

M.V. "KOSOH MARU"  
**REPORT ON BOILERS.**

No. FE-3532

K O B E

t. 5b.

Received at London Office 9 - AUG 1956

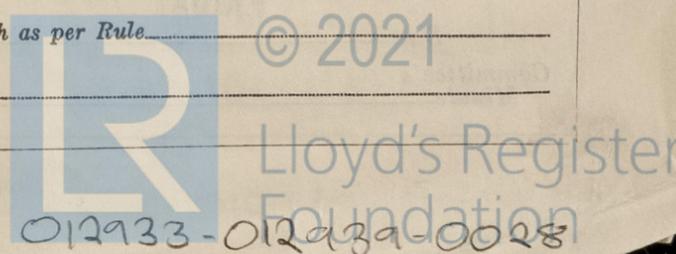
K O B E

Date of writing Report 19... When handed in at Local Office 19... Port of KOBE & NAGASAKI  
 Survey held at Kobe and Nagasaki Date, First Survey K O B E 19th Oct., 1955 Last Survey K O B E 15th Feb., 1956  
 No. in Reg. Book. (Number of Visits 18) Tons { Gross Net  
 Built at Nagasaki, Japan By whom built Mitsubishi Zosen K.K. Yard No. 1465 When built  
 Engines made at By whom made Engine No. When made  
 Boilers made at Osaka, Japan By whom made Hirano Iron Works Co., Ltd. Boiler No. H515 When made Feb., 1956  
 Owners Daido Kaiun K.K. Port belonging to Kobe

**VERTICAL BOILER.**

Made at Osaka, Japan By whom made Hirano Iron Wks., Co. Ltd. Boiler No. H515 When made Feb. 1956 Where fixed Nagasaki  
 Manufacturers of Steel Plates: Yawata Iron & Steel Co., Ltd., Yawata. Tubes: Sumitomo Metal Co., Ltd., Amagasaki.  
 Total Heating Surface of each Boiler 80M<sup>2</sup> Is forced draught fitted No Coal or Oil fired Oil  
 No. and Description of Boilers One Cochran Donkey Boiler Working Pressure 7.0 kg/cm<sup>2</sup>  
 Tested by hydraulic pressure to 14.0 kg/cm<sup>2</sup> Date of test 8th February, 1956 No. of Certificate I-28711  
 Area of fire grate in each Boiler No. and description of safety valves to each boiler  
 Area of each set of valves per boiler { per Rule as fitted Pressure to which they are adjusted Are they fitted with easing gear  
 State whether steam from main boilers can enter the donkey boiler Smallest distance between boiler or uptake and bunkers  
 Is oil fuel carried in the double bottom under boiler Smallest distance between base of boiler and tank top plating  
 Is the base of the boiler insulated Largest internal dia. of boiler 2400mm Height 5200mm  
 Top & Bot: 16mm Middle: 18mm  
 Shell plates: Material Boiler Steel Tensile strength 50.5-52.1kg/cm<sup>2</sup> Thickness 18mm  
 How the shell plates welded or flanged Shell, Riveted Shell crown, welded If fusion welded, state name of welding firm Kawasaki Dockyard Co., Ltd.  
 Have all the requirements of the Rules for Class I vessels been complied with Yes Description of riveting: circ. seams { end Double zigzag inner Double zigzag  
 Double zigzag with double butt strap Dia. of rivet holes in { circ. seams 26.5mm Pitch of rivets { Top 85mm Thickness of butt straps { outer 13mm  
 long. seams 23.0mm Dished Bot. 86mm inner 16mm  
 Shell Crown: Whether complete hemisphere, dished partial spherical, or flat. partial Material Boiler Steel Tensile strength 44.8 Thickness 23mm  
 Dia. 1,900mm Description of Furnace: Plain, spherical, or dished crown Spherical Material Boiler Steel  
 Tensile strength 42.4-42.7 kg/mm<sup>2</sup> Thickness 18mm External diameter { top Length as per Rule bottom  
 Pitch of support stays circumferentially and vertically Are stays fitted with nuts or riveted over  
 Diameter of stays over thread Radius of spherical or dished furnace crown 1038mm  
 Thickness of Ogee Ring 32mm Diameter as per Rule { D 2400mm d 1981mm  
 Combustion Chamber: Material Tensile strength Thickness of top plate  
 Diameter if dished Thickness of back plate Diameter if circular  
 Length as per Rule Pitch of stays  
 Are stays fitted with nuts or riveted over Diameter of stays over thread  
 Shell Plates: Material { front boiler steel Tensile strength 42.1-43.1kg/mm<sup>2</sup> Thickness { 30mm Mean pitch of stay tubes in nests 247.5mm  
 back boiler steel 44.5-45.4kg/mm<sup>2</sup> 30mm  
 comprising shell, dia. as per Rule { front 2154 Pitch in outer vertical rows { 105 Dia. of tube holes FRONT { stay 64.75mm BACK { stay 69.75mm  
 back 2226 105 plain 65 plain 67  
 Each alternate tube in outer vertical rows a stay tube Yes  
 Girders to Combustion Chamber Tops: Material Tensile strength  
 Thickness and thickness of girder at centre Length as per Rule  
 Spacing apart No. and pitch of stays in each

