by rules 203 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., Manufacturer.
Director.

Dates of Survey } During progress of work in shops - - }
 while building } During erection on board vessel - - - }
 See Machinery Report. Is the approved plan of boiler forwarded herewith yes
 Total No. of visits 80

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been built under special survey in accordance with the approved plans & the workmanship & material are of good quality, they are now securely fitted on board
This Report accompanies that of the Machinery

Survey Fee ... £ ... When applied for, 7th NOVEMBER 1927
 Travelling Expenses (if any) £ ... When received, 8th NOVEMBER 1927
charged on Machinery Report
W. J. London-Maclean
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 15 NOV 1927
 Assigned See accompanying Machy. Report

