

REPORT ON WATER TUBE BOILERS.

No.

1232

Received at London Office.

of writing Report 19 When handed in at Local Office 23 FEB. 1953 Port of Kobe

in Survey held at Aioi, Japan Date, First Survey 4th March 1952 Last Survey 24th October 1952

Book. on the Steel, Single Screw SS "KIRISHIMA-MARU" (Number of Visits 26) Gross 11979.61

at Aioi, Japan By whom built Harima Shipbuilding & Engineering Co., Ltd. Yard No. 476 When built OCT. 1952

ines made at Tokyo, Japan By whom made Ishikawajima Heavy Industries Co., Ltd. Engine No. 1T2185 When made Aug., 1952

ers made at Aioi, Japan By whom made Harima Shipbuilding & Engineering Co., Ltd. Boiler No. 752 When made AUG. 1952

inal Horse Power 3 x 503.854 Owners Terukuni Kaiun K.K. Port belonging to Tokyo

TER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Plate: YAWATA & SUMITOMO Casting: HARIMA

of Approval of plan 4th September 1952 No. and Description or Type

Boilers 3 A Type Harima 3 drum Water Tube Working Pressure 22 kg/cm² Tested by Hydraulic Pressure to 36.5 kg/cm² Date of Test 16.9.52

of Certificate B388, B389, B390 in each boiler be worked separately Yes Total Heating Surface of Boilers 561.724 m² x 3

forced draught fitted Yes Area of Fire Grate (coal) in each Boiler 5 x 350 kg/H Harima Dahl oil pressured tip No. and description of safety valves on

and type of burners (oil) in each boiler 1 x 700 Duplex high lift type Area of each set of valves per boiler 10.065 sq. inch

boiler 22.6 kg/cm² Are they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter

donkey boiler Smallest distance between boilers or uptakes and bunkers or woodwork 400 mm Height of boiler 1240 mm

th and length 5636 mm x 4266 mm Steam Drums: Number in each boiler 1 Inside diameter 1400 mm

ckness of plates Shell: 22 mm Tube: 48 mm Range of tensile strength 30.5-34.0 T/6: 28.7-31.1 T/6

anged No 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 2 Rows lap joint Double butt strap

meter of rivet holes in long. seams 26.5 mm Pitch of rivets 96 mm Thickness of straps Out: 16 mm In: 18 mm

joint: Plate 72.4 Rivet 78.35 Diameter of tube holes in drum 60.7, 50.4, 40.4 mm Pitch of tube holes 115.85.65 mm

centage strength of shell in way of tubes 47.2, 40.7, 37.85 Steam Drum Heads or Ends: Range of tensile strength 26.3-29.5 T/6: 26.7-26.9 T/6

ckness of plates 34 (Front) 32 (Back) Radius or how stayed 1150 mm Size of manhole or handhole 305 x 405 mm Water Drums: Number

each boiler 2 Inside diameter 800 mm Thickness of plates S. 18 mm T. 38 mm Range of tensile strength 28.8-32.3 T/6

ded or flanged No 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 2 Rows lap joint Double butt strap

meter of rivet holes in long. seams 26.5 mm Pitch of rivets 96 mm Thickness of straps Out: 14 mm In: 16 mm

percentage strength of long. joint: Plate 72.4 Rivet 95.76 Diameter of tube holes in drum 60.7, 50.4, 40.4 mm Pitch of tube holes 115.85.65 mm

percentage strength of drum shell in way of tubes 47.2, 40.7, 37.85 Water Drum Heads or Ends: Range of tensile strength 29.2-29.9 T/6

ckness of plates 22 mm Radius or how stayed 650 mm Size of manhole or handhole 305 x 405 mm

adders or Sections: Number 4 Material Forged Steel Thickness 25 mm Tested by hydraulic pressure to 36.5 kg/cm²

Ext 60.3, 50, 40, 101.6 Thickness 5.0, 4.0, 3.5, Number 112, 202, 648, 4 Steam Dome or Collector: Description of

at to shell Inside diameter Thickness of shell plates Range of tensile

ngth 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

h of rivets Thickness of straps Percentage strength of long. joint plate rivet

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

PERHEATER, Drums or Headers: Number in each boiler 4 Inside diameter 140 mm x 140 mm

ckness 25 mm Material Forged Steel Range of tensile strength 35.7-36.1 T/6 Are drum shell plates welded

anged No 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

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

joint: Plate Rivet Diameter of tube holes in drum 32.4 mm Pitch of tube holes 57 mm Percentage strength of

in shell in way of tubes 43.1 Drum Heads or Ends: Forged Steel Thickness 25 mm Range of tensile strength 35.7-36.1 T/6

ius or how stayed square Size of manhole or handhole No Number, diameter, and thickness of tubes 66 x 32 mm x 2.9 mm

ed by hydraulic pressure to 44 kg/cm² Date of test Aug. 6, 8. 11th 1952 Is a safety valve fitted to each section of the superheater which

be shut off from the boiler No No. and description of safety valves 1 x 700 Simplex high lift type Area of each set

valves 5.966 sq. inch (as fitted) Pressure to which they are adjusted 22.3 kg/cm² Is easing gear fitted Yes

re Gear. Has the spare gear required by the Rules been supplied Yes

The foregoing is a correct description,

THE HARIMA SHIPBUILDING AND ENGINEERING COMPANY, LTD.

During progress of work in shops - March 4, June 20, July 2, 9, 11, 11, 16, 18, 21, 23, 28, 30, Aug. 1, 2, 6, 8, 9, 11, 12, 14

During erection on board vessel - Aug. 25, Oct. 4, 7, 18, 21, 24, (1952) Total No. of visits 26

is boiler a duplicate of a previous case Yes If so, state vessel's name and report No. S.S. "TERUKUNI-MARU"

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The Main Boilers of this vessel have been constructed in accordance with the Rules, Approved Plans and Secretary's letters. The workmanship and materials are found to be good. The Main Boilers have been examined under steam, safety valves adjusted to 22.8 kg/cm² and found satisfactory.

Survey Fee ... £ 340.200 When applied for 23 FEB. 1953

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

Date FRI. 19 JUN 1953

nittee's name Sue F. E. Welch, Jt.

R. Rabuchin for D. Currie & self.
Engineer Surveyor to Lloyd's Register of Shipping.

009570 - 009579 - 0146