

# REPORT ON BOILERS.

No. 18216.

Received at London Office W.F.O. 14 MAY. 1924

Date of writing Report 16. 4. 1924 When handed in at Local Office 8th May 1924. Port of Greenock  
 No. in Survey held at Greenock Date, First Survey (1923) January 10. Last Survey 5. 5. 1924  
 Reg. Book. S/S "Jehangir" (Number of Visits 73.) Gross Tons Net  
 on the Master Built at Glasgow By whom built Liffgow L<sup>d</sup> (755) When built 1924  
 Engines made at Greenock By whom made Rankin, Blackmore & Co<sup>l</sup> Ltd When made 1924  
 Boilers made at ditto By whom made ditto (401) When made 1924  
 Registered Horse Power Owners Bombay Pania Steam Nav Co Port belonging to Bombay

## MULTITUBULAR BOILERS ~~MADE AUXILIARY ON~~ DONKEY.—Manufacturers of Steel *Sovell, Green, Skill & Deuloh.*

(Letter for record R) Total Heating Surface of Boilers 1278 # 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 15.2.24

No. of Certificate 1641 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 7.06 # 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 - 32.5 Are the shell plates welded or flanged

Descrip. of riveting: cir. seams DR long. seams TRL Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 4 63/64

Lap of plates or width of butt straps 8 1/4" Per centages of strength of longitudinal joint rivets 80.54 plate 77.40 Working pressure of shell by rules 127 Size of manhole in shell 16x12" Size of compensating ring 30 1/2 x 26 1/2 x 13 1/16 No. and Description of Furnaces in each boiler 2 plain Material S Outside diameter 3-8 1/4 Length of plain part top 36.448 bottom 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 7/8 x 11 1/8" Back 11 1/8 x 9 7/8"

Top 9 7/8 x 11 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 145.173 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 19" How are stays secured DN Working pressure by rules 113 Material of stays S Area at smallest part 457.5

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 45/64 Greatest pitch of stays 13 x 9 7/8 Working pressure of plate by rules 113 Diameter of tubes 3 1/2"

Pitch of tubes 45/8 x 45/8 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 1/8 (2) Length as per rule 2.434 Distance apart 11 1/8" Number and pitch of Stays in each 2 at 9 7/8"

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., *A. J. Green* Director, Manufacturer.

Dates of Survey } During progress of work in shops - - } while building } During erection on board vessel - - - } See Machinery 1st Entry.  
Is the approved plan of boiler forwarded herewith Yes  
Total No. of visits 73.

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

Survey Fee ... £ 4 : 4 : } When applied for, 6th May 1924  
Travelling Expenses (if any) £ : : } When received, 8th May 1924

Committee's Minute GLASGOW 13 MAY 1924  
Assigned See accompanying machinery report.  
W. Gordon-Merrick  
Engineer Surveyor to Lloyd's Register of Shipping.

