

REPORT ON BOILERS.

No. 6621.

23 SEP 1929

Received at London Office

Date of writing Report 20th Aug. 1929. When handed in at Local Office 19 Port of Kobe.No. in Survey held at Kobe Date, First Survey 14th March Last Survey 15th August 1929
Reg. Book

on the Steel Single Screw Motorship "HINO MARU" (Number of Visits 10) Gross 2666 Tons Net 1604.

Built at Kobe By whom built Mitsubishi Zosen Kaisha. Yard No. 188 When built 1929

Engines made at Kobe By whom made Mitsubishi Zosen Kaisha. Engine No. 188 When made 1929

Boilers made at Kobe By whom made Mitsubishi Zosen Kaisha. Boiler No. 188 When made 1929

Owners Nippon Shokuen Kaisha Kabushiki Kaisha. Port belonging to Larumi.

VERTICAL DONKEY BOILER.

Made at Kobe By whom made Mitsubishi Zosen Kaisha Boiler No. 188 When made 1929 Where fixed Engine Room.

Manufacturers of Steel Asano Shipbuilding Co.

Total Heating Surface of Boiler 75 sq. ft. Is forced draught fitted No. Coal or Oil fired oil. ✓

No. and Description of Boilers One Cochran Type Vertical boiler. Working pressure 50 lbs. □

Tested by hydraulic pressure to 100 lbs. □ Date of test 18th May 1929. No. of Certificate 2038.

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

Area of each set of valves per boiler { per rule 3.14 sq. ft. Pressure to which they are adjusted 53 lbs. □ Are they fitted with easing gear YES. ✓
as fitted 3.14 sq. ft.

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

or woodwork. ✓ Is oil fuel carried in the double bottom under boiler YES. ✓ Smallest distance between base of boiler and tank top plating

4'-0" Is the base of the boiler insulated YES. ✓ Largest internal dia. of boiler 3'-3" Height 9'-0"

Shell plates: Material OH. stl. Tensile strength 28-32 tons □ Thickness 3/8"

Are the shell plates welded or flanged No. Description of riveting: circ. seams { end Single long. seams Double.
inter. SingleDia. of rivet holes in { circ. seams 3/16" Pitch of rivets { 2" Percentage of strength of circ. seams { plate 59 of Longitudinal joint { plate 59
long. seams 3/16" rivets 61 rivets 128.
combined.Working pressure of shell by rules 147 lbs. □ Thickness of butt straps { outer. ✓
inner. ✓

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat dished partial spherical. Material OH. stl.

Tensile strength 26-30 T. □ Thickness 1/2" Radius 3'-2" Working pressure by rules 110 lbs. □

Description of Furnace: Plain, spherical, or dished crown spherical. Material OH. stl. Tensile strength 26-30 T. □

Thickness 3/8" External diameter { top 2'-7 1/4" Length as per rule ✓ Working pressure by rules 192 lbs. □
bottom 2'-7 1/4"

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 1'-3 5/8" Working pressure by rule 192 lbs. □

Thickness of Ogee Ring 1/2" ✓ Diameter as per rule { D 39" Working pressure by rule 120 lbs. □
d. 32 1/4"

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

Radius if dished ✓ Working pressure by rule ✓ 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 ✓ Working pressure of back plate by rules ✓

Tube Plates: Material { front OH. stl. Tensile strength { 26-30 T. □ Thickness { 1/16" Mean pitch of stay tubes in nests 7/4"
back OH. stl. 26-30 T. □ 1/16"If comprising shell, Dia. as per rule { front Pitch in outer vertical rows { Dia. of tube holes FRONT { stay 2 1/2" BACK { stay 2 1/2"
back Pitch in outer vertical rows { Dia. of tube holes FRONT { plain 2 1/2" BACK { plain 2 1/2"Is each alternate tube in outer vertical rows a stay tube YES. ✓ Working pressure by rules { front 195 lbs. □
back 190 lbs. □

Girders to combustion chamber tops: Material ✓ Tensile strength ✓

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

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



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Crown stays: Material ☒ Tensile strength ☒ Diameter { at body of stay, ☒
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, ☒
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 W.I. External diameter { plain 2 1/2
stay 2 1/2 Thickness { 10 L.S.G.
5/16
No. of threads per inch 9 per in. Pitch of tubes 3 3/4" x 3 3/4" Working pressure by rules 265 lbs sq
Manhole Compensation: Size of opening in shell plate 11" 15" Section of compensating ring ☒ No. of rivets and diameter
of rivet holes ☒ Outer row rivet pitch at ends ☒ Depth of flange if manhole flanged 2 5/8"
Uptake: External diameter ☒ Thickness of uptake plate ☒
Cross Tubes: No. ☒ External diameters { ☒ Thickness of plates ☒
Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with YES.

The foregoing is a correct description,

J. Sasane Manufacture

Dates of Survey { During progress of work in shops - - 1929. MAR. 14. APRIL 1. 24. MAY. 6. 9. 18.
while building { During erection on board vessel - - JUNE 10. 12. AUG. 10. 15.
Is the approved plan of boiler forwarded herewith Sept 14th 1929
(If not state date of approval.)
Total No. of visits 10.

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

The Donkey Boiler reported above has been constructed under special survey, it agrees with the approved plan & Rule requirements. The materials & workmanship employed in its manufacture are good.
In my opinion The vessel is now entitled to the notation D.B. 50 lbs. in the Register Book.

Survey Fee ... ¥ 65.- :
Travelling Expenses (if any) £ See Hull Rpt.
When applied for, 15th Aug. 1929.
When received, 28.10.29

H. Kimber

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 27 SEP 1929
Assigned See P. 6. rpt. attached

