

DONKEY REPORT ON BOILERS.

No. 6546.

12 AUG 1929

Received at London Office

Date of writing Report 11th July 1929 When handed in at Local Office 11th July 1929 Port of Kobe
 No. in Survey held at Tama Date, First Survey 15th Jan. 1929 Last Survey 18th July 1929
 7. Book on the Steel single screw motorship "SENSAN MARU" (Number of Visits 14)
 Tons Gross Net
 It at Tama By whom built Mitsui Bussan Kaisha Yard No. 160 When built 1929
 Lines made at Copenhagen By whom made Burmester + Wain Engine No. 1584 When made 1929
 Boilers made at Tama By whom made Mitsui Bussan Kaisha Boiler No. 160 When made 1929
 Owners Daisen Kisen Kaisha Port belonging to Daisen

VERTICAL DONKEY BOILER.

Location Tama By whom made Mitsui Bussan Kaisha Boiler No. 160 When made 1929 Where fixed Star^d side E.R.
 Manufacturers of Steel Asano Shipbuilding Co
 Heating Surface of Boiler 68 sq. ft. Is forced draught fitted No Coal or Oil fired oil
 Description of Boilers One vertical wet uptake donkey boiler Working pressure 100 lbs.
 Tested by hydraulic pressure to 200 lbs./sq. in. Date of test 15.4.29 No. of Certificate 1973
 Area of Firegrate in each Boiler oil burning No. and Description of safety valves to each boiler one spring loaded
 of each set of valves per boiler 3.14 sq. in. as fitted 3.97 sq. in. Pressure to which they are adjusted 103 Are they fitted with easing gear yes
 whether steam from main boilers can enter the donkey boiler no Smallest distance between boiler or uptake and bunkers no
 Is oil fuel carried in the double bottom under boiler no Smallest distance between base of boiler and tank top plating no
 Is the base of the boiler insulated no Largest internal dia. of boiler 4'-6" Height 10'-6"
 plates: Material O.H. Steel Tensile strength 28-32 tons/sq. in. Thickness 9/16"
 The shell plates welded or flanged No Description of riveting: circ. seams { end single long. seams D.R. Capped
 of rivet holes in { circ. seams 15/16" Pitch of rivets { 2 7/8" Percentage of strength of circ. seams { plate 50 of Longitudinal joint { plate 67.3
 { long. seams 15/16" { 2 7/8" { rivets 47.2 { rivets 40
 Working pressure of shell by rules 192 lbs./sq. in. Thickness of butt straps { outer no inner no
 Crown: Whether complete hemisphere, dished partial spherical, or flat Dished partial spherical Material O.H. Steel
 Tensile strength 26-30 T/sq. in. Thickness 9/16" Radius 4'-0" Working pressure by rules 138 lbs./sq. in.
 Description of Furnace: Plain, spherical, or dished crown Dished crown Material O.H. Steel Tensile strength 26-30 T/sq. in.
 Crown 9/16" Steel 1/16" External diameter { top 3'-6" Length as per rule 39 7/16" Working pressure by rules 195 lbs./sq. in.
 { bottom 3'-10"
 Radius of support stays circumferentially no and vertically no Are stays fitted with nuts or riveted over no
 Diameter of stays over thread no Radius of spherical or dished furnace crown 3'-0" Working pressure by rule 129 lbs./sq. in.
 Thickness of Ogee Ring 1 1/16" Diameter as per rule { D 4'-4 7/8" Working pressure by rule 140 lbs./sq. in.
 { d 3'-10"
 Combustion Chamber: Material no Tensile strength no Thickness of top plate no
 If dished no Working pressure by rule no Thickness of back plate no Diameter if circular no
 As per rule no Pitch of stays no Are stays fitted with nuts or riveted over no
 Diameter of stays over thread no Working pressure of back plate by rules no
 Plates: Material { front no Tensile strength { no Thickness { no Mean pitch of stay tubes in nests no
 { back no
 Pitching shell, Dia. as per rule { front no Pitch in outer vertical rows { no Dia. of tube holes FRONT { stay no BACK { stay no
 { back no { plain no { plain no
 Alternate tube in outer vertical rows a stay tube no Working pressure by rules { front no back no
 Connections to combustion chamber tops: Material no Tensile strength no
 Length as per rule no
 Thickness and thickness of girder at centre no Working pressure by rule no
 Distance apart no No. and pitch of stays in each no Working pressure by rule no

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Donkey

Crown stays: Material - Tensile strength - Diameter { at body of stay, - or 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, - or 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 - External diameter { plain - stay - Thickness { -

No. of threads per inch - Pitch of tubes - Working pressure by rules -

Manhole Compensation: Size of opening in shell plate 11" x 15" Section of compensating ring 1 7/16" x 9/16" No. of rivets and diameter of rivet holes 40 - 1 5/16" Outer row rivet pitch at ends 7" Depth of flange if manhole flanged 3"

Uptake: External diameter 1' - 3 7/8" Thickness of uptake plate 7/16"

Cross Tubes: No. 2/100 External diameters { 9 7/8" Thickness of plates 7/16"

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with Yes

The foregoing is a correct description,
J. W. K. Manufacturer.

Dates of Survey { During progress of work in shops - 1929 Jan 15, 22 Feb. 2, 7, 13 Mar 4, 30 April 1 Is the approved plan of boiler forwarded herewith 21-12-28 (If not state date of approval.)

while building { During erection on board vessel - 1929 May 30 June 5, 13, 20, 26 July 1 Total No. of visits 14

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The boiler referred to herein has been constructed under Special Purview & complies with the Rule requirements & approved plan. The materials & workmanship employed are good. The boiler has been securely installed on board & examined under working conditions. The safety valve has been adjusted under steam as stated above. In our opinion the vessel is now entitled to the record of D.B. (100 lbs) in the Register Book

Survey Fee ... £68 : - : } When applied for, July 12th 1929

Travelling Expenses (if any) £ ✓ : : } When received, 28.10.1929

W. Kimber & Chas. Bell
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 16 AUG 1929
Assigned See Minute on Kobe Rpt 6576

