

# REPORT ON BOILERS.

No. 5653

Received at London Office 2 MAY 1927

Writing Report 6-4-1927 When handed in at Local Office 19 Port of Kobe.

Survey held at Lima. Date, First Survey 28-1-27 Last Survey 22-3-1927.

on the Single Screw Steel Motorship "KOYASAN MARU" (Number of Visits 13.) Tons { Gross 1998. Net 1133.

Lima By whom built Nitani Bussan Kaisha. Yard No. 131 When built 1927-03

made at Copenhagen By whom made Burmeister & Wain. Engine No. 1271 When made 1926.

made at Lima By whom made Nitani Bussan Kaisha. Boiler No. 131 When made 1927.

Nitani Bussan Kaisha. Port belonging to Kobe.

## TICAL DONKEY BOILER.

Lima By whom made Nitani Bussan Kaisha Boiler No. 131 When made 1927 Where fixed S.S. in eng. room. Bottom platform

Manufacturers of Steel Imperial Steel Works, Yawata.

Heating Surface of Boiler 68 sq. ft. Is forced draught fitted No Coal or Oil fired oil.

Description of Boilers One vertical wet uptake donkey boiler. Working pressure 80 lbs sq. in.

Hydraulic pressure to 160 lbs sq. in. Date of test 21-2-27. No. of Certificate Lloyd's Register No. 1095 21-2-27 W.K. R.

Firegrate in each Boiler oil burning No. and Description of safety valves to each boiler One spring loaded.

Pressure to which adjusted 80 lbs sq. in. Is it fitted with easing gear Yes

Can other steam from main boilers enter the donkey boiler Smallest distance between boiler or uptake and bunkers

Is oil fuel carried in the double bottom under boiler No. Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated Yes. Largest internal dia. of boiler 4'-6" Height 10'-6"

Material O.H. S.L. Tensile strength 28-32 tons Thickness 9/16"

Shell plates welded or flanged No. Description of riveting: circ. seams Single long. seams Double riv. lapped.

Pitch of rivets 2 1/2" Percentage of strength of circ. seams 56 of Longitudinal joint 70.0

Pressure of shell by rules 192 lbs sq. in. Thickness of butt straps outer inner

Whether complete hemisphere, dished partial spherical, or flat dished partial spherical Material O.H. S.L.

Tensile strength 26-30 tons Thickness 9/16" Radius 4'-0" Working pressure by rules 138 lbs sq. in.

Form of Furnace: Plain, spherical, or dished crown dished crown. Material O.H. S.L. Tensile strength 26-30 tons.

Crown 9/16" shell 1/16" External diameter top 3'-6" bottom 3'-10" Length as per rule 39 9/16" Working pressure by rules 195 lbs sq. in.

Support stays circumferentially and vertically Are stays fitted with nuts or riveted over

Radius of spherical or dished furnace crown 3'-3" Working pressure by rule 120 lbs sq. in.

Ogee Ring 4/16" Diameter as per rule 4'-4 1/2" Working pressure by rule 170 lbs sq. in.

Chamber: Material Tensile strength Thickness of top plate

dished Working pressure by rule Thickness of back plate Diameter if circular

Pitch of stays Are stays fitted with nuts or riveted over

Working pressure of back plate by rules

Material front back Tensile strength Thickness Mean pitch of stay tubes in nests

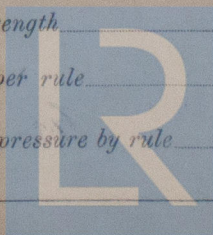
Single shell, Dia. as per rule front back Pitch in outer vertical rows Dia. of tube holes FRONT BACK

Alternate tube in outer vertical rows a stay tube Working pressure by rules front back

Combustion chamber tops: Material Tensile strength

Thickness of girder at centre Length as per rule

apart No. and pitch of stays in each Working pressure by rule



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W681-0152



**Crown stays:** Material ☒ Tensile strength ☒ Diameter { at body of stay, ☒ or over threads, ☒   
 No. of threads per inch ☒ Area supported by each stay ☒ Working pressure by rules ☒   
**Screw stays:** Material ☒ Tensile strength ☒ Diameter { at turned off part, ☒ or over threads, ☒ No. of threads per inch ☒   
 Area supported by each stay ☒ Working pressure by rules ☒ Are the stays drilled at the outer ends ☒   
**Tubes:** Material ☒ External diameter { plain ☒ stay ☒ Thickness { ☒   
 No. of threads per inch ☒ Pitch of tubes ☒ Working pressure by rules ☒   
**Manhole Compensation:** Size of opening in shell plate 11" x 15" ☒ Section of compensating ring 17 1/4" x 9/16" ☒ No. of rivets and washers ☒   
 of rivet holes 46 15/16" ☒ Outer row rivet pitch at ends 7" ☒ Depth of flange if manhole flanged 3" ☒   
**Uptake:** External diameter 1'-3 3/8" ☒ Thickness of uptake plate 7/16" ☒   
**Cross Tubes:** No. Two ☒ External diameters { 9 3/8" ☒ Thickness of plates 7/16" ☒   
 Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with ☒ **Yes**

The foregoing is a correct description,  
*S. J. Kai*

Dates of Survey { During progress of work in shops - - JAN. 20. 29. FEB. 5. 9. 14. 21. 26.   
 while building { During erection on board vessel - - FEB. 26. MAR. 2. 4. 14. 15. 22.   
 Is the approved plan of boiler forwarded herewith No. 6-8-26   
 (If not state date of approval.)   
 Total No. of visits 13. *Plan in Gun Book*

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.)   
*The boiler referred to herein has been constructed under special survey, complete with the Rules & agrees with the approved plans. The materials used in its construction have been tested & the workmanship is good. The boiler has been securely fitted on board the vessel & tested under steam with satisfactory results being eligible in my opinion to be granted the record of D.B. 80 lbs in the Reg. Book.*

Survey Fee ... .. £ **YEN 66.00** :   
 Travelling Expenses (if any) £ *see Hull Rpt.* :   
 When applied for, 8/6/27 19   
 When received, 8/6/27 19

Committee's Minute **FRI 6 MAY 1927**   
 Assigned *see minute on Kobe Rpt*   
*5653 attached*

