

REPORT ON BOILERS

No. 28918.

Date of writing Report 18/5/10 When handed in at Local Office 18/5/10 Port of Glasgow Received at London Office WHIL 15 JUN 1910
 No. in Survey held at Glasgow Date, First Survey 28th Jan 1910 Last Survey 12th May 1910 WHIL 25 MAY 1910
 Req. Book. on the Donkey Boiler for Rankine & Blackmore No 286. (Number of Visits 15) } Gross Tons }
 Master Built at By whom built When built
 Engines made at By whom made when made
 Boiler made at Govan, Glasgow By whom made L. Burnet & Co (No 1262) when made 1910.
 Registered Horse Power Owners Port belonging to

MULTITUBULAR BOILERS — ~~MAIN, AUXILIARY OR~~ DONKEY. — Manufacturers of Steel Steel Co of Scotland & Lanarkshire.

(Letter for record) Total Heating Surface of Boilers 1470 sq ft Is forced draft fitted
 Boilers 1 single ended marine type Working Pressure 110 lb Tested by hydraulic pressure to 220 lb Date of test 12.5.10.
 No. of Certificate 10399. Can each boiler be worked separately Area of fire grate in each boiler 39.8 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 Inside Mean dia. of boilers 12'-6" Length 11'-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 D.P. Lap long. seams T.R. D.P. S. Diameter of rivet holes in long. seams 13/16" Pitch of rivets 6"
~~Top of plates~~ width of butt straps 11 13/16" Per centages of strength of longitudinal joint rivets 93.5% Working pressure of shell by rules 114 lb Size of manhole in shell 16" x 12" Size of compensating ring 6 1/2" x 3/4" No. and Description of Furnaces in each boiler 2 plain Material Steel Outside diameter 3'-8 1/2" Length of plain part 37'-2 1/2" Thickness of plates 2 1/32"
 Description of longitudinal joint welded No. of strengthening rings none Working pressure of furnace by the rules 143 lb Combustion chamber plates: Material Steel Thickness: Sides 33/64" Back 9/16" Top 19/32" Bottom 7/8" Pitch of stays to ditto: Sides 8 x 9' Back 10 x 9 3/4'
 Top 12 1/2' x 8' If stays are fitted with nuts or riveted heads nuts Working pressure by rules 112 lb Material of stays Steel Diameter at smallest part 1.474" Area supported by each stay 97.5 sq in Working pressure by rules 121 lb End plates in steam space: Material Steel Thickness 13/16"
 Pitch of stays 16" x 16" How are stays secured on nut Working pressure by rules 115 Material of stays Steel Diameter at smallest part 3.36"
 Area supported by each stay 206 sq in Working pressure by rules 136 lb Material of Front plates at bottom Steel Thickness 13/16" Material of Lower back plate Steel Thickness 1/16" Greatest pitch of stays 13 3/4" Working pressure of plate by rules 115 lb Diameter of tubes 3 1/4"
 Pitch of tubes 4 3/8" + 4 9/16" Material of tube plates Steel Thickness: Front 13/16" Back 3/4" Mean pitch of stays 8 3/4" x 9 1/8" Pitch across wide water spaces 14 1/2" Working pressures by rules 112 lb Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8 3/4" x 1 1/2" Length as per rule 34 1/16" Distance apart 12 1/2" Number and pitch of Stays in each 3 @ 8"
 Working pressure by rules 110 lb Superheater or Steam chest: how connected to boiler none Can the superheater be shut off and the boiler worked separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

Survey request form No. 396 attached

The foregoing is a correct description, Lindsay Burnet & Co Manufacturer.

Dates of Survey: During progress of work in shops — 1910. Jan 28. Feb 1. 9. 15. 28. Mar 10. 16. Is the approved plan of boiler forwarded herewith yes.
 while building: During erection on board vessel — 31. April 7. 14. 20. 27. 29 May 4. 12 Total No. of visits 15

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The workmanship & materials are good. The boiler has been built under Special Survey, & forwarded to Greenock.

Survey Fee £2-2-0 : : 2 : 2 : When applied for. 19/5/10 19. 10.
 Travelling Expenses (if any) : : : : When received. 23/5/10 19. 10.

A.H. Tilditch
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

GLASGOW 24 MAY. 1910

GLASGOW 14 JUN. 1910

Committee's Minute assigned Transmit to London

See minute on GARRH. No. 15800.



2220-0222