

REPORT ON WATER TUBE BOILERS.

No. 322

Received at London Office 11 JUN 1951

Reporting Report 1st March 1951 When handed in at Local Office 19 Port of Kobe
 Survey held at Aioi, Japan. Date, First Survey 21st April 1950 Last Survey 4th December 1950
 (Number of Visits 25) Gross 11806.07t
 on the Steel Single Screw Steam Ship "NICHIEI MARU" Tons Net 8550.57t
 Aioi, Japan. By whom built Harima Shipbuilding Works Ltd. Yard No. 453 When built December 1950
 made at Tokyo, Japan. By whom made Ishikawajima Heavy Industries Co., Ltd. Engine No. 112152 When made October 1950
 made at Aioi, Japan. By whom made Harima Shipbuilding Works Ltd. Boiler No. 8723 8722 When made December 1950
 Horse Power 503,866 x 3 = 1511.6 Owners Nitto Shosen Co., Ltd. Port belonging to Tokyo

R TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY. Manufacturers of Steel Plate: Yawata Tube: Shin-Fuso Casting: Harima

Approval of plan 7th August 1950 No. and Description or Type
 3. Harima 3 drums water tube Boiler Working Pressure 22 Kg/cm² Tested by Hydraulic Pressure to 36.5 Kg/cm² Date of Test 21.9.29.50
 Certificate B134, B135, B136 Can each boiler be worked separately Yes Total Heating Surface of Boilers 602.971 M² x 3
 draught fitted Yes Area of Fire Grate (coal) in each Boiler
 type of burners (oil) in each boiler 5 x 350 Kg/H Harima - Dahl Oil Pressured Type No. and description of safety valves on
 1 Duplex Full-Bore Type Area of each set of valves per boiler per rule 6.725 Sq. in Pressure to which they
 as fitted 16.4 Sq. in
 tested 22.6 Kg/cm² Are they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter
 ey boiler Smallest distance between boilers or uptakes and bunkers or woodwork 330 MM Height of boiler 4249 MM
 nd length 5676 MM, 4266 MM Steam Drums: Number in each boiler 1 Inside diameter 1100 MM
 s of plates Shell 22 MM, Tube 18 MM Range of tensile strength 32.7~32.9/29.3~30.4 % Are drum shell plates welded
 d No If fusion welded, state name of welding firm Have all the requirements of the Rules
 I vessels been complied with Yes Description of riveting: Circ. seams 2 Rows Lap Joint long. seams Double Butt Strap
 of rivet holes in long. seams 26.5 MM Pitch of rivets 96 MM Thickness of straps 16 mm, 18 mm Percentage strength of
 nt: Plate 72.4 % Rivet 78.35 % Diameter of tube holes in drum 60.7, 62.4, 40.1 mm Pitch of tube holes 115, 85, 65 mm
 ge strength of shell in way of tubes 47.2, 40.7, 37.85 % Steam Drum Heads or Ends: Range of tensile strength 28.1~30.0 T/D
 1-5 s of plates 34, 32 MM Radius or how stayed 1150 MM Size of manhole or handhole 305 x 405 MM Water Drums: Number
 0-5 boiler 2 Inside diameter 800 MM Thickness of plates 18, 38 Range of tensile strength 30.1~33.1/31.1~34.3 % Are drum shell plates
 2-5 or flanged If fusion welded, state name of welding firm Have all the requirements of the Rules
 I vessels been complied with Description of riveting: Circ. seams 2 Rows Lap Joint long. seams Double Butt Strap
 of rivet holes in long. seams 26.5 MM Pitch of rivets 96 MM Thickness of straps 14 mm, 16 mm Percentage strength of
 ge strength of long. joint: Plate 72.4 % Rivet 95.76 % Diameter of tube holes in drum 60.7, 62.4, 40.1 mm Pitch of tube holes 115, 85, 65 mm
 ge strength of drum shell in way of tubes 47.2, 40.7, 37.85 % Water Drum Heads or Ends: Range of tensile strength 27.0~28.3 T/D
 s of plates Front 22 MM Back 20 MM Radius or how stayed 650 MM Size of manhole or handhole 305 x 405 MM
 or Sections: Number 4 Material Cast steel Thickness 25 MM Tested by hydraulic pressure to 36.5 Kg/cm²
 Ext 60, 3, 50, 40, 101.6 MM Thickness 5, 9, 4, 9, 3, 5, 6, 5 Number 112, 202, 648, 4 MM Steam Dome or Collector: Description of
 shell Inside diameter Thickness of shell plates Range of tensile
 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
 rivets Thickness of straps Percentage strength of long. joint plate rivet
 or End Plates: Range of tensile strength Thickness Radius or how stayed
 HEATER, Drums or Headers: Number in each boiler 4 Headers Inside diameter 1140 x 1140 MM
 s 25 MM Material Cast Steel Range of tensile strength 31.6 ~ 35.0 % Are drum shell plates welded
 d If fusion welded, state name of welding firm Have all the requirements of the Rules
 I vessels been complied with Yes Description of riveting: Circ. seams long. seams
 of rivet holes in long. seams Pitch of rivets Thickness of straps Percentage strength of
 nt: Plate Rivet Diameter of tube holes in drum 32.4 mm Pitch of tube holes 57 mm Percentage strength of
 ell in way of tubes 43.2 % Drum Heads or Ends: Cast Steel Thickness 25 mm Range of tensile strength 31.6 ~ 35.0 %
 r how stayed Square Size of manhole or handhole 90 ø Number, diameter, and thickness of tubes 66 x 32 mm x 2.9 mm
 y hydraulic pressure to 14 Kg/cm² Date of test Sep. 25, 28, 29, -1950 Is a safety valve fitted to each section of the superheater which
 out off from the boiler No No. and description of safety valves 1 x 60 ø Simplex Full Bore Type Area of each set
 4.4 Sq. in Pressure to which they are adjusted 22.3 Kg/cm² Is easing gear fitted Yes
 Gear. Has the spare gear required by the Rules been supplied Yes

The foregoing is a correct description,

J. J. Partridge

Manufacturer.

During progress of work in shops 1950-April 21 July 24 31 Aug 16 24 28 Sep 15 11 16 18 19 Is the approved plan of boiler forwarded herewith No
 During erection on board vessel 1950-Oct 5, 20 Nov 18, 9 Dec 4, 12, 14 Total No. of visits 25

Under 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 Main Boilers of this vessel have been constructed under Special Survey in accordance with the Rules. Approved plans and Secretary's letters. Workmanship and materials are sound and good. The main Boilers have been examined under steam, the safety valves adjusted to 22.7 Kg/cm² and found satisfactory.

Survey Fee ... £ : : When applied for 19
 Travelling Expenses (if any) £ : : When received 19

Date See F.E. Michy. spk

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