

# REPORT ON BOILERS.

No. 2140

THU, 7 FEB. 1918

Received at London Office

Date of writing Report 10 Dec. 1917 When handed in at Local Office

Port of Kobe

No. in Survey held at Osaka

Date, First Survey 16 Jan'y 1917

Last Survey 10 Nov. 1917

on the Steel Twin Screw Steamer "Alps Maru"

(Number of Visits 19)

Gross Tons 7789  
Net 4861

Builder Built at Osaka

By whom built The Osaka Iron Works Ltd

When built 1917

Engines made at Osaka

By whom made The Osaka Iron Works Ltd

When made 1917

Boilers made at do

By whom made do

When made do

Registered Horse Power 655

Owners The Osaka Shosen Kaisha

Port belonging to Osaka

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel

John Spencer & Sons Ltd  
Deighton Tube Co.

Letter for record S. ) Total Heating Surface of Boilers 1403 sq ft

Is forced draft fitted Yes

No. and Description of

Boilers One S. E.

Working Pressure 200 lbs

Tested by hydraulic pressure to 400 lbs

Date of test 22.5.17

of Certificate Lloyd's Register Can each boiler be worked separately Yes

Area of fire grate in each boiler 39.4 sq ft

No. and Description of

Valves to each boiler

Two Direct Spring

Area of each valve 2 1/2" diam

Pressure to which they are adjusted 205 lbs

Are they fitted with easing gear Yes

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 15"

Mean dia. of boilers 12' 0"

Length 11' 6"

Material of shell plates Steel

Thickness 1 1/8"

Range of tensile strength 28-32 tons

Are the shell plates welded or flanged No.

Description of riveting: cir. seams

Double riv. long. seams

Double riveted Diameter of rivet holes in long. seams 1 3/16"

Pitch of rivets 8 1/4" x 4 1/8"

Width of butt straps 17 1/4" x 1 1/16"

Per centages of strength of longitudinal joint

88.0

Working pressure of shell by

Rules 209 lbs

Size of manhole in shell 12 x 16

Size of compensating ring 34 1/2 x 1 1/8"

No. and Description of Furnaces in each

Boiler Two Deighton

Material Steel

Outside diameter 47 1/4"

Length of plain part

top

Thickness of plates

crown

5/8"

Description of longitudinal joint Weld

No. of strengthening rings

Working pressure of furnace by the rules 212 lbs

Combustion chamber

Material Steel

Thickness: Sides 2 1/32"

Back 2 1/32"

Top 2 1/32"

Bottom 7/8"

Pitch of stays to ditto: Sides 8 1/4" x 8 1/2"

Back 9" x 8"

If stays are fitted with nuts or riveted heads Nuts

Working pressure by rules 206 lbs

Material of stays Steel

Section Diameter at

Smallest part 1.79"

Area supported by each stay 72 sq in

Working pressure by rules 223 lbs

End plates in steam space: Material Steel

Thickness

1 5/32"

How are stays secured Double nut

Working pressure by rules 212 lbs

Material of stays Steel

Section Diameter at smallest part 5.94"

Area supported by each stay 17 x 17 1/2"

Working pressure by rules 207 lbs

Material of Front plates at bottom Steel

Thickness 13/16"

Material of

Lower back plate Steel

Thickness 13/16"

Greatest pitch of stays 14 3/4" between

Working pressure of plate by rules 200 lbs

Diameter of tubes 3 1/4"

Pitch of tubes 4 1/2" x 4 3/8"

Material of tube plates Steel

Thickness: Front 13/16"

Back 13/16"

Mean pitch of stays 10 3/4"

Pitch across wide

Inter spaces 14" doubled

Working pressures by rules 200 lbs

Girders to Chamber tops: Material Steel

Depth and thickness of

Under at centre 10 1/4" x 7/8"

Length as per rule 34 1/2"

Distance apart 9"

Number and pitch of Stays in each 3 @ 8"

Working pressure by rules 238 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

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

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,

G. Genyuda

Manufacturer.

Engineer Manager Osaka S. S. Co.

Dates

During progress of

16.30 Jan'y 9. 24 Feb. 14. 24 Mar. 12. 23 Apr.

Is the approved plan of boiler forwarded herewith? Yes

Survey

work in shops - -

1.8.22 May. 4. 13 June

While

During erection on

20. 21 July 20 Aug. 18 Oct. 20 Oct. 10 Nov.

Total No. of visits 19

Building

board vessel - - -

1917

## GENERAL REMARKS

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

This Auxiliary boiler has been made & fitted under Special Survey in accordance with the Rules & the materials & workmanship have been found good.

Survey Fee

Included in Machinery

When applied for,

19

Travelling Expenses (if any) £ S. S. Fee

When received,

19

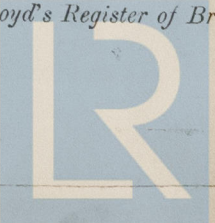
A. L. Jones

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

Committee's Minute

TUE. FEB. 12 1918.

Assigned



Lloyd's Register Foundation