

Rpt. 5

REPORT ON BOILERS.

Hwe No. 49985

Std No. 22654

WED. 14 MAR 1906

Port of Newcastle

Received at London Office

10

No. in Survey held at Gateshead Date, first Survey Nov. 21 Last Survey Jan 26 1906
Reg. Book. on the S. S. CAMBRIC (Number of Visits 3)
Master W. Hill Built at Sunderland By whom built Sunderland I. B. Co (No 235) When built 1906
Engines made at Sunderland By whom made North Eastern Mar. Eng. Co. Ltd. when made 1906
Boilers made at Gateshead By whom made Clarke Chapman & Co (No 2490d) when made 1906
Registered Horse Power Owners W. H. Bockerline & Co. Port belonging to Hull

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel J. Spencer & Sons

(Letter for record S) Total Heating Surface of Boilers 675 sq Is forced draft fitted no No. and Description of Boilers One - single-ended Working Pressure 100 lbs Tested by hydraulic pressure to 200 lbs Date of test 26/1/06
No. of Certificate 7160 Can each boiler be worked separately ✓ Area of fire grate in each boiler 27 sq No. and Description of safety valves to each boiler Two, direct spring Area of each valve 4.92 Pressure to which they are adjusted 100 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 on deck Mean dia. of boilers 9'-4 13/16" Length 9' 0"
Material of shell plates Steel Thickness 19/32" Range of tensile strength 27-32 Are the shell plates welded or flanged no
Descrip. of riveting: cir. seams S. Lap long. seams S. Lap Diameter of rivet holes in long. seams 15/16" Pitch of rivets 4 1/2"
Lap of plates or width of butt straps 6 13/16" Per centages of strength of longitudinal joint rivets 84.7 plate 80. Working pressure of shell by rules 102 lbs Size of manhole in shell 15" x 12" Size of compensating ring 6" x 19/32" No. and Description of Furnaces in each boiler 2 - plain Material Steel Outside diameter 2'-9" Length of plain part top 6'-1" bottom 6'-1" Thickness of plates crown 1/2" bottom 1/2"
Description of longitudinal joint S. Lap No. of strengthening rings ✓ Working pressure of furnace by the rules 111 lbs Combustion chamber plates: Material Steel Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 9/16" Pitch of stays to ditto: Sides 9 1/2" x 9 1/2" Back 9 7/8" x 9 7/8"
Top 11" x 9 1/2" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 103 lbs Material of stays Steel Diameter at smallest part 1.23" Area supported by each stay 97.50" Working pressure by rules 102 lbs End plates in steam space: Material Steel Thickness 1/16"
Pitch of stays 15" x 13" How are stays secured S. H. & W. Working pressure by rules 113 lbs Material of stays Steel Diameter at smallest part 1 3/4"
Area supported by each stay 195" Working pressure by rules 123 lbs Material of Front plates at bottom Steel Thickness 1/16" Material of Lower back plate Steel Thickness 1/16" Greatest pitch of stays 11" Working pressure of plate by rules 149 lbs Diameter of tubes 3"
Pitch of tubes 4 1/2" x 4 1/4" Material of tube plates Steel Thickness: Front 1/16" Back 5/8" Mean pitch of stays 11" Pitch across wide water spaces 13" Working pressures by rules 100 lbs Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 7 1/2" x 9/16" Length as per rule 24" Distance apart 11" Number and pitch of Stays in each 1-10"
Working pressure by rules 113 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

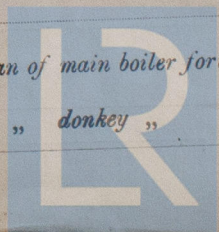
FOR CLARKE, CHAPMAN & Co. LTD.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
During progress of work in shops - -
During erection on board vessel - -
Total No. of visits 3

CHAIRMAN

Is the approved plan of main boiler forwarded herewith ✓

© 2020

Lloyd's Register Foundation

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

This donkey boiler has been constructed under special survey & the materials & workmanship are found & good.

The Donkey Boiler has been fitted with good mountings in accordance with the Requirements of the Rules and the Safety Valve Adjusted to their working pressure under steam, and casing gear fitted.

W.H.

Certificate (if required) to be sent to

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

Monthly account

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

Committee's Minute

FRI. 16 MAR 1906

Assigned



© 2020

Lloyd's Register
Foundation