

REPORT ON BOILERS.

No. 15251

SAT.-3 JUN. 1916

Date of writing Report 29th May, 1916 When handed in at Local Office 1/6/1916

Received at London Office

Port of West Hartlepool

No. in Survey held at W. Hartlepool

Date, First Survey 19th Nov. 15 Last Survey 21st March 1916

Reg. Book.

on the Steel Screw Steamer "Merioneth" (Wm. Gray & Co's SS No. 8757)

(Number of Visits)

Gross 3003.55
Tons Net 1853.62

Master G. Roberts, 1914-1916 Built at W. Hartlepool

By whom built W. Gray & Co. Ltd.

When built 5-1916

Engines made at W. Hartlepool

By whom made Central Marine Engine Works

When made 1916

Boilers made at W. Hartlepool

By whom made Central Marine Engine Works

When made 1916

Registered Horse Power 288

Owners Harrogate Steamship Co. Ltd. (Jenkins Bros. Agents) Port belonging to Cardiff.

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel J. Spencer & Sons, Ltd.

(Letter for record S.)

Total Heating Surface of Boilers 588 sq. ft.

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 17/3/16

No. of Certificate 3426

Can each boiler be worked separately Yes

Area of fire grate in each boiler 23 sq. ft.

No. and Description of

safety valves to each boiler Two, Spring

Area of each valve 7.07 sq. ins. 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'-4¹³/₁₆"

Length 9'-0"

Material of shell plates Steel

Thickness 19/32"

Range of tensile strength 26/30 tons

Are the shell plates welded or flanged Both

Descrip. of riveting: cir. seams

long. seams dble, dble straps

Diameter of rivet holes in long. seams 7/8"

Pitch of rivets 3 5/8"

Lap of plates or width of butt straps 10"

Per centages of strength of longitudinal joint

rivets 83.

Working pressure of shell by

rules 102 lbs.

Size of manhole in shell 15" x 11"

Size of compensating ring 29" x 25" x 1/4"

No. and Description of Furnaces in each

boiler Two, plain

Material Steel

Outside diameter 35 1/2"

Length of plain part top 64.5"

Thickness of plates crown 15/32"

bottom 3/32"

Description of longitudinal joint welded

No. of strengthening rings One

Working pressure of furnace by the rules 102 lbs. Combustion chamber

plates: Material Steel

Thickness: Sides 19/32"

Back 19/32"

Top 19/32"

Bottom 9/16"

Pitch of stays to ditto: Sides 10 1/2" Back 11 1/2" x 10"

Top 12" x 9 7/8" If stays are fitted with nuts or riveted heads Both

Working pressure by rules 100 lbs. Material of stays Steel

smallest part 1-383 Area supported by each stay 1 1/2" x 10"

Working pressure by rules 104

End plates in steam space: Material Steel

Pitch of stays 18" x 15 1/2"

How are stays secured dble nuts

Working pressure by rules 103 Material of stays Steel

Area supported by each stay 18" x 15 1/2"

Working pressure by rules 107

Material of Front plates at bottom Steel

Lower back plate Steel

Thickness 23/32"

Greatest pitch of stays 14" x 10"

Working pressure of plate by rules 120 lbs. Diameter of tubes 3 1/4"

Pitch of tubes 4 1/2"

Material of tube plates Steel

Thickness: Front 23/32"

Back 5/8"

Mean pitch of stays 13 1/2" x 9"

Pitch across wide

water spaces 14"

Working pressures by rules 101 lbs.

Girders to Chamber tops. Material Steel

girder at centre 7 1/2" x 1 1/8"

Length as per rule 25 7/8"

Distance apart 9 7/8"

Number and pitch of Stays in each One

Working pressure by rules 104 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

1) 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

FOR THE CENTRAL MARINE ENGINE WORKS.
(W. GRAY & Co., Ltd.)

The foregoing is a correct description,

A. Hogarth

Chief Draughtsman

Manufacturer.

Dates of Survey
During progress of work in shops - 1915 Nov. 19, 22, 23, 24, 25, 26, 29, Dec 1, 7, 9, 10, 13, 15
while building - 20, 22, 24, 1916 Jan 7, 10, 11, 12, 13, 14, 17, 18, 19, 21, 25, 26
During erection on board vessel - 27, 28, 31, Feb 1, 2, 3, 10, 21, 22, 24, 25, Mar 15, 17, 21. Total No. of visits 42

Is the approved plan of boiler forwarded herewith Yes

GENERAL REMARKS

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

Workmanship good.

This Donkey Boiler has been built under Special Survey, also tested by hydraulic pressure to 200 lbs. per sq. in. & found tight & good. And its scantlings & general details are in accordance with those shown on the approved plan. The boiler has now been efficiently fitted on board the above named vessel.

Survey Fee ... £ 2 - - 2 -
Travelling Expenses (if any) £ :

When applied for, Monthly d/c
When received, 191

W. F. H.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE.-6 JUN. 1916

Assigned See minute 28 of 1st attached