

REPORT ON BOILERS.

No. 61982

Received at London Office

FRI. MAR. 22. 1912

Date of writing Report 22nd Dec. 1911 When handed in at Local Office

191 Port of Newcastle

No. in Survey held at Kelburn
Reg. Book.Date, First Survey 6th Oct. 1911 Last Survey 20th March 1912(Number of Visits) Gross 253
Net 92

Master

Built at Shields

By whom built

Hepple & Co. Ltd

When built 1912

Engines made at Shields

By whom made

Hepple & Co. Ltd

When made 1912

Boilers made at Kelburn

By whom made

Palmer & Co. Ltd

When made 1912

Registered Horse Power

Owners

Canadian Western Lumber Co

Port belonging to

British

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel

J. Spence & Sons & Palmer & Co

(Letter for record S)

Total Heating Surface of Boilers 1970 sq

Is forced draft fitted

no

No. and Description of

Boilers

One, single-ended

Working Pressure 160 lbs

Tested by hydraulic pressure to 360 lbs

Date of test 21-12-11

No. of Certificate 8253

Can each boiler be worked separately

Area of fire grate in each boiler 63 sq

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 15'-0"

Length 12'-0"

Material of shell plates Steel

Thickness 1 1/4"

Range of tensile strength 28-32

Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams S. Lap

long. seams S.B.S. T. Rivd.

Diameter of rivet holes in long. seams 1 1/4"

Pitch of rivets 8 1/2"

Lap of plates or width of butt straps 18 7/8"

Per centages of strength of longitudinal joint

rivets 86

Working pressure of shell by

rules 187 lbs

Size of manhole in shell 16" x 12"

Size of compensating ring McNeil

No. and Description of Furnaces in each

boiler 3-

movable

Material Steel

Outside diameter 45 3/4"

Length of plain part

top

Thickness of plates

crown 9 1/16"

Description of longitudinal joint Welded

No. of strengthening rings

Working pressure of furnace by the rules 192 lbs

Combustion chamber

plates: Material Steel

Thickness: Sides 5/8"

Back 2 1/32"

Top 5/8"

Bottom 1"

Pitch of stays to ditto: Sides 8 5/8" x 8 1/2"

Top 8 5/8" x 8 1/2" If stays are fitted with nuts or riveted heads nuts

Working pressure by rules 183 lbs

Material of stays Steel

Diameter at

smallest part 1 7/32"

Area supported by each stay 73.3 sq

Working pressure by rules 188 lbs

End plates in steam space: Material Steel

Thickness 1 7/16"

Pitch of stays 18" x 16"

How are stays secured S. h. W.

Working pressure by rules 184 lbs

Material of stays Steel

Diameter at smallest part 5.05"

Area supported by each stay 288 sq

Working pressure by rules 182 lbs

Material of Front plates at bottom Steel

Thickness 15/16"

Material of

Lower back plate Steel

Thickness 15/16"

Greatest pitch of stays 13 1/2"

Working pressure of plate by rules 240 lbs

Diameter of tubes 3 1/2"

Pitch of tubes 4 3/4" x 4 3/4"

Material of tube plates Steel

Thickness: Front 17/16"

Back 13/16"

Mean pitch of stays 10 11/16"

Pitch across wide

water spaces 14 1/2"

Working pressures by rules 192 lbs

Girders to Chamber tops: Material Steel

Depth and thickness of

girder at centre 9 3/4" x 2"

Length as per rule 39 3/8

Distance apart 8 1/2"

Number and pitch of Stays in each 3-8 5/8"

Working pressure by rules 200 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

The foregoing is a correct description,

For

Palmer's Shipbuilding & Iron Co. Ltd

Manufacturer.

Dates

During progress of

1911

Oct. 6, 18, 25, 30 Nov. 7, 13, 17, 22, 23 Dec. 5, 14, 19, 21

Is the approved plan of boiler forwarded herewith

yes

of Survey

work in shops - -

See Machinery Report

Total No. of visits

13+

while

During erection on

board vessel - - -

GENERAL REMARKS

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

This main boiler has

been constructed under special survey & the materials and workmanship are found to be good.

Survey Fee ...

£

When applied for, ...

191

Travelling Expenses (if any) £

When received, ...

191

Thomas Field

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

Committee's Minute

TUE. MAR. 26. 1912

Assigned