*Handwritten signature and date*  
 4/9/53



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REPORT ON BOILERS

Rpt. 4c.

**Crown Stays:** Material \_\_\_\_\_ Tensile strength \_\_\_\_\_ Diameter { at body of stay, .....  
or  
over threads..... } Date of writing \_\_\_\_\_

No. of threads per inch \_\_\_\_\_ **Screw Stays:** Material \_\_\_\_\_ Tensile strength \_\_\_\_\_ No. in Reg. Book. 36405

Diameter { at turned off part, .....  
or  
over threads..... } No. of threads per inch \_\_\_\_\_ Are the stays drilled at the outer ends \_\_\_\_\_

**Tubes:** Material Seamless mild steel External diameter { plain, 65mm  
stay, 65mm } Thickness { 3.5mm  
8.0mm } Built at \_\_\_\_\_

No. of threads per inch 9 Pitch of tubes Vertical 105mm x Horizontal 95mm Owners \_\_\_\_\_

**Manhole Compensation:** Size of opening in shell plate \_\_\_\_\_ Section of compensating ring \_\_\_\_\_ No. of rivets and diam. \_\_\_\_\_  
of rivet holes \_\_\_\_\_ Outer row rivet pitch at ends \_\_\_\_\_ Depth of flange if manhole flanged 85mm Oil Engines m  
Generators m

**Uptake:** External diameter \_\_\_\_\_ Thickness of uptake plate No Is Set intend \_\_\_\_\_

**Cross Tubes:** No \_\_\_\_\_ External diameters { \_\_\_\_\_ Thickness of plates \_\_\_\_\_ OIL ENG  
\_\_\_\_\_ } \_\_\_\_\_

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with Yes

The foregoing is a correct description,

*T. Ueda*  
HIRANO IRON WORKS CO., LTD. Manufacturer

Dates of Survey while building { During progress of work in shops - - } 1955: Oct. 19, 25, Nov. 1, 8, 16, 19, Is the approved plan of boiler forwarded herewith 25-11-54  
Dec. 16, 20, 21, (If not state date of approval.)  
{ During erection on board vessel - - - } 1956: Jan. 7, 10, 27, Feb. 1, 2, 4, 6, 8, 15 Total No. of visits 18 Kobe

Is this Boiler a duplicate of a previous case Yes If so, state Vessel's name and Report No. M.V. "KOCHU MARU" (Yard No. 1445)

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

This boiler has been constructed under Special Survey in accordance with the Rules, approved plans and Secretary's letters.

The material and workmanship are sound and good.

This boiler has been examined under hydraulically and found satisfactory.

Survey Fee ... £28,250 (Kob) When applied for 20th April 1956  
Locally.  
Travelling Expenses (if any) £ 3,560 (Kob) When received 19

FRIDAY 14 SEP 1956

*[Signature]*  
Engineer Surveyor to Lloyd's Register of Shipping

Date \_\_\_\_\_  
Committee's Minute *See Rpt. 4c.*



*X. at 15/9/56*