

REPORT ON BOILERS.

No. 132

Received at London Office

WED. 20 NOV. 1918

Writing Report

191

When handed in at Local Office

191

Port of

CLEVELAND, OHIO.

in Survey held at
Book.

Buffalo N.Y.

Date, First Survey

July 2nd 1917

(Number of Visits

Last Survey Nov. 24 1917

on the

Challambra

Gross
Tons
Net

Built at

By whom built

When built

nes made at

By whom made

When made

rs made at

Buffalo

By whom made

Lake Erie Boiler Works

When made

1917

tered Horse Power

Owners

Seattle Dry Dock Co

Port belonging to

Seattle Wash

LTTUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel

Lukens Steel Co

er for record

Total Heating Surface of Boilers 538.5

Is forced draft fitted

No. and Description of

ers one

Working Pressure 175

Tested by hydraulic pressure to 265

Date of test 24-11-17

of Certificate 102

Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of

y valves to each boiler

Area of each valve

Pressure to which they are adjusted

they fitted with easing gear

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

test distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers

7'0"

Length 8'0"

rial of shell plates OH Steel

Thickness $\frac{21}{32}$ Range of tensile strength $\frac{60000}{71680}$

Are the shell plates welded or flanged

No

rip. of riveting: cir. seams Lap Single R. long. seams B-D-5

Diameter of rivet holes in long. seams $\frac{1}{16}$

Pitch of rivets

7"

of plates or width of butt straps 15"

Per centages of strength of longitudinal joint

rivets 143.5

Working pressure of shell by

180

Size of manhole in shell 2-11" X 15"

Size of compensating ring 28 1/2 X 32 1/2 X 1 1/16

No. and Description of Furnaces in each

r 1 Morrison

Material OH Steel

Outside diameter 42"

Length of plain part

Thickness of plates

crown 1/2"

ription of longitudinal joint Welded

No. of strengthening rings

Working pressure of furnace by the rules 179

Combustion chamber

s: Material OH Steel

Thickness: Sides 19"

Back 19"

Top 19"

Bottom 19"

Pitch of stays to ditto: Sides 7" X 7"

Back 7" X 7"

7" X 7" If stays are fitted with nuts or riveted heads riveted heads

Working pressure by rules 180

Material of stays Iron

Diameter at

est part 1 3/4"

Area supported by each stay 49"

Working pressure by rules 180

End plates in steam space: Material OH Steel

Thickness 39"

Diameter at smallest part 2 3/8"

of stays 13 1/2" X 13 1/2"

How are stays secured Double Nut

Working pressure by rules 181

Material of stays Iron

Diameter at smallest part 2 3/8"

supported by each stay 182 1/4"

Working pressure by rules 182

Material of Front plates at bottom OH Steel

Thickness 39/64"

Material of

r back plate OH Steel

Thickness 39/64"

Greatest pitch of stays 7" X 7"

Working pressure of plate by rules 180

Diameter of tubes 3"

of tubes 4" X 4"

Material of tube plates OH Steel

Thickness: Front 39/64"

Back 39/64"

Mean pitch of stays 8" X 8"

Pitch across wide

spaces 12"

Working pressures by rules 210

Girders to Chamber tops: Material OH Steel

Depth and thickness of

at centre 5 1/2" X (5/8 X 2)

Length as per rule 20 1/4"

Distance apart 7"

Number and pitch of Stays in each 2-7"

ing pressure by rules 213

Superheater or Steam chest: how connected to boiler

Can the superheater be shut off and the boiler worked

ately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

fitted with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

ing pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

TICAL DONKEY BOILER—

No.

Description

Manufacturers of steel

at

By whom made

When made

Where fixed

Working pressure

by hydraulic pressure to

Date of test

No. of Certificate

Fire grate area

Description of safety valves

safety valves

Area of each

Pressure to which they are adjusted

If fitted with easing gear

If steam from main boilers can

to donkey boiler

Dia. of donkey boiler

Length

Material of shell plates

Thickness

Range of tensile

to

Descrip. of riveting long. seams

Dia. of rivet holes

Whether punched or drilled

Pitch of rivets

plating

Per centage of strength of joint

Rivets

Working pressure of shell by rules

Thickness of shell crown plates

of do.

No. of Stays to do.

Dia. of stays

Diameter of furnace Top

Bottom

Length of furnace

ss of furnace plates

Description of joint

Working pressure of furnace by rules

Thickness of furnace crown

Radius of do.

Stayed by

Diameter of uptake

Thickness of uptake plates

ss of water tubes

The foregoing is a correct description.

By R. N. Wheaton Mgr Manufacturer.

During progress of work in shops - July 2nd, 3, 4, 9, 12, Aug 2nd, 8, 15, 18, 21, 24, Sept 4, 7, 10, 15, 24, Oct 4, 10, 15, 22, 31, Nov 2, 9, 12, 24, Dec 1, 8, 15, 22, 31, 1917

During erection on board vessel -

Total No. of visits

Is the approved plan of main boiler forwarded herewith

donkey

Lloyd's Register
Foundation
W592-0146

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

This Boiler has been constructed under Special Survey.
 The materials and workmanship employed in the construction are sound & good
 & found satisfactory under test
 This Boiler has been shipped to the Seattle Bay Dock Co, Seattle Washington
 to be installed in Hull No. 2

201

Certificate (if required) to be sent to

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee .. £	:	:	When applied for,
Special £	:	:19.....
Donkey Boiler Fee \$35 : 00	:	:	When received,
Travelling Expenses (if any) \$ 3 : 00	:	:19.....

Committee's Minute
 Assigned

New York NOV 5 1918

See Seattle Rpt No 725-

J. W. Redden W. V. Scott
 Engineer Surveyor to Lloyd's Register of Shipping.

