

REPORT ON BOILERS.

Received at London Office

Date of writing Report 1st Oct. 1961 When handed in at Local Office 19 Port of Nagasaki

Survey held at Nagasaki Date, First Survey 5th July, 1961 Last Survey 18th August, 1961

No. in Book. on the m.v. "MANHATTAN MARU" (Number of Visits 4) Tons Gross 9556.16 Net 5536.04

Boilers made at Nagasaki By whom built Mitsubishi Zosen K.K. Yard No. 1561 When built 1961-8

Engines made at Nagasaki By whom made Mitsubishi Zosen K.K. Engine No. 326 When made 1961-8

Boilers made at Osaka By whom made Hirano Iron Works Co., Ltd. Boiler No. H-1492 When made 1961-4

Manufacturers Daido Kaiun K.K. Port belonging to Kobe

VERTICAL BOILER.

Made at By whom made Boiler No. When made Where fixed Nagasaki

Manufacturers of Steel Exhaust Gas Heated Economizer 83M2 Is forced draught fitted Yes Coal or Oil fired Oil Exhaust Gas

Total Heating Surface of each Boiler One-Cochran Boiler with Exhaust Gas Heated Economizer Economizer Cert. No. Nag. M-9372 Working Pressure 7 kg/cm²

Tested by hydraulic pressure to Date of test 1-60mm dia Duplex improved High Lift Type No. of Certificate

Area of fire grate in each Boiler No. and description of safety valves to each boiler

Area of each set of valves per boiler { per Rule 5452mm² as fitted Pressure to which they are adjusted Are they fitted with easing gear

State whether steam from main boilers can enter the donkey boiler No Smallest distance between boiler or uptake and bunkers

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

Shell plates: Material Is the base of the boiler insulated Yes Largest internal dia. of boiler Height

Are the shell plates welded or flanged If fusion welded, state name of welding firm

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

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

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat Material Tensile strength Thickness

Radius Description of Furnace: Plain, spherical, or dished crown Material

Tensile strength Thickness External diameter { top bottom Length as per Rule

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

Thickness of Ogee Ring Diameter as per Rule { D d Thickness of top plate

Combustion Chamber: Material Tensile strength Diameter if circular

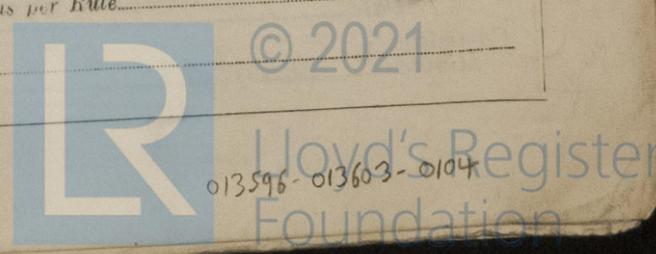
Radius if dished Thickness of back plate Pitch of stays

Length as per Rule Diameter of stays over thread

Are stays fitted with nuts or riveted over

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(Smk) (Kob)



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 - External diameter { plain -
 stay. - Thickness {
 No. of threads per inch - Pitch of tubes -
 Manhole Compensation: Size of opening in shell plate - Section of compensating ring - No. of rivets and diameter
 of rivet holes - Outer row rivet pitch at ends - Depth of flange if manhole flanged -
 Uptake: External diameter - Thickness of uptake plate -
 Cross Tubes: No. - External diameters { -
 Thickness of plates -
 Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with -

The foregoing is a correct description,
K. Kito
 NAGASAKI WORKS
 MITSUBISHI SHIPBUILDING & ENGINEERING CO., LTD. Manufacture at -

Dates of Survey while building { During progress of work in shops - -
 During erection on board vessel - - - } 1961 July 5, 31, Aug. 10, 18
 Is the approved plan of boiler forwarded herewith (If not state date of approval.)
 Total No. of visits 4

Is this Boiler a duplicate of a previous case. If so, state Vessel's name and Report No. m.v. "BROOKLYN MARU" FE-1069 Nag.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The Donkey Boiler with exhaust gas heated economizer of this ship has been installed under the supervision of the Surveyors in accordance with the requirement of the Rules, Approved plans and Secretary's letters.
 The donkey boiler with exhaust gas heated economizer was examined under steam, safety valves on the donkey boiler adjusted to 7.2 kgs per sq. cm., accumulation test carried out and found satisfactory.
 The safety valves of the exhaust gas heated economizer adjusted to 11 kg/cm².
 For the reports on survey of the donkey boiler & economizer during construction in the manufacturer's shop, see Kobe Surveyor's Report No. FE.8937 and Cert. No. M-1-69707 and Nag. M-9372 for economizer.

Survey Fee ... £22,500 : When applied for 22nd Sept., 1961
 Travelling Expenses (if any) £ : : When received 19

A. Imaizumi
 Engineer Surveyor to Lloyd's Register of Shipping.
 A. Imaizumi

Date FRIDAY - 5 JAN 1962
 Committee's Minute See Rpt 1

