

REPORT ON BOILERS.

No. 35459

Received at London Office

WED. 22. SEP. 1915

Date of writing Report

191

When handed in at Local Office

191

Port of

Glasgow

No. in Survey held at

Glasgow

Date, First Survey

Last Survey

191

Reg. Book.

184 on the

S/S "Dara"

(Number of Visits)

Gross Tons

Net

Master

Built at Pt. Glasgow

By whom built

Russell & Co

When built 1915

Engines made at

Glasgow

By whom made

Dunsmuir, Jackson & Co (Ld)

When made 1915

Boilers made at

ditto

By whom made

ditto

When made 1915

Registered Horse Power

Owners Bombay & Persia S & Co Ltd

Port belonging to Liverpool

MULTITUBULAR BOILERS ~~MAIN, AUXILIARY OR~~ DONKEY. — Manufacturers of Steel

(Letter for record) Total Heating Surface of Boilers 1079 sq ft Is forced draft fitted No No. and Description of Boilers one Single Ended Working Pressure 100 Tested by hydraulic pressure to 200 Date of test 24-5-15

No. of Certificate 13/51 Can each boiler be worked separately Yes Area of fire grate in each boiler 25 sq ft No. and Description of safety valves to each boiler Double Spring Area of each valve 7.07 sq in Pressure to which they are adjusted 105

Are they fitted with casing gear No 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 Mean dia. of boilers 10-0 1/16" Length 9.6"

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

Descrip. of riveting: cir. seams DR. long. seams TR Lap. Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 4"

Lap of plates width of butt straps 4 3/8" Per centages of strength of longitudinal joint rivets 82 plate 73.4 % Working pressure of shell by rules 107

Size of manhole in shell 16 1/2" Size of compensating ring 8 in dia. No. and Description of Furnaces in each boiler 2 plain Material S Outside diameter 3-4 1/8" Length of plain part top 6-3 bottom 6-7 1/2 Thickness of plates crown 9/16 bottom 9/16

Description of longitudinal joint weld. No. of strengthening rings Working pressure of furnace by the rules 103 Combustion chamber plates: Material S Thickness: Sides 17/32 Back 17/32 Top 17/32 Bottom 27/32 Pitch of stays to ditto: Sides 9x9 Back 9 3/8 x 8 7/8

Top 9 x 8 1/2 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 104 Material of stays Iron Diameter at smallest part 1 1/8" Area supported by each stay 83 Working pressure by rules 103 End plates in steam space: Material S Thickness 3/4

Pitch of stays 16 x 14 3/4 How are stays secured DN Working pressure by rules 106 Material of stays S Diameter at smallest part 2.66 Area supported by each stay 236 Working pressure by rules 118 Material of Front plates at bottom S Thickness 3/4 Material of Lower back plate S Thickness 1 1/16 Greatest pitch of stays 14 1/2 x 8 7/8 Working pressure of plate by rules 120 Diameter of tubes 3

Pitch of tubes 4 1/2 x 4 3/16 Material of tube plates S Thickness: Front 3/4 Back 1 1/16 Mean pitch of stays 12 9/16 Pitch across wide water spaces 14 Working pressures by rules 108 Girders to Chamber tops: Material Iron Depth and thickness of girder at centre 6 x 3 1/4 (2) Length as per rule 2 2 25/32 Distance apart 8 1/2 Number and pitch of Stays in each 2 at 9'

Working pressure by rules 109 Superheater or Steam chest: how connected to boiler 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 casing gear

Are they fitted with casing gear DUNSMUIR & JACKSON, Limited. The foregoing is a correct description, James Flecker Director, Manufacturer.

Is the approved plan of boiler forwarded herewith Yes Total No. of visits

Dates of Survey During progress of work in shops - - while building 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. Plus Report accompanying that of the Machinery

Survey Fee ... When applied for ... 191 Travelling Expenses ... When received ... 191

charged on Machinery Report. Wm Gordon-Muclivie Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

GLASGOW 21 SEP. 1915

Assigned See accompanying Machinery Report

