

REPORT ON WATER TUBE BOILERS.

No. 2325
19 OCT 1954

Received at London Office

Report 19 When handed in at Local Office OCT - 8, 1954 19 Port of K O B E
Survey held at Aioi, Japan Date, First Survey 14-10-53 Last Survey 30-6-1954
by Rule Actual mm in the Steel Single Screw M/V "ISE-MARU"
Aioi, Japan By whom built Harima Shipbuilding & Engineering Co., Ltd. No. 481 When built July, 1954
Aioi, Japan By whom made Harima Shipbuilding & Engineering Co., Ltd. No. 119 When made July, 1954
Aioi, Japan By whom made Harima Shipbuilding & Engineering Co., Ltd. No. 770 When made July, 1954
Power 381.365 Owners Terukuni Kaiun K.K. Port belonging to Tokyo

TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Plate: Yawata. Tube: Sumitomo
No. and Description or Type
1 x 3 Drum Water Tube Boiler Working Pressure 25kg/cm² Tested by Hydraulic Pressure to 41kg/cm² Date of Test 25-3-54
Can each boiler be worked separately? Yes Total Heating Surface of Boilers Evaporating Tube 413.4 M² T. 425.16 M²
Area of Fire Grate (coal) in each Boiler 4 x 400 kg/H Harima Dahl Type
No. and description of safety valves on 1 x 75 mm Duplex High lift type (IMPROVED) area of each set of valves per boiler As Approved Pressure to which they are fitted 88.33 sq. cm
Are they fitted with easing gear? Yes In case of donkey boilers state whether steam from main boilers can enter boiler No. M.B. Smallest distance between boilers and bunkers 2,500 mm Height of boiler 4,338 mm
Steam Drums:—Number in each boiler 1 Inside diameter 1,400 mm
Shell 22mm Tube 50mm Range of tensile strength 49.0kg/mm²; 50.2kg/mm² Are drum shell plates welded? Yes If fusion welded, state name of welding firm Harima Shipbuilding & Engineering Co., Ltd.
Description of riveting:—Circ. seams — long. seams —
Pitch of rivets — Thickness of straps — Percentage strength of rivet holes in long. seams — Diameter of tube holes in drum 40.4, 51.2 Pitch of tube holes 65mm 85mm
Steam Drum Heads or Ends:—Range of tensile strength 44.4kg/mm²; 46.5kg/mm²
Water Drums:—Number 2 Inside diameter 800 mm Thickness of plates 16, 132mm Range of tensile strength 53.6kg/mm²; 47.0kg/mm² Are drum shell plates welded? Yes If fusion welded, state name of welding firm Harima Shipbuilding & Engineering Co., Ltd.
Description of riveting:—Circ. seams — long. seams —
Pitch of rivets — Thickness of straps — Percentage strength of rivet holes in long. seams — Diameter of tube holes in drum 40.4, 51.2 Pitch of tube holes 65mm 85mm
Water Drum Heads or Ends:—Range of tensile strength 45.6kg/mm²; 47.3kg/mm²
Size of manhole or handhole 305 x 405 mm
Sections:—Number 4 Material Forged Steel Thickness 20mm Tested by hydraulic pressure to 41kg/cm²
K-meter 80, 50.8, 40 Thickness 5.0, 4.5, 3.5 Number 8, 820, 220 = 1048 Steam Dome or Collector:—Description of K-1 — Inside diameter — Thickness of shell plates — Range of tensile K-2 — Description of longitudinal joint — If fusion welded, state name of welding K-3 — Have all the requirements for the Rules for Class I vessels been complied with — Diameter of rivet holes — KT Lid — Thickness of straps — Percentage strength of long. joint — plate — rivet — KT Lid Plates:—Range of tensile strength — Thickness — Radius or how stayed —
ATER, Drums or Headers:—Number in each boiler — Inside diameter — Material — Range of tensile strength — Are drum shell plates welded — If fusion welded, state name of welding firm — Have all the requirements of the Rules been complied with — Description of riveting:—Circ. seams — long. seams — rivet holes in long. seams — Pitch of rivets — Thickness of straps — Percentage strength of plate — Rivet — Diameter of tube holes in drum — Pitch of tube holes — Percentage strength of way of tubes — Drum Heads or Ends:—Thickness — Range of tensile strength — stayed — Size of manhole or handhole — Number, diameter, and thickness of tubes — hydraulic pressure to — Date of test — Is a safety valve fitted to each section of the superheater which from the boiler — No. and description of safety valves — Area of each set — Pressure to which they are adjusted — Is easing gear fitted —
Has the spare gear required by the Rules been supplied? Yes

The foregoing is a correct description,

THE HARIMA SHIPBUILDING AND ENGINEERING COMPANY, LTD. Manufacturer.

Is the approved plan of boiler forwarded herewith? no
during progress of 1953: OCT. 14 NOV. 17 DEC. 17, 28, 29, 1954; Jan 22, 23
taken on in shops - FEB. 5, 18, 22, 23, MARCH 4, 25
erection on 1954: APRIL 7, MAY 21, JUNE 7, 11, 18, 21, 24, 30
rd vessel - - - Total No. of visits 21

uplicate of a previous case. No If so, state vessel's name and report No.

REMARKS (State quality of workmanship, opinions as to class, &c. The Donkey Boiler of this vessel has been ed under Special Survey in accordance with the Rules, Approved Plans, and Secretary's

The workmanship and materials are sound and good.

y Boiler has been examined under steam. The safety valves adjusted to 25 kg/cm² and ion test carried out and found satisfactory.

Expenses (if any) \$102,000 When applied for OCT - 8, 1954 19
When received 19

Lloyd's Register

Engineer Surveyor to Lloyd's Register of Shipping

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