

REPORT ON BOILERS.

No. 14679.

WED. 9 MAY 1906

Port of Greenock

Received at London Office

No. in Survey held at Greenock
Reg. Book.

Date, first Survey 20th April 1906 Last Survey 27th April 1906

(Number of Visits 64)

on the **SCREW STEAMER "VALDIVIA"**

Tons { Gross
Net

Master Built at Port Glasgow. By whom built Russell & Co When built 1906

Engines made at Greenock By whom made Rankin & Blackmore when made 1906

Boilers made at Greenock. By whom made Rankin & Blackmore. when made 1906

Registered Horse Power Owners The Valdivia Steamship Coy Ld Port belonging to Glasgow

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

(Letter for record S) Total Heating Surface of Boilers Is forced draft fitted No No. and Description of

Boilers 1: Cylindrical Working Pressure 100 lbs Tested by hydraulic pressure to 200 lbs Date of test 26/3/06

No. of Certificate 758 Can each boiler be worked separately - Area of fire grate in each boiler 30.6 sq ft No. and Description of

safety valves to each boiler 2: Direct Spring Area of each valve 5.9 sq in Pressure to which they are adjusted 104 lbs

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 About 12" Mean dia. of boilers 10' 0" Length 9' 0"

Material of shell plates Steel Thickness 3/32" Range of tensile strength 29-32 tons Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams Lap long. seams Lap, Ribble Diameter of rivet holes in long. seams 1" Pitch of rivets 4 1/4"

Lap of plates or width of butt straps 4" Per centages of strength of longitudinal joint rivets 49 Working pressure of shell by

rules 100 lbs Size of manhole in shell 16" x 12" Size of compensating ring 6" x 1 1/2" No. and Description of Furnaces in each

boiler 2: plain Material Steel Outside diameter 36" Length of plain part 5' 9" Thickness of plates 1 1/2"

Description of longitudinal joint Butt Straps No. of strengthening rings partial Working pressure of furnace by the rules 108 lbs Combustion chamber

plates: Material Steel Thickness: Sides 3/32" Back 1/2" Top 1/32" Bottom 1/32" Pitch of stays to ditto: Sides 8" x 1/2" Back 8" x 8 3/4"

Top 12 1/2" x 8" If stays are fitted with nuts or riveted heads Auto Working pressure by rules 105 lbs Material of stays Steel Diameter at

smallest part 1 1/8" Area supported by each stay 70 sq in Working pressure by rules 115 lbs End plates in steam space: Material Steel Thickness 1/8"

Pitch of stays 19 1/4" x 1 1/4" How are stays secured Drift Working pressure by rules 101 lbs Material of stays Steel Diameter at smallest part 2.09"

Area supported by each stay 339 sq in Working pressure by rules 102 lbs Material of Front plates at bottom Steel Thickness 1/16" Material of

Lower back plate Steel Thickness 5/8" Greatest pitch of stays 12 1/2" Working pressure of plate by rules 148 lbs Diameter of tubes 3 1/2"

Pitch of tubes 4 5/8" x 4 5/8" Material of tube plates Steel Thickness: Front 1/16" Back 5/8" Mean pitch of stays 10.4" Pitch across wide

water spaces 13" Working pressures by rules 101 lbs 121 lbs Girders to Chamber tops: Material Steel Depth and thickness of

girder at centre 4" x 1 1/4" Length as per rule 25 1/8" Distance apart 12 1/2" Number and pitch of Stays in each 2: 8"

Working pressure by rules 105 lbs Superheater or Steam chest: how connected to boiler None 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

VERTICAL DONKEY BOILER— No. ✓ Description Manufacturers of steel

Made at By whom made When made Where fixed

Working pressure tested by hydraulic pressure to No. of Certificate Fire grate area Description of safety valves

No. of safety valves Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can

enter the donkey boiler Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile

strength Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets

Lap of plating Per centage of strength of joint Rivets Working pressure of shell by rules Thickness of shell crown plates

Radius of do. No. of Stays to do. Dia. of stays Diameter of furnace Top Bottom Length of furnace

Thickness of furnace plates Description of joint Working pressure of furnace by rules Thickness of furnace crown

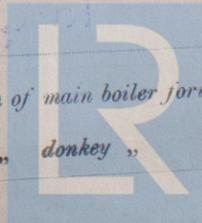
plates Stayed by Diameter of uptake Thickness of uptake plates Thickness of water tubes

The foregoing is a correct description,

Rankin & Blackmore Manufacturer.

Dates of Survey while building { During progress of work in shops - - }
{ During erection on board vessel - - - }
Total No. of visits

Is the approved plan of main boiler forwarded herewith



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

In recommendations See previous sheet.

RECEIVED

RECEIVED

Certificate (if required) to be sent to...

The amount of Entry Fee...	£	:	:	When applied for,
Special	£	:	:	19
Donkey Boiler Fee ...	£	:	:	When received,
Travelling Expenses (if any) £	:	:	:	19

Wm R. Austin

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

Glasgow - 8 MAY 1903

Committee's Minute

Assigned *See accompanying report.*



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