

## REPORT ON BOILERS.

No. 5204

Received at London Office

Date of writing Report 2-3-26 19 When handed in at Local Office 12<sup>th</sup> April 19 26 Port of Kobe

No. in Survey held at INNOSHIMA Date, First Survey 30<sup>th</sup> SEPT. 1924 Last Survey 17<sup>th</sup> MARCH 1926

Reg. Book. on the STEEL SINGLE SC. "SEIRYU MARU" (Number of Visits SEE MACH. RPT.) Gross 1895.82 Tons Net 1166.80

Master Built at INNOSHIMA By whom built OSAKA IRON WORKS LTD When built 1926-3

Engines made at INNOSHIMA By whom made OSAKA IRON WORKS LTD when made 1926-3

Boilers made at INNOSHIMA By whom made OSAKA IRON WORKS LTD when made 1926-3

Registered Horse Power 1561 Owners KITA NIPPON KISEN KAB. K. OSAKA IRON WORKS LTD Port belonging to NISHINOMIYA

**MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.** Manufacturers of Steel YAWATA & KAWASAKI STEEL CO. LTD

(Letter for record S ) Total Heating Surface of Boilers 3011 Is forced draft fitted YES No. and Description of Boilers 2. SE MULTITUBULAR Working Pressure 200 Tested by hydraulic pressure to 350 Date of test 18-1-26

of Certificate 810 Can each boiler be worked separately YES Area of fire grate in each boiler 42.6 No. and Description of Safety valves to each boiler TWO SPRING LOADED. Area of each valve 4.91 Pressure to which they are adjusted 205

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 18" Mean dia. of boilers 12'-3" I.D. Length 11'-0"

Material of shell plates O.H. STEEL Thickness 1 1/8" Range of tensile strength 28-35 TONS Are the shell plates welded or flanged NO

Description of riveting: cir. seams D.R. LAP long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 1 3/16" Pitch of rivets 8 1/4"

Gap of plates or width of butt straps 17 3/4" Per centages of strength of longitudinal joint 91.6 Working pressure of shell by rules 201 1/2

Size of manhole in shell 21 1/2 x 17 1/2 Size of compensating ring 35 1/4 x 31 1/4 x 1 1/8" No. and Description of Furnaces in each boiler 2 MORISON

Material O.H. STEEL Outside diameter 45 1/16" Length of plain part top 31 1/2" bottom 32" Thickness of plates 21" crown 32" bottom

Description of longitudinal joint WELDED No. of strengthening rings ✓ Working pressure of furnace by the rules 210 Combustion chamber plates: Material O.H. STEEL Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 7/8" Pitch of stays to ditto: Sides 7 1/2 x 7 1/2" Back 8 x 8"

Top 7 x 8 1/2" If stays are fitted with nuts or riveted heads NUTS Working pressure by rules 210 Material of stays O.H. STEEL Diameter at smallest part 1.48" Area supported by each stay 64" Working pressure by rules 238 End plates in steam space: Material O.H. STEEL Thickness 1 1/2"

Pitch of stays 17 x 16 1/2" How are stays secured D. NUTS Working pressure by rules 247 Material of stays O.H. STEEL Diameter at smallest part 2.786"

Area supported by each stay 280.5 Working pressure by rules 247 Material of Front plates at bottom O.H. STEEL Thickness 1 1/8" Material of lower back plate O.H. STEEL Thickness 1 1/8" Greatest pitch of stays 14 x 8" Working pressure of plate by rules 206 Diameter of tubes 3" O.D.

Pitch of tubes 4 5/16 x 4 3/8" Material of tube plates STEEL Thickness: Front 7/8" Back 13/16" Mean pitch of stays 9.515" Pitch across wide water spaces 13 1/2" WITH 2" DOUBLER Working pressures by rules 240 Girders to Chamber tops: Material O.H. STEEL Depth and thickness of girder at centre 8 1/2 x 1 5/8" Length as per rule 30 1/16" Distance apart 8 1/2" Number and pitch of Stays in each 3 @ 7"

Working pressure by rules 236 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,

H. Sasaki. Manufacturer.

During progress of work in shops - - - } SEE MACHINERY REPORT.

During erection on board vessel - - - }

Is the approved plan of boiler forwarded herewith YESTotal No. of visits ✓

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

These Boilers have been constructed under special survey, & tested in accordance with the Rule requirements & approved plans. The materials have been tested found efficient & the workmanship throughout is good. They have now been efficiently installed on board & tested under full working conditions with satisfactory results.

Survey Fee ... £ } SEE MACH. RPT. When applied for, 19

Travelling Expenses (if any) £ : : When received, 19

Committee's Minute

DUES. 18 MAY 1926

Assigned

See report attached

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