

REPORT ON BOILERS

No. 17953

Received at London Office

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Date of writing Report 17 Jan 1922 When handed in at Local Office 28 Jan 1922 Port of GreenockNo. in Survey held at Port Glasgow Date, First Survey 18th Aug. 1921 Last Survey 26th January, 1922
Reg. Book. on the Steel Steamer "Busel" (Number of Visits 23) Gross 1539
Tons Net 647Master Built at Port Glasgow By whom built Ferguson Bros Ltd When built 1922
Engines made at Port Glasgow By whom made Ferguson Bros Ltd When made 1922
Boilers made at Port Glasgow By whom made Clyde & B. & C. Ltd When made 1922
Registered Horse Power Owners Cork Steamship Co. Ltd. Port belonging to LondonMULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel W. Beardmore(Letter for record S) Total Heating Surface of Boilers 3904 sq ft Is forced draft fitted yes No. and Description of Boilers Two Single Ended Working Pressure 185 lb Tested by hydraulic pressure to 330 lb Date of test 17-25/1/22No. of Certificate 1591 Can each boiler be worked separately yes Area of fire grate in each boiler 52.5 sq ft No. and Description of safety valves to each boiler Two Spring Area of each valve 7.07 sq in Pressure to which they are adjusted 190 lbAre they fitted with easing gear yes 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 18 in Mean dia. of boilers 14.0 in Length 11.6 inMaterial of shell plates Steel Thickness 1 1/16 in Range of tensile strength 28-32 Are the shell plates welded or flanged —Descrip. of riveting: — seams all welded Long. seams all welded Diameter of rivet holes in long. seams 1 1/16 in Pitch of rivets 8 7/16 inLap of plates or width of butt straps 17 7/8 in Per centages of strength of longitudinal joint rivets 85.1 Working pressure of shell by rules 186 lb Size of manhole in shell 16 x 12 in Size of compensating ring 33 x 27 x 1 1/16 in No. and Description of Furnaces in each boiler 3 Brighton Material Steel Outside diameter 43 1/8 in Length of plain part top Thickness of plates crown bottom 9 1/16 inDescription of longitudinal joint welded No. of strengthening rings long Working pressure of furnace by the rules 189 lb Combustion chamber plates: Material Steel Thickness: Sides 1 9/16 in Back 1 9/16 in Top 1 10/16 in Bottom 2 1/16 in Pitch of stays to ditto: Sides 8 x 9 in Back 8 x 7 1/2 inTop 9 x 7 7/8 in If stays are fitted with nuts or riveted heads — Working pressure by rules 187 lb Material of stays Steel Area at smallest part 1.45 sq in Area supported by each stay 60 sq in Working pressure by rules 209 lb End plates in steam space: Material Steel Thickness 1 7/16 inPitch of stays 22 x 19 in How are stays secured all welded Working pressure by rules 195 lb Material of stays Steel Area at smallest part 7.24 sq inArea supported by each stay 429 sq in Working pressure by rules 185 lb Material of Front plates at bottom Steel Thickness 2 7/16 in Material of Lower back plate Steel Thickness 2 3/16 in Greatest pitch of stays 13 1/2 in Working pressure of plate by rules 201 lb Diameter of tubes 2 1/2 inPitch of tubes 3 3/4 in Material of tube plates Steel Thickness: Front 2 7/16 in Back 2 1/16 in Mean pitch of stays 7 1/2 in Pitch across wide water spaces 18 in Working pressures by rules 216 lb Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 9 3/4 x 1 1/2 in Length as per rule 37 1/4 in Distance apart 7 7/8 in Number and pitch of Stays in each Three 9 inWorking pressure by rules 189 lb 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,

FERGUSON BROTHERS (Port-Glasgow) LTD.

P. Ferguson

Manufacturer.

DIRECTOR

Dates of Survey During progress of work in shops - - 1921 Aug 18 - Sept 1 - 7 - 12 - 14 - 20 - 21 - 29 - Oct 3 - 10 - 13 - 17 - 20 - 26 - Is the approved plan of boiler forwarded herewith yes
while building During erection on board vessel - - - 28 - 31 - Nov 3 - 8 - 17 - 22 - 25 - 29 - 1922 Jan 26 - Total No. of visits 23GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) Workmanship good.These main boilers have been constructed under special survey tested by hydraulic pressure and found good.They have now been efficiently fitted on board the above named steamer.Survey Fee ... £ 28 : 15 : When applied for, 26/1/1922Travelling Expenses (if any) £ : : When received, 7.2.1922

Committee's Minute

GLASGOW

31 JAN 1922

Engineer Surveyor to Lloyd's Register of Shipping.

Assigned See attached Mach. Report.