

REPORT ON BOILERS.

No. 6536

18 JUN 1929

Received at London Office

Writing Report 28th May 1929 When handed in at Local Office 19 Port of Kobe

Survey held at Yama Date, First Survey Jan. 15th 1929 Last Survey 15 May 1929

on the Steel Single Screw Motorship "TENSAN MARU" (Number of Visits 14) Tons Gross ✓ Net ✓

at Yama By whom built Mitsui Bussan Kaisha Yard No. 159 When built 1929

made at Copenhagen By whom made Burmeister + Wain Engine No. 1581 When made 1929

made at Yama By whom made Mitsui Bussan Kaisha Boiler No. 159 When made 1929

Daisen Kisen Kaisha Port belonging to Daisen

VERTICAL DONKEY BOILER.

at Yama By whom made Mitsui Bussan Kaisha Boiler No. 159 When made 1929 Where fixed E. R. Starboard side

Manufacturers of Steel Asano Ship Building Co.

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

and Description of Boilers one vertical wet uptake donkey boiler Working pressure 100 lb/sq. in.

loaded by hydraulic pressure to 200 lb/sq. in. Date of test 1-4-29 No. of Certificate 1936

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

of each set of valves per boiler per rule 3.14 sq. ins. Pressure to which they are adjusted 102 lbs Are they fitted with easing gear yes

whether steam from main boilers can enter the donkey boiler ✓ Smallest distance between boiler or uptake and bunkers

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

5'-3" - 4" Is the base of the boiler insulated No Largest internal dia. of boiler 4'-6" Height 10'-6"

plates: Material O.H. Steel Tensile strength 28-32 tons/sq. in. Thickness 9/16"

shell plates welded or flanged No Description of riveting: circ. seams end Single long seams D.R. lapped

of rivet holes in circ. seams 15/16" Pitch of rivets 2 1/8" Percentage of strength of circ. seams plate 50 of Longitudinal joint rivets 70

working pressure of shell by rules 192 lbs/sq. in. Thickness of butt straps outer inner

der Crown: Whether complete hemisphere, dished partial spherical, or flat Dished partial spherical Material O.H. Steel

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

Book Description of Furnace: Plain, spherical, or dished crown Dished crown Material O.H. Steel Tensile strength 26-30 tons/sq. in.

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

of support stays circumferentially ✓ and vertically ✓ Are stays fitted with nuts or riveted over ✓

ter of stays over thread ✓ Radius of spherical or dished furnace crown 3'-0" Working pressure by rule 129 lbs/sq. in.

ness of Ogee Ring 1 1/16" Diameter as per rule D 4'-4 7/8" Working pressure by rule 140 lbs/sq. in.

ation Chamber: Material ✓ Tensile strength ✓ Thickness of top plate ✓

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

as per rule ✓ Pitch of stays ✓ Are stays fitted with nuts or riveted over ✓

ter of stays over thread ✓ Working pressure of back plate by rules ✓

Plates: Material front Tensile strength ✓ Thickness ✓ Mean pitch of stay tubes in nests ✓

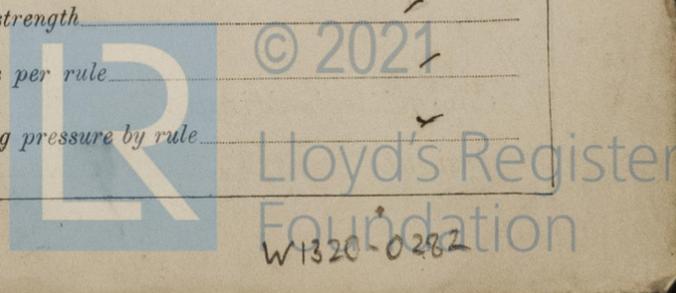
prising shell, Dia. as per rule front Pitch in outer vertical rows ✓ Dia. of tube holes FRONT stay BACK stay

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

s to combustion chamber tops: Material ✓ Tensile strength ✓

and thickness of girder at centre ✓ Length as per rule ✓

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



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 1 7/4" x 9/16" No. of rivets and
 of rivet holes 40 15/16" Outer row rivet pitch at ends 4" Depth of flange if manhole flanged 3"
Uptake: External diameter 1'-3 7/8" Thickness of uptake plate 7/16"
Cross Tubes: No. Two External diameters { 9 7/8" 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,

J. V. Kar

Dates of Survey { During progress of work in shops - 1929 Jan 15, 22 Feb. 27, 13 Mar. 4, 20 Is the approved plan of boiler forwarded herewith Dec 21
 while building { During erection on board vessel - April (If not state date of approval.)
 Total No. of visits 14

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The boiler referred to herein has been constructed under special survey & complies with the Rule requirements approved plan. The materials & workmanship employed are good.
The boiler has been securely installed on board & examined under working conditions. The safety valve has been adjusted under steam as stated above.
In our opinion the vessel is now entitled to the record of D.B. (10) in the Register Book.

27/6/29

Survey Fee ... £EN 68 : } When applied for, 28th Aug 1929
 Travelling Expenses (if any) £ - : - : } When received, 26.8.29
Included with Hull Expenses.

L. R. Miller & Clive Bell
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute FRI. 28 JUN 1929
 Assigned see Minute on Kobe R/P 6536

