

REPORT ON BOILERS.

No. 23979
TUES. 15 MAY 1906

Port of Glasgow

Received at London Office

No. in Survey held at Glasgow Date, first Survey 30 March Last Survey 17 August 1905
 Reg. Book. " " (Number of Visits)
 on the Donkey boiler for S. S. Auchendale Tons Gross 1906
 Master Fort Glasgow Built at Fort Glasgow By whom built Russell & Co. (L: 556) When built 1906
 Engines made at Glenora By whom made J. Fincaid & Co. when made 1906
 Boilers made at Glasgow By whom made Barclay Curle & Co. (J.N. 6) when made 1906
 Registered Horse Power Owners Port belonging to

MULTITUBULAR BOILER ~~MANUFACTURED BY~~ DONKEY. — Manufacturers of Steel W. Beardmore & Co. Ltd.

(Letter for record S.) Total Heating Surface of Boilers 788 sq ft Is forced draft fitted No. and Description of Boilers One single ended Working Pressure 80 lbs Tested by hydraulic pressure to 160 lbs Date of test 17-8-05
 No. of Certificate 7662 Can each boiler be worked separately Area of fire grate in each boiler 29.2 sq ft No. and Description of safety valves to each boiler Area of each valve Pressure to which they are adjusted
 Are they fitted with easing gear 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 Mean dia. of boilers 10'-0" Length 9'-0"
 Material of shell plates Steel Thickness 1/2" Range of tensile strength 28-32 Are the shell plates welded or flanged No.
 Descrip. of riveting: cir. seams D. N. L. long. seams D. T. S. Diameter of rivet holes in long. seams 3/4" Pitch of rivets 3 5/16"
 Lap of plates or width of butt straps 7 5/8" Per centages of strength of longitudinal joint rivets 78 Working pressure of shell by rules 84 lbs Size of manhole in shell 16" x 12" Size of compensating ring 28 1/2" x 24 1/2" x 5/8" No. and Description of Furnaces in each boiler 2. plain Material Steel Outside diameter 36 1/16" Length of plain part top 68" Thickness of plates crown 1 7/32" bottom 96"
 Description of longitudinal joint weld No. of strengthening rings none Working pressure of furnace by the rules 89 lbs Combustion chamber plates: Material Steel Thickness: Sides 1 5/32" Back 1 5/32" Top 1 5/32" Bottom 1 7/32" Pitch of stays to ditto: Sides 9" x 9" Back 9" x 8 3/8"
 Top 9" x 7 1/4" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 83 lbs Material of stays Steel Diameter at smallest part 96" Area supported by each stay 81" Working pressure by rules 97 lbs End plates in steam space: Material Steel Thickness 3/4"
 Pitch of stays 14 1/2" How are stays secured D. nuts Working pressure by rules 120 lbs Material of stays Steel Diameter at smallest part 2-03"
 Area supported by each stay 210" Working pressure by rules 96 lbs Material of Front plates at bottom Steel Thickness 3/4" Material of Lower back plate Steel Thickness 3/4" Greatest pitch of stays 18 1/4" Working pressure of plate by rules 100 lbs Diameter of tubes 3 1/4"
 Pitch of tubes 4 1/2" Material of tube plates Steel Thickness: Front 3/4" Back 9/16" Mean pitch of stays 11 1/4" Pitch across wide water spaces 13 1/2" Working pressures by rules 110 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 5" x 9 1/16" Length as per rule 26" Distance apart 7 1/4" Number and pitch of Stays in each 2 x 9"
 Working pressure by rules 86 lbs 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

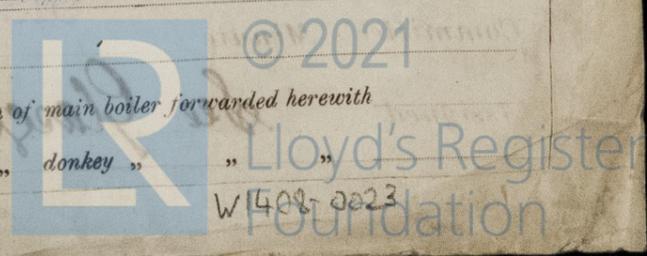
VERTICAL DONKEY BOILER — No. Description Manufacturers of steel

Made at By whom made When made Where fixed Working pressure
 tested by hydraulic pressure to Date of test 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 Plates 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
 Radius of do. Stayed by Diameter of uptake Thickness of uptake plates
 Thickness of water tubes

The foregoing is a correct description,
FOR BARCLAY CURLE & CO., LTD Manufacturer.
James Gilchrist Director.

Dates of Survey while building { During progress of work in shops -- } 1905: Mar. 30. Apr. 7. May 1. & 19 June
 { During erection on board vessel --- } 20. 30. July 10. 13. Aug. 3. 17.
 Total No. of visits 11

Is the approved plan of main boiler forwarded herewith
 " " " donkey " " " "



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

This boiler has been constructed under Special
 survey the materials & workmanship are good &
 efficient.

VERTICAL DONKEY BOILER

No.	Material	Quantity	Remarks
1	Steel	10' 0"	Shell
2	Steel	10' 0"	End plates
3	Steel	10' 0"	Diaphragms
4	Steel	10' 0"	Stays
5	Steel	10' 0"	Stays
6	Steel	10' 0"	Stays
7	Steel	10' 0"	Stays
8	Steel	10' 0"	Stays
9	Steel	10' 0"	Stays
10	Steel	10' 0"	Stays
11	Steel	10' 0"	Stays
12	Steel	10' 0"	Stays
13	Steel	10' 0"	Stays
14	Steel	10' 0"	Stays
15	Steel	10' 0"	Stays
16	Steel	10' 0"	Stays
17	Steel	10' 0"	Stays
18	Steel	10' 0"	Stays
19	Steel	10' 0"	Stays
20	Steel	10' 0"	Stays

Certificate (if required) to be sent to the Committee's Minute.

The amount of Entry Fee... £	When applied for.
Special ... £	19
Donkey Boiler Fee ... £ 2 : 2	When received.
Travelling Expenses (if any) £	19/5/0

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

Glasgow - 8 MAY 1906

Committee's Minute

Assigned

See Glasgow Report No. 20932.

