

AUXILIARY REPORT ON BOILERS.

No. 1528

Received at London Office 28 AUG 1953

7 MAY 1953

Date of writing Report 10-4-1953 When handed in at Local Office 19 Port of KOBE

Survey held at Yamano, Japan Date, First Survey 11-10-52 Last Survey 2-4-1953
 on the Steel Single Screw Motor Vessel "ASASHIO MARU" (Number of Visits 16) Gross 7524.02
 Net 4184.98

Yamano, Japan By whom built Mitsui Shipbuilding Engineering Co., Ltd. Yard No. 575 When built April 53
 Yamano, Japan By whom made Mitsui Shipbuilding Engineering Co., Ltd. Engine No. 478 When made April 53
 Yamano, Japan By whom made Mitsui Shipbuilding Engineering Co., Ltd. Boiler No. 362 When made April 53
 Nakamura Steam Ship Co., Ltd. Port belonging to Kobe

VERTICAL BOILER.

Yamano By whom made Mitsui S.B. & E. Co., Ltd. Boiler No. 362 When made April 53 Where fixed 2nd Dk in ENGINE ROOM
 Manufacturers of Steel Plate: Yawata Steel & Iron Works Tube: Sumitomo Metal Ind., Amagasaki Tube Works
 Total Heating Surface of Boiler Oil Side 29.76 m² Exhaust Gas side 49.46 m² Is forced draught fitted yes Coal or Oil fired Oil & Exhaust Gas

1. Vertical Cochran type Working Pressure 7 kg/cm²
 Tested by hydraulic pressure to 14 kg/cm² Date of test 10-2-53 No. of Certificate 8456

Area of fire grate in each Boiler - No. and description of safety valves to each boiler 1 Set Spring loaded safety valves
 Area of each set of valves per boiler per Rule 36.13 cm² as fitted 56.54 cm² Pressure to which they are adjusted 7.2 kg/cm² Are they fitted with easing gear yes

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

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 No Largest internal dia. of boiler 2000 mm Height 5650 mm

Shell plates: Material O.H. Steel Tensile strength 30.7-34.2 kg/cm² Thickness 12 mm

Are the shell plates welded or flanged Riveted 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 Single Riveted Lap joint inter Single Riveted Lap joint

Long. seams Double Riveted Lap joint Dia. of rivet holes in { circ. seams 23 mm Pitch of rivets { 49.38 mm Percentage of strength of circ. seams { plate 53.2 rivets 57.9

Longitudinal joint { plate 66.5 rivets 72.4 Thickness of butt straps { outer - inner - Shell Crown: Whether complete hemisphere, dished partial

Spherical, or flat Dished partial spherical Material O.H. Steel Tensile strength 28.3 kg/cm² Thickness 16 mm

Radius 1800 mm Description of Furnace: Plain, spherical, or dished crown Spherical Material O.H. Steel

Tensile strength 27.4 kg/cm² Thickness 12 mm External diameter { top - bottom 1676 mm 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 838 mm

Thickness of Ogee Ring 22 mm Diameter as per Rule { D 2000 mm d 1774 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 29.1 kg/cm² Back 29.2 kg/cm² Thickness { 32 mm 27 mm Mean pitch of stay tubes in nests oil 277.5 mm Exhaust Gas 217.5 mm

of comprising shell, dia. as per Rule { front - back - Pitch in outer vertical rows 61-70 mm Dia. of tube holes FRONT { stay Exhaust Gas 51 mm oil 60 mm BACK { stay Exhaust Gas 48 mm oil 65 mm plain Exhaust Gas 45 mm

Is each alternate tube in outer vertical rows a stay tube yes Exhaust Gas 90 mm

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 oil 65mm Exh. gas 45mm Thickness { oil 3.5mm Exh. at oil 6.5mm Exh. gas 45mm oil 3.5mm Exh. at

No. of threads per inch 9 Pitch of tubes oil 95mm x 90mm, Exh. gas 75mm x 70mm

Manhole Compensation: Size of opening in shell plate 380mm x 480mm Section of compensating ring Flanged type No. of rivets and directors

of rivet holes 24, 23mm Outer row rivet pitch at ends 67.05mm Depth of flange if manhole flanged 90mm

Uptake: External diameter 420mm 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 yes

The foregoing is a correct description, here a
 MITSUBISHI SHIPBUILDING & ENGINEERING CO., LTD., TAMANO WORKS. Manufac

S. Tanaka
 Senior Managing Director. 19-11-52
 Is the approved plan of boiler forwarded herewith (If not state date of approval.)

Dates of Survey while building	During progress of work in shops	1952- OCT. 11. NOV. 7. 12. 25. DEC. 23. 25	Total No. of visits <u>16</u>
	During erection on board vessel	1953- JAN. 13. 20. 31. FEB. 3. 10. 17. MAR. 13.	

Is this Boiler a duplicate of a previous case yes If so, state Vessel's name and Report No. "KENYO MARU"

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

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

Materials and the workmanship are sound and good.

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

Survey Fee ... £ 24000 When applied for 13. AUG. 1953

Travelling Expenses (if any) £ When received 19

Date TUESDAY 22 SEP 1953

Committee's Minute See Ret. 46.

L. Williams & Partners
 Engineer Surveyor to Lloyd's Register of Shipping.
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