

REPORT ON BOILERS.

No. 18025

Received at London Office WED. SEP. 13 1922

Date of writing Report 6th Sept. 1922 When handed in at Local Office 6/9/1922 Port of Grimport
 No. in Survey held at Grimport Date, First Survey 19th July, 1920 Last Survey 4th Sept. 1922
 Reg. Book. 78183 on the Screw Steamer 'BEGUM' (Number of Visits 166) Gross 5843 Tons Net 3656
 Master PT. Glasgow By whom built Lithgow Ltd. When built 1922
 Engines made at Grimport By whom made John G. Kincaid & Co. Ltd. When made 1922
 Boilers made at Grimport By whom made John G. Kincaid & Co. Ltd. When made 1922
 Registered Horse Power 563 Owners Asiatic S. N. Co. Ltd. Port belonging to London

MULTITUBULAR BOILERS ~~MAIN, AUXILIARY OR DONKEY.~~ Manufacturers of Steel PT. Telford Steel Co. J. Open on Sea

(Letter for record S.R.) Total Heating Surface of Boilers 1192^{ft} Is forced draft fitted No. No. and Description of Boilers One Cyl. Mult. Single End. Working Pressure 110^{lb} Tested by hydraulic pressure to 215^{lb} Date of test 19.6.22

No. of Certificate 1610 Can each boiler be worked separately ✓ Area of fire grate in each boiler 35^{ft} No. and Description of safety valves to each boiler Two Spring Area of each valve 7.06^{sq} Pressure to which they are adjusted 115^{lb}

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 14ⁱⁿ Mean dia. of boiler 12'-0" Length 10'-0"

Material of shell plates S. Thickness 21/32 Range of tensile strength 28/32 T. Are the shell plates welded or flanged No. Descrip. of riveting: cir. seams L.D.R. long. seams DBS/DR. Diameter of rivet holes in long. seams 27/32 Pitch of rivets 4 5/8

Lap of plates on width of butt straps 9/8 Per centages of strength of longitudinal joint 81.7 Working pressure of shell by rules 110^{lb} Size of manhole in shell 16 x 12 Size of compensating ring 29 3/4 x 25 1/4 x 1 1/2 No. and Description of Furnaces in each boiler 2. Plain Material S. Outside diameter 43 7/16 Length of plain part 87 Thickness of plates 21/32

Description of longitudinal joint Weld. No. of strengthening rings None Working pressure of furnace by the rules 120^{lb} Combustion chamber plates: Material S. Thickness: Sides 9/16 Back 19/32 Top 9/16 Bottom 23/32 Pitch of stays to ditto: Sides 10 1/2 x 9 1/4 Back 10 1/2 x 9 1/4

Top 10 1/2 x 9 1/4 If stays are fitted with nuts or riveted heads None Working pressure by rules 111^{lb} Material of stays I. Area at smallest part 1.45^{sq} Area supported by each stay 102^{sq} Working pressure by rules 122^{lb} End plates in steam space: Material S. Thickness 27/32

Pitch of stays 18 x 16 1/2 How are stays secured D.N. Working pressure by rules 110^{lb} Material of stays S. Area at smallest part 3.26^{sq} Area supported by each stay 293^{sq} Working pressure by rules 118^{lb} Material of Front plates at bottom S. Thickness 13/16 Material of

Lower back plate S. Thickness 5/8 Greatest pitch of stays 13 1/2 x 9 1/4 Working pressure of plate by rules 111^{lb} Diameter of tubes 3 1/4 Pitch of tubes 4 1/2 Material of tube plates S. Thickness: Front 13/16 Back 23/32 Mean pitch of stays 13 1/2 x 11 1/4 Pitch across wide

water spaces 14 Working pressures by rules 117^{lb} Girders to Chamber tops: Material S. Depth and thickness of girder at centre 7 1/4 x 1 1/4 Length as per rule 29.68 Distance apart 10 1/2 Number and pitch of Stays in each 2 @ 9 1/4

Working pressure by rules 140^{lb} Steam dome: description of joint to shell None % 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 - Tested by Hydraulic Pressure to -

SUPERHEATER. Type None Date of Approval of Plan - Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler - Is Easing Gear fitted -

Date of Test - Pressure to which each is adjusted - Diameter of Safety Valve -

The foregoing is a correct description, FOR JOHN G. KINCAID & COY., LIMITED Manufacturer. Robert Green

Is the approved plan of boiler forwarded herewith Yes Total No. of visits 166

Dates of Survey - During progress of work in shops - while building - During erection on board vessel - See accompanying machinery report

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

The above Boiler has been constructed under Special Survey. The materials and workmanship employed are sound and good and proved satisfactory under test. It has been fitted in a most satisfactory manner.

Survey Fee ... £ 4 : 4 : When applied for, 6/9/1922
 Travelling Expenses (if any) £ - : - : When received, 8/9/1922

Committee's Minute GLASGOW 12 SEP 1922
 Assigned See attached machy. report

W. Lane
 Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation