

# REPORT ON BOILERS.

No. 14155

Received at London Office

11 JUL 1917

Writing Report 23 June 1917 When handed in at Local Office 29 June 1917 Port of Greenock  
Survey held at Greenock & S. Glasgow Date, First Survey 11th Apr 1916 Last Survey 27 June 1917  
on the Steel Steamer "Mairan" (Number of Visits 106.) } Gross  
Tons } Net  
Built at S. Glasgow By whom built Russell & Co. When built 1917  
Made at Greenock By whom made John B. Kincaid & Co. When made 1917  
Made at Greenock By whom made John B. Kincaid & Co. When made 1917  
Horse Power Owners Port belonging to Liverpool

**TITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY**—Manufacturers of Steel Cochrane & Sons  
for record 12 ) Total Heating Surface of Boilers 5500 sq ft Is forced draft fitted Yes No. and Description of  
One Single Ended Working Pressure 200 lb Tested by hydraulic pressure to 400 lb Date of test 2/5/17  
Certificate 1296 Can each boiler be worked separately Yes Area of fire grate in each boiler 61.5 sq ft No. and Description of  
valves to each boiler Two opening Area of each valve 7.07 sq ft Pressure to which they are adjusted 205 lb  
fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler —  
Distance between boilers or uptakes and bunkers or woodwork 30" Mean dia. of boilers 17' 0" Length 12' 0"  
Material of shell plates Mild Thickness 1 1/2" Range of tensile strength 29/33 Are the shell plates welded or flanged —  
Pitch of riveting: cir. seams — long. seams all chip steel Diameter of rivet holes in long. seams 1 7/32" Pitch of rivets 10 1/2"  
plates or width of butt straps 22 1/2" Per centages of strength of longitudinal joint rivets 87.0 Working pressure of shell by  
plate 85.4  
Size of manhole in shell 16" x 12" Size of compensating ring flanged 1 1/2" No. and Description of Furnaces in each  
4 Brighton Material Mild Outside diameter 45 1/2" Length of plain part — Thickness of plates 10 1/16"  
Pitch of longitudinal joint welded No. of strengthening rings none Working pressure of furnace by the rules 223 lb Combustion chamber  
Material Mild Thickness: Sides 1 1/16" Back 2 1/32" Top 1 1/16" Bottom 1 3/16" Pitch of stays to ditto: Sides 9 1/2" x 8 1/2" Back 8 1/2" x 8 1/2"  
If stays are fitted with nuts or riveted heads none Working pressure by rules 202 lb Material of stays Steel Diameter at  
top part 2.03" Area supported by each stay 8.10" Working pressure by rules 208 lb End plates in steam space: Material Mild Thickness 1 7/16"  
of stays 23" x 2 1/4" How are stays secured all nut Working pressure by rules 201 lb Material of stays Mild Diameter at smallest part 9.82"  
supported by each stay 4.66" Working pressure by rules 211 lb Material of Front plates at bottom Mild Thickness 1 1/16" Material of  
back plate Mild Thickness 2 9/32" Greatest pitch of stays 14" Working pressure of plate by rules 208 lb Diameter of tubes 3"  
of tubes 4 1/16" x 4 1/16" Material of tube plates Mild Thickness: Front 1 1/16" Back 2 7/32" Mean pitch of stays 8 1/16" x 8 1/16" Pitch across wide  
spaces 14" Working pressures by rules 207 lb Girders to Chamber tops: Material Mild Depth and thickness of  
at centre 11 1/2" x 1 7/8" Length as per rule 40" x 46" Distance apart 8 1/4" Number and pitch of Stays in each none 9 1/4"  
Working pressure by rules 207 lb Superheater or Steam chest: how connected to boiler Can the superheater be shut off and the boiler worked  
Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet  
Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness  
ended 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 JOHN G. KINCAID & COY., LIMITED.**  
Robert Green Manufacturer.

During progress of work in shops - - - Is the approved plan of boiler forwarded herewith yes  
During erection on board vessel - - - Total No. of visits

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

Workmanship good.  
This main boiler has been constructed under special survey in accordance with the approved Test Point. Tested by hydraulic pressure and efficiently fitted on board the above named steamer.

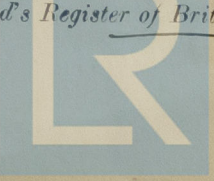
See 1st Entry Report attached hereto.

Survey Fee ... £ : : When applied for, 191  
Travelling Expenses (if any) £ : : When received, 191

Committee's Minute GLASGOW 10 JUL 1917

See accompanying mach<sup>y</sup> report.

James Jones  
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.



Lloyd's Register  
Foundation

005282-005289-0225