

REPORT ON BOILERS.

No. 2170

AUG 1954

Received at London Office

Date of writing Report 19 When handed in at Local Office JUL. 26. 1954 19 Port of KOBE

No. in Survey held at Osaka Date, First Survey 14th Dec., 1953 Last Survey 31st May, 1954
Reg. Book. 266975 on the Steel Single Screw Motor Ship "INUISAN MARU" (Number of Visits 6) Tons Gross 7197.46 Net 4118.24

Built at Osaka By whom built Fujinagata S.B.Co., Ltd. Yard No. 31 When built 1954 6mo.
Engines made at Tanano By whom made Mitsui S.B. & Eng.Co., Ltd. Engine No. 517 When made 1954 6mo.
Boilers made at Osaka By whom made Fujinagata S.B.Co., Ltd. Boiler No. 123 When made 1954 6mo.
Owners Inui Kisen K.K., Port belonging to Kobe.

VERTICAL BOILER.

Made at Osaka By whom made Fujinagata S.B.Co., Ltd. Boiler No. 123 When made 1954-6 Where fixed in funnel

Manufacturers of Steel plate:- Kawasaki Steel Corporation, Kobe Tube:- Sumitomo Metal Co., Amagasaki

Total Heating Surface of Boiler 120.5M2 Is forced draught fitted - Coal or Oil fired Exhaust gas

No. and Description of Boilers One:- Vertical tube boiler Working Pressure 10kg/cm2

Tested by hydraulic pressure to 18.5kgs/cm2 Date of test 28-4-54 No. of Certificate -

Area of fire grate in each Boiler - No. and description of safety valves One:- 50mm Double spring ordinary safety V.

Area of each set of valves per boiler { per Rule 3320mm2 as fitted 3925 Pressure to which they are adjusted 10kg/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

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 No Largest internal dia. of boiler 2200mm Height 2174mm

Shell plates: Material Boiler plate Tensile strength 46.8mm Thickness 16mm

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 Double riveted lap joint

long. seams Double riveted butt joint Dia. of rivet holes in { circ. seams 23mm @ 81.3mm Pitch of rivets { 96mm 81.3mm Percentage of strength of circ. seams { plate 67.9% rivets 51.1%

of longitudinal joint { plate 81.2% rivets 76% combined Thickness of butt straps { outer 14mm inner 14mm 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 -

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 top boiler plate 46mm Tensile strength 46mm Thickness 22mm Mean pitch of stay tubes in nests 285.5mm

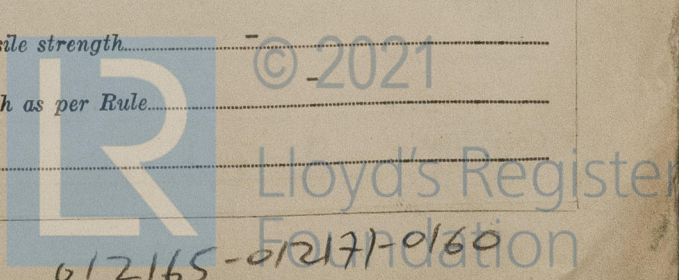
If comprising shell, dia. as per Rule { front - back - Pitch in outer vertical rows { - Dia. of tube holes FRONT { stay 71mm Bot. 65mm BACK { stay 65mm plain 65mm

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 -



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 Boiler tube ✓ External diameter { plain 65mm ✓ stay 71mm x 65mm Thickness { 3.5mm ✓ 8.5mm ✓
No. of threads per inch 9 ✓ Pitch of tubes 90mm x 95mm ✓
Manhole Compensation: Size of opening in shell plate 415mm x 530mm ✓ Section of compensating ring 3458mm2 ✓ No. of rivets and diameter
of rivet holes 52-23mm dia. ✓ Outer row rivet pitch at ends 85.7mm Depth of flange if manhole flanged 90mm ✓
Uptake: External diameter 822mm Thickness of uptake plate 6mm
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,
M. M. Grijalva Manufacturer.

Dates of Survey while building During progress of work in shops - 1953: Dec. 14, 1954: Mar. 23 Apr. 28 Is the approved plan of boiler forwarded herewith (If not state date of approval.) App. Date 12-30-11-53
During erection on board vessel - 1954: May 21, 29, 31 Total No. of visits 6

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.)
The Exhaust gas boiler of this vessel has been constructed under Special Survey in accordance with the Rules, approved plans and Secretary's letters.
The Material and workmanship are sound and good.
The Exhaust gas boiler has been examined under working condition and found satisfactory.

Survey Fee ... £ 30,000 When applied for 19
Travelling Expenses (if any) £ See Rpt. 1 When received 19

J. Burns
Engineer Surveyor to Lloyd's Register of Shipping.

Date TUESDAY 14 SEP 1954
Committee's Minute See Rpt. 46.

