

## REPORT ON BOILERS.

No. 2405.

Writing Report

191

When handed in at Local Office

191

Port of Kobe

Received at London Office

MON. 17. MAR. 1919

in Survey held at

Osaka &amp; Imoshima.

Date, First Survey

June 10<sup>th</sup>

Last Survey

Oct 23<sup>rd</sup>

1918

Book.

on the Steel Single Screw Steamer "Hoyeisan Maru"

(Number of Visits)

Gross 6079.05

Net 3850.07

K. Tsugi.

Built at

Imoshima.

By whom built

Osaka Iron Works.

Imoshima

When built 1918

Made at

Osaka.

By whom made

Osaka Iron Works.

When made 1918

Made at

Osaka.

By whom made

Osaka Iron Works.

When made 1918

Registered Horse Power

Owners

Mitsubussan Kabushiki Kaisha

Port belonging to Kobe.

## L TITUBULAR BOILERS

MANUFACTURED BY DONKEY.

Manufacturers of Steel

Osaka Iron Works

For record

Total Heating Surface of Boilers

1139.87 sq. ft.

Is forced draft fitted

No.

No. and Description of

One Simple Ended.

Working Pressure

120 lbs.

Tested by hydraulic pressure to

240 lbs.

Date of test 20<sup>th</sup> August.

Certificate

HYD. TEST.

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

41.08 sq. ft.

No. and Description of

Valves to each boiler

A. L. J. R.

Two Spring loaded.

Area of each valve

3" dia.

Pressure to which they are adjusted

120 lbs.

They fitted with easing gear

Yes

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

No.

Least distance between boilers or uptakes and bunkers or woodwork

16"

Mean dia. of boilers

11'-6"

Length

10'-0"

Material of shell plates

Steel

Thickness

3/4"

Range of tensile strength

28-32 tons

Are the shell plates welded or flanged

No.

Type of riveting: cir. seams

DRL

long. seams

DRDBS

Diameter of rivet holes in long. seams

5/16"

Pitch of rivets

5"

Width of butt straps

10"

Per centages of strength of longitudinal joint

rivets 82.21

plate 81.875

Working pressure of shell by

Size of manhole in shell

12" x 16"

Size of compensating ring

2'-4" x 2'-8" x 3/4"

No. and Description of Furnaces in each

Two plain.

Material

Steel

Outside diameter

3'-8"

Length of plain part

top 44"

Thickness of plates

crown 9/16"

bottom 1/2"

Description of longitudinal joint

Weld

No. of strengthening rings

One and

Working pressure of furnace by the rules

137 lbs

Combustion chamber

Material

Steel

Thickness: Sides

9/16"

Back

9/16"

Top

9/16"

Bottom

Pitch of stays to ditto: Sides

8 1/2 x 9 3/4"

Back

8 1/2 x 9 3/4"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

13 lbs

Material of stays

Steel

Area at

largest part

15.179

Area supported by each stay

8 1/2 x 9 3/4"

Working pressure by rules

136 lbs

How are stays secured

Double nuts

Working pressure by rules

125 lbs

Material of stays

Steel

Area at smallest part

3.97 sq. ft.

Material of Front plates at bottom

Steel

Thickness

1/16"

Material of

Back plate

Steel

Thickness

1/16"

Greatest pitch of stays

14" between

Working pressure of plate by rules

120 lbs

Diameter of tubes

3 1/4"

Material of tube plates

Steel

Thickness: Front

1/16"

Back

1/16"

Mean pitch of stays

4 1/2"

Pitch across wide

spaces

14"

Working pressures by rules

120 lbs

Girders to Chamber tops: Material

Steel

Depth and thickness of

at centre

7 x 3/4"

Length as per rule

29"

Distance apart

8 1/2"

Number and pitch of Stays in each

20 @ 9 3/4"

Steam dome: description of joint to shell

% of strength of joint

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

Working pressure of shell by rules

Crown plates

Thickness

How stayed

Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Pressure to which each is adjusted

Is Easing Gear fitted

The foregoing is a correct description

Kahachi Abe

Is the approved plan of boiler forwarded herewith

Yes

Total No. of visits

15

During progress of

work in shops

June 10<sup>th</sup>, 27<sup>th</sup>July 4<sup>th</sup>, 5<sup>th</sup>, 9<sup>th</sup>, 13<sup>th</sup>Aug 10<sup>th</sup>, 20<sup>th</sup>

Is the approved plan of boiler forwarded herewith

Yes

During erection on

board vessel

Sept 13<sup>th</sup>, 21<sup>st</sup>Oct 1<sup>st</sup>, 7<sup>th</sup>, 13<sup>th</sup>, 23<sup>rd</sup>

Total No. of visits

15

GENERAL REMARKS

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

This boiler has been made and fitted under special survey in

accordance with the Rules and the materials and workmanship

have been found good.

Survey Fee

Yen 80.00

When applied for

Oct 15<sup>th</sup>

1918

Travelling Expenses (if any) £

When received

Oct 22<sup>nd</sup>

1918

Committee's Minute

TUE. 1-APR. 1919

See Note for yst attached

Signed

R. P. Patcher

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register

Foundation

WI 333-0302