

REPORT ON BOILERS.

No. 18252

Received at London Office

WED. JUL 2 1924

Date of writing Report 20-6-1924 When handed in at Local Office 23-6-1924 Port of GREENOCK

No. in Survey held at Greenock Date, First Survey 10th January, 1923 Last Survey 23rd June, 1924
 Reg. Book. S/S "Alari" (Number of Visits 70) Gross Tons Net

Master Built at Glasgow By whom built Lithgow & Co (456) When built 1924
 Engines made at Greenock By whom made Rankin, Blackmore & Co (402) When made 1924
 Boilers made at ditto By whom made ditto When made 1924
 Registered Horse Power Owners Bombay Persia Steam Navigation Co Port belonging to Bombay

MULTITUBULAR BOILERS ~~MANUFACTURED BY~~ DONKEY. Manufacturers of Steel Steel Co. Salville & Co. Dundee

Letter for record R Total Heating Surface of Boilers 12784 Is forced draft fitted No No. and Description of

Boilers One Single Ended Working Pressure 110 Tested by hydraulic pressure to 215 Date of test 20.3.24

No. of Certificate 1647 Can each boiler be worked separately Area of fire grate in each boiler 40 No. and Description of

safety valves to each boiler Double Spring Area of each valve 7.00 Pressure to which they are adjusted 110

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 12 Mean dia. of boilers 12.0 Length 10.6

Material of shell plates S Thickness 13/16 Range of tensile strength 28 1/2 - 32 1/2 Are the shell plates welded or flanged

Descrip. of riveting: cir. seams DR long. seams TEL Diameter of rivet holes in long. seams 1 1/8 Pitch of rivets 4.3/64

Lap of plates or width of butt straps 8 1/4 Per centages of strength of longitudinal joint rivets 80.5 plate 44.4 Working pressure of shell by

rules 124 Size of manhole in shell 16 x 12 Size of compensating ring 30 1/2 x 26 1/2 x 13/16 No. and Description of Furnaces in each

boiler 2 plain Material S Outside diameter 3-8 1/4 Length of plain part top 6-4 1/8 Thickness of plates crown 23/32 bottom

Description of longitudinal joint DBS No. of strengthening rings Working pressure of furnace by the rules 119 Combustion chamber

plates: Material S Thickness: Sides 5/8 Back 5/8 Top 5/8 Bottom 3/4 Pitch of stays to ditto: Sides 9 1/8 x 1 1/8 Back 1 1/8 x 9 1/8

Top 9 1/8 x 1 1/8 If stays are fitted with nuts or riveted heads Yes Working pressure by rules 122 Material of stays Iron Area at

smallest part 45.173 Area supported by each stay 108 Working pressure by rules 114 End plates in steam space: Material S Thickness 1 1/32

Pitch of stays 22 1/8 x 1 1/8 How are stays secured DN Working pressure by rules 113 Material of stays S Area at smallest part 457

Area supported by each stay 219 Working pressure by rules 115 Material of Front plates at bottom S Thickness 3/4 Material of

Lower back plate S Thickness 1/64 Greatest pitch of stays 13 x 9 1/8 Working pressure of plate by rules 113 Diameter of tubes 3 1/2

Pitch of tubes 4 1/8 x 4 1/8 Material of tube plates S Thickness: Front 3/4 DP Back 5/8 Mean pitch of stays 9 1/4 Pitch across wide

water spaces 13 1/2 Working pressures by rules 113 Girders to Chamber tops: Material S Depth and thickness of

girder at centre 4 1/2 x 11 1/6 (2) Length as per rule 2.73/4 Distance apart 11 1/8 Number and pitch of Stays in each 2 at 9 1/8

Working pressure by rules 119 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.

Is the approved plan of boiler forwarded herewith Yes

Total No. of visits

Dates of Survey During progress of work in shops - - - See Machinery Report.
 while During erection on board vessel - - -

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. (Depl of S/S Jehangir Lark Rept. 910 18216)
 This Rept. accompanies that of the Machinery

Survey Fee. ... £ 4 : 4 : } When applied for, 25th June 1924
 Travelling Expenses (if any) £ : : } When received, 26th June 1924

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

Committee's Minute GLASGOW - 1 JUL 1924

Assigned See accompanying mach. report

004285-004291-0120

Lloyd's Register Foundation