

REPORT ON WATER TUBE BOILERS.

APR 1959

Received at London Office

of writing Report 25th Feb., 1959. When handed Local Office MAR 27 1959 19 Port of KOBE

Survey held at Tamano Date, First Survey 14th April, 1958 Last Survey 9th Feb., 1959

Book on the M.V. "OHMINESAN MARIU" (Number of Visits 44) Gross 20,201.82 Tons

at Tamano, Japan By whom built Mitsui S.B. & Eng., Co., Ltd. Yard No. 635 When built 1959-2

Lines made at Tamano, Japan By whom made - do - Engine No. 739 When made 1959-2

Boilers made at Tamano, Japan By whom made - do - Boiler No. 454,455 When made 1959-2

No. for Register Book 15,000 Owners Mitsui Steamship Co., Ltd. Port belonging to Tokyo

WATER TUBE BOILERS - MAIN, AUXILIARY, OR DONKEY. - Manufacturers of Steel Plate: Yawata Works, Yawata Iron & Steel Co., Ltd., & Kawasaki Steel Works.

of Approval of plan 23-10-58 2 sets, Mitsui B & W. Tubes: Sumitomo Metal Ind. Ltd., Steel Tube Wks., Amagasaki. No. and Description or Type

Boilers Double evaporation boilers Working Pressure 55 kg/cm2 Tested by Hydraulic Pressure to 86 kg/cm2 Date of Test 6-11-58

of Certificate 53411 Can each boiler be worked separately. Yes Total Heating Surface of Boilers 254 M2 Superheaters

of Economisers Is forced draught fitted. Area of Fire Grate (coal) in each Boiler

and type of burners (oil) in each boiler 1 set per boiler, Mitsui Press. jet burner No. and description of safety valves on

each boiler 1 set per boiler Double spring loaded high lift type Area of each set of valves per boiler per rule 1962.5mm2 x 2 Pressure to which they

adjusted 55 kg/cm2 Are they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter

Material donkey boiler - Smallest distance between boilers or uptakes and bunkers or woodwork - Height of boiler 7,780 mm

diameter of thickness of plates 3920x3920mm Steam Drums: Number in each boiler 1 Inside diameter 800mm

and purpose of flanged. Welded If fusion welded, state name of welding firm Mitsui S.B. & Eng., Co., Ltd. Are drum shell plates welded

How long at Class I vessels been complied with Yes Description of riveting: - Circ. seams - long. seams -

diameter of rivet holes in long. seams - Pitch of rivets - Thickness of straps - Percentage strength of

long. joint: - Plate - Rivet - Diameter of tube holes in drum 38 & 76.2mm Pitch of tube holes 76.2mm

Percentage strength of shell in way of tubes 49.2% Steam Drum Heads or Ends: Range of tensile strength 42.8 - 43.0 kg/mm2

Thickness of plates 29mm Radius or how stayed 640mm Size of manhole or handhole 305 x 405mm Water Drums: Number

each boiler 1 Inside diameter 800mm Thickness of plates 4mm Range of tensile strength 46.2-51.7 kg/mm2 Are drum shell plates

flanged or welded. Welded If fusion welded, state name of welding firm Mitsui S.B. & E. Co., Ltd. Have all the requirements of the Rules

Class I vessels been complied with Yes Description of riveting: - Circ. seams - long. seams -

diameter of rivet holes in long. seams - Pitch of rivets - Thickness of straps -

Material Percentage strength of long. joint: - Plate - Rivet - Diameter of tube holes in drum 38 & 76.2mm Pitch of tube holes 76.2mm

Percentage strength of drum shell in way of tubes 49.2% Water Drum Heads or Ends: Range of tensile strength 42.8 - 43.0 kg/mm2

Thickness of plates 29mm Radius or how stayed 640mm Size of manhole or handhole 305 x 405mm

Headers or Sections: Number 1 per boiler Material Forged Steel & O.H. Steel Thickness 36mm Tested by hydraulic pressure to 86 kg/cm2

Boles: Diameter 38mm 76.2mm Thickness 4.0mm & 6mm Number 56 each boiler Steam Dome or Collector: Description of

joint to shell - Inside diameter - Thickness of shell plates - Range of tensile

strength - Description of longitudinal joint - If fusion welded, state name of welding

Have all the requirements for the Rules for Class I vessels been complied with - Diameter of rivet holes -

Thickness of straps - Percentage strength of long. joint - plate - rivet -

Bottom or End Plates: Range of tensile strength - Thickness - Radius or how stayed -

UPERHEATER, Drums or Headers: Number in each boiler - Inside diameter -

Thickness - Material - Range of tensile strength - Are drum shell plates welded

flanged - If fusion welded, state name of welding firm - Have all the requirements of the Rules

Class I vessels been complied with - Description of riveting: - Circ. seams - long. seams -

diameter of rivet holes in long. seams - Pitch of rivets - Thickness of straps - Percentage strength of

long. joint: - Plate - Rivet - Diameter of tube holes in drum - Pitch of tube holes - Percentage strength of

drum shell in way of tubes - Drum Heads or Ends: - Thickness - Range of tensile strength -

Radius or how stayed - Size of manhole or handhole - Number, diameter, and thickness of tubes -

Tested by hydraulic pressure to - Date of test - Is a safety valve fitted to each section of the superheater which

can be shut off from the boiler - No. and description of safety valves - Area of each set

of valves - Pressure to which they are adjusted - Is easing gear fitted -

Spare Gear. Has the spare gear required by the Rules been supplied Yes MITSUI SHIPBUILDING & ENGINEERING CO., LTD., TAMANO WORKS.

The foregoing is a correct description, S. Takata, Senior Managing Director, Manufacturer.

Dates During progress of 1958: Apr. 14, 22, May 23, 26, 29, June 27, July 3, 4, 10, 11, 14, 17, 24, 29, Aug. 1, 5, 12, 13, 22, 29, Sept. 8, 9, 15, 26, Oct. 9, 13, 20, 22, Nov. 6, 21, 25, 27, Dec. 8, 9, 12, 18, 19

Survey while building During erection on board vessel 1959: Jan. 9, 16, 1959: Jan. 14, 21, 26, 30, Feb. 9

Is the approved plan of boiler forwarded herewith Appr. 23-10-58 Total No. of visits 44

Is this boiler a duplicate of a previous case No If so, state vessel's name and report No. -

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c. These Primary boilers have been constructed under

social Survey in accordance with the Rules, approved plans and Secretary's letters. The materials and workmanship are

sound and good and the boilers have been satisfactory installed in the ship. The Primary boilers have been examined under

exam and the safety valves have been adjusted to 55 kg/cm2. Accumulation tests carried out with satisfactory results.

Survey Fee ... £ ¥144,000 When applied for 19

Travelling Expenses (if any) £ : / : When received 19

Date FRIDAY 24 APR 1959 See Rpt. 1. A. Jacobs & K. Tabuchi. Engineer Surveyor to Lloyd's Register of Shipping. Foundation 014887 - 014898 - 0085