

REPORT ON BOILERS.

No. 4640

Received at London Office 18 FEB 1931

When handed in at Local Office 28 Jan. 1931 Port of YOKOHAMA

held at YOKOHAMA

Date, First Survey 22 August 1930. Last Survey 17 January 1931

Steel Screw M.V. "SOYO MARU"

(Number of Visits 8) Gross 6081.46 Tons Net 3680.66

Built at Yurumi, Yokohama By whom built Asano S. B. Co. Ltd Yard No. 270 When built 1931

Kobe By whom made Kobe Steel Works. Engine No. 104 When made 1930

Yurumi, Yokohama By whom made Asano Shipbuilding Co. Ltd Boiler No. 270 When made 1931

power 747 Owners Soyo Kisen Kabushiki Kaisha Port belonging to Yokohama

ULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Steel Asano Shipbuilding Co. Ltd. Yurumi, Japan. (Letter for Record S.)

Surface of Boilers 231.73 ft. Is forced draught fitted no Coal or Oil fired Oil

ion of Boilers One single ended cylindrical boiler Working Pressure 100 lbs

ic pressure to 200 lbs. Date of test 29/ No. of Certificate 29 Can each boiler be worked separately

in each Boiler No. and Description of safety valves to each boiler Two Spring Loaded

of valves per boiler per Rule 3.012 as fitted 3.534 Pressure to which they are adjusted 100 lbs Are they fitted with easing gear yes

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

between boilers or uptakes and bunkers or woodwork Is oil fuel carried in the double bottom under boilers

etween shell of boiler and tank top plating 2'-2 1/2" Is the bottom of the boiler insulated yes

ia. of boilers 5'-6" Length 6'-6" Shell plates: Material steel Tensile strength 28-32 tons/sq. in.

Are the shell plates welded or flanged Description of riveting: circ. seams S. R. Lap

lap. Diameter of rivet holes in circ. seams 13/16" Pitch of rivets 13/4"

length of circ. end seams plate 53.5% rivets 47.2% Percentage of strength of circ. intermediate seam plate 67.5% rivets 66.0%

length of longitudinal joint plate 67.5% rivets 66.0% combined Working pressure of shell by Rules 115.8 lbs.

traps outer inner No. and Description of Furnaces in each Boiler 1 plain furnace

Tensile strength 26-30 tons/sq. in. Smallest outside diameter 2'-0 7/8"

rt top 4'-8 1/4" Thickness of plates crown 7/16" Description of longitudinal joint Weld

bottom 5'-0" Working pressure of furnace by Rules 121 lbs.

ning rings on furnace or c.c. bottom Working pressure of furnace by Rules 121 lbs.

n space: Material steel Tensile strength 26-30 tons Thickness 1/2" Pitch of stays 13" x 15 1/2" dia.

red nuts washers inside and outside Working pressure by Rules 108 lbs.

ial front steel Tensile strength 26/30 tons Thickness 1/2"

back steel Tensile strength 26/30 tons Thickness 3/4"

tubes in nests 6 1/2" x 6 1/2" Pitch across wide water spaces Working pressure front 107 lbs back 107.2 lbs.

ion chamber tops: Material steel Tensile strength 28-32 tons Depth and thickness of girder

6" x 7 1/16" Length as per Rule 17 1/4" Distance apart 4 1/4" No. and pitch of stays

14" Working pressure by Rules 121 lbs. Combustion chamber plates: Material steel

26-30 tons Thickness: Sides 7/16" Back 7/16" Top 7/16" Bottom 7/16"

Sides 6 1/4" x 6 1/4" Back 6 1/2" x 6 1/2" Top 6 1/4" x 7 1/4" Are stays fitted with nuts or riveted over nuts riveted over

Rules 138 lbs. Front plate at bottom: Material steel Tensile strength 26-30 tons

Lower back plate: Material steel Tensile strength 26-30 Thickness 1/2"

le water space 6 1/2" x 6 1/2" Are stays fitted with nuts or riveted over nuts

er of Shipping 150 lbs Main stays: Material steel Tensile strength 28-32 tons

ay, 2" No. of threads per inch 6 Area supported by each stay 240.25 sq. in.

TUE. Rules 109 lbs. Screw stays: Material steel Tensile strength 26-30 tons

art, 1" No. of threads per inch 9 Area supported by each stay 42.25 sq. in.

Working pressure by Rules 104.966 Are the stays drilled at the outer ends no Margin stays: Diameter { At turned off part, or Over threads } 1 1/8"
No. of threads per inch 9 Area supported by each stay 43.870" Working pressure by Rules 124.91
Tubes: Material Steel External diameter { Plain 3 1/4" Stay 3 1/4" } Thickness { 10 LSG. 1/4" } No. of threads per inch
Pitch of tubes 4 1/4" x 4 1/4" Working pressure by Rules 130 lbs. Manhole compensation: 5-2
shell plate 16" x 12" 18 1/2 x 14 1/2 Section of compensating ring 4 1/2" x 1/2" No. of rivets and diameter of rivet holes 26 @ 1 1/2"
Outer row rivet pitch at ends 2 3/4" Depth of flange if manhole flanged 2 1/4" Steam Dome: Material
Tensile strength Thickness of shell Description of longitudinal joint
Diameter of rivet holes Pitch of rivets Percentage of strength of joint { Plate Rivets }
Internal diameter Working pressure by Rules Thickness of crown
stays Inner radius of crown Working pressure by Rules
How connected to shell Size of doubling plate under dome Diameter of rivet holes
of rivets in outer row in dome connection to shell

Type of Superheater Manufacturers of Tubes Steel castings
Number of elements Material of tubes Internal diameter and thickness of tubes
Material of headers Tensile strength Thickness Can the superheater be worked separately
the boiler be worked separately Is a safety valve fitted to every part of the superheater which can be shut off from the boiler
Area of each safety valve Are the safety valves fitted with easing gear Working pressure
Rules Pressure to which the safety valves are adjusted Hydraulic
tubes castings and after assembly in place Are drain cocks provided
to free the superheater from water where necessary
Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with

The foregoing is a correct description of the boiler and superheater
Yoshio Kamioka

Dates of Survey { During progress of work in shops - - 22/8, 28/8, 3/9, 22/9, 29/9/30.
while building { During erection on board vessel - - - 16/10/30, 7/11, 17/11/31.

Are the approved plans of boiler and superheater forwarded hereto (If not state date of approval.)

Total No. of visits 8.

Is this Boiler a duplicate of a previous case ☒ If so, state Vessel's name and Report No. ☒

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built special survey in accordance with the Rules & approved plan. Materials and workmanship are of the best. This boiler has now been securely fitted onboard this vessel and examined under steam and the safety valves adjusted to 100 lbs. Accumulation tests were made and no rise in pressure found.

Survey Fee ... YEN 1000 : Charged on mch. rept.

Travelling Expenses (if any) rept. :

When applied for, 23 - 1 - 1931.

When received, 19

Committee's Minute

FRI. 27 FEB. 1931

Assigned

See Yka. Rpt. 4640

J. Micholas.
Engineer Surveyor to Lloyd's Register

10 NOV 1931

FRI. 16 SEP 1932

TUE. 1 MAR 1933

TUE. 25 APR 1933
FRI. 28 JUL 1933

Lloyd's Register
Foundation