

REPORT ON BOILERS.

No. FE-3856

Received at London Office

Date of writing Report 19... When handed in at Local Office AUG 29 1956 19... Port of K O B ESurvey held at Tamano, Japan Date, First Survey 2nd Dec., 1955 Last Survey 7th June, 1956
No. in Reg. Book. on the M.V. "MIKAGESAN MARU" (Number of Visits 18) Tons { Gross 7200.05
Net 4019.43Built at Tamano, Japan By whom built Mitsui Shipbuilding & Eng., Co., Ltd. Yard No. 609 When built 1956-6
Engines made at Tamano, Japan By whom made Mitsui Shipbuilding & Eng., Co., Ltd. Engine No. 607 When made 1956-6
Boilers made at Tamano, Japan By whom made Mitsui Shipbuilding & Eng., Co., Ltd. Boiler No. 397 When made 1956-6
Owners Mitsui Steamship Co., Ltd. Port belonging to Tokyo.

VERTICAL BOILER.

Made at Tamano By whom made Mitsui Shipbuilding & Eng., Co., Ltd. Boiler No. 397 When made 1956-6 Where fixed in engine room Boiler room port side

Manufacturers of Steel. Plates: Yawata Iron & Steel Co., Ltd. Tube: Sumitomo Metal Ind. Ltd., Steel tube works, Amagasaki

Total Heating Surface of each Boiler 53.8 M² Is forced draught fitted ☒ Yes Coal or Oil fired ☒ Oil

No. and Description of Boilers 1 Vertical Cochran type Working Pressure 7 kg/cm²

Tested by hydraulic pressure to 14 kg/cm² Date of test 16-4-56 No. of Certificate I-32318

Area of fire grate in each Boiler - No. and description of safety valves to each boiler 1 Double spring ordinal type

Area of each set of valves per boiler { per Rule 50.9 mm x 2 Pressure to which they are adjusted 72 kg/cm² Are they fitted with easing gear ☒ Yes
as fitted 65 mm x 2

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 No Smallest distance between base of boiler and tank top plating -

Is the base of the boiler insulated Yes Largest internal dia. of boiler 2,100 mm Height 5,100 mm

Shell plates: Material O.H. Steel Tensile strength 50.3-50.8 kg/mm² Thickness 12 mm

Are the shell plates welded or flanged Welded If fusion welded, state name of welding firm Mitsui Shipbuilding & Eng., Co., Ltd.

Have all the requirements of the Rules for Class I vessels been complied with ☒ Yes Description of riveting: circ. seams { end -
inter -

long. seams - Dia. of rivet holes in { circ. seams - Pitch of rivets { - Thickness of butt straps { outer -
long. seams - inner -

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat spherical Material O.H. Steel Tensile strength 43.8 kg/mm² Thickness 16 mm

Radius 1,550 mm Description of Furnace: Plain, spherical, or dished crown Spherical crown Material O.H. Steel

Tensile strength 42.4-42.5 kg/mm² Thickness 12 mm External diameter { top 1800 mm Length as per Rule -
bottom 1800 mm

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 888 mm

Thickness of Ogee Ring 22 mm Diameter as per Rule { D 2100 mm
d 1800 mm

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

Radius 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 -

Tube Plates: Material { front O.H. Steel Tensile strength { front 43.6 kg/mm² Thickness { 32 mm Mean pitch of stay tubes in nests 287.5 mm
back O.H. Steel after 45.5 27 mm

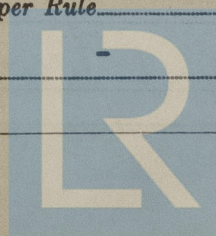
If comprising shell, dia. as per Rule { front - Pitch in outer vertical rows { 180 mm Dia. of tube holes FRONT { stay 71 mm BACK { stay 65 mm
back - plain 68 mm plain 65 mm

Is each alternate tube in outer vertical rows a stay tube -

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 -



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Crown Stays: Material - Tensile strength - Diameter { at body of stay, - or over threads, -

No. of threads per inch - Screw Stays: Material - Tensile strength -

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

Tubes: Material O.H. Steel External diameter { plain, 65mm stay, 65mm Thickness { 3.5mm 8mm

No. of threads per inch 9 Pitch of tubes 90 x 95mm

Manhole Compensation: Size of opening in shell plate 390 x 515mm Section of compensating ring 4761.78mm² No. of rivets and diameter

of rivet holes - Outer row rivet pitch at ends - Depth of flange if manhole flanged 80mm

Uptake: External diameter 550mm Thickness of uptake plate 4.5mm

Cross Tubes: No. - External diameters { - Thickness of plates -

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

MITSUBISHI SHIPBUILDING & ENGINEERING CO., LTD., TAMANO WORKS.

The foregoing is a correct description,
J. Asano for S. Tanaka
Senior Managing Director.

Dates of Survey while building { During progress of work in shops - - 1955: Dec. 2 1956: Jan. 6, 23, Feb. 1, 13, 23, 24, 27 March 2, 19, 23, April, 9, 12, 16, 23 Is the approved plan of boiler forwarded herewith 8 Dec., 1954. (If not state date of approval.) During erection on board vessel - - 1956: May 28, June 7 Total No. of visits 18

Is this Boiler a duplicate of a previous case Yes - If so, state Vessel's name and Report No. M.V. "HODAKASAN MARU" M.V. "MOGAMISAN"

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

The Donkey Boiler of this vessel has been constructed under Special Survey in accordance with the Rules approved plans and secretary's letters.

The workmanship and materials are sound and good.

The Donkey boiler has been examined under steam and the safety valves adjusted to 7.2 kg/cm² and found satisfactory.

Accumulation tests were carried out in accordance with the Rules with satisfactory results.

Survey Fee ... £ 24,000.00 When applied for AUG. 21. 1956

Travelling Expenses (if any) £ See Rpt. 1 When received 19

Date TUESDAY 16 OCT 1956

Committee's Minute See Rpt. 4 C.

R. J. Sutcliffe J. Nonokura
Engineer Surveyor to Lloyd's Register of Shipping.



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