

REPORT ON BOILERS.

No. 27910.

Received at London Office

Date of writing Report 19... When handed in at Local Office 3/7/1909 Port of Glasgow WFT. 7 JUL 1909
 No. in Survey held at Glasgow Date, First Survey 22nd October, Last Survey 28th June, 1909.
 Reg. Book. S/S "Dunedin" (Number of Visits 56.) Gross 4469 Tons Net
 on the
 Master Built at Glasgow By whom built G. Bonnell & Co. Ltd. When built 1909
 Engines made at Glasgow By whom made Dunsmuir & Jackson Ltd. when made 1909
 Boilers made at ditto By whom made Dunsmuir & Jackson Ltd. when made 1909
 Registered Horse Power Owners Henderson & McIntosh. Port belonging to Leith

MULTITUBULAR BOILERS ~~MANUFACTURED BY~~ DONKEY.—Manufacturers of Steel **Colville**
 (Letter for record (S)) Total Heating Surface of Boilers 941. 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 8.4.09
 No. of Certificate 984 Can each boiler be worked separately Area of fire grate in each boiler 32^{sq} No. and Description of safety valves to each boiler Double Spring Area of each valve 7.06^{sq} Pressure to which they are adjusted 105
 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 8" Mean dia. of boilers 11'-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 D R. long. seams T R Lap Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 4 1/32
 Lap of plates 4 1/4" Per centages of strength of longitudinal joint rivets 81.2% plate 73.5% Working pressure of shell by rules 105 Size of manhole in shell 16 x 12" Size of compensating ring No. and Description of Furnaces in each boiler 2 plain Material S Outside diameter 3-5 1/16" Length of plain part top 6.3 bottom 6.7 1/8" Thickness of plates crown 1 1/16" bottom 1 1/8"
 Description of longitudinal joint mild. No. of strengthening rings Working pressure of furnace by the rules 110 Combustion chamber plates: Material S Thickness: Sides 1/2" Back 1/2" Top 1/2" Bottom 23/32" Pitch of stays to ditto: Sides 4 3/4 x 9 1/4" Back 4 5/8 x 8 7/8"
 Top 4 3/4 x 8" If stays are fitted with nuts or riveted heads 9 x 5/8" Working pressure by rules 107 Material of stays S Diameter at smallest part 1 1/2" Area supported by each stay 64" Working pressure by rules 123 End plates in steam space: Material S Thickness 3/4" Diameter at smallest part 3 4/7"
 Pitch of stays 15 1/2 x 15" How are stays secured DN Working pressure by rules 108. Material of stays S Diameter at smallest part 3 4/7"
 Area supported by each stay 233" Working pressure by rules 131. Material of Front plates at bottom S Thickness 1 1/16" Material of Lower back plate S Thickness 1 1/16" Greatest pitch of stays 16" Working pressure of plate by rules 117 Diameter of tubes 3"
 Pitch of tubes 4 1/2 x 4 1/4" Material of tube plates S Thickness: Front 2 1/8" Back 5/8" Mean pitch of stays 1 1/4" Pitch across wide water spaces 14" Working pressures by rules 120 Girders to Chamber tops: Material Iron Depth and thickness of girder at centre 6 x 3/4 (2) Length as per rule 2.3" Distance apart 8" Number and pitch of Stays in each 2 at 4 3/4"
 Working pressure by rules 116 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 easing gear

The foregoing is a correct description.
 for DUNSMUIR & JACKSON, Limited James Fletcher Manufacturer.

Dates of Survey During progress of work in shops - - - See accompanying report
 while building During erection on board vessel - - - Is the approved plan of boiler forwarded herewith Glasgow Report No 27778
 Total No. of visits 56.

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

Survey Fee ... £ : When applied for. 19...
 Travelling Expenses (if any) £ : When received. 19...

W. Gordon Muir
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute GLASGOW 6 JUL. 1909

Assigned See minute on accompanying report (No. 27910)

