

REPORT ON WATER TUBE BOILERS.

No. 983

Received at London Office

4 FEB 1953

Date of writing Report 14-8-1952 When handed in at Local Office 19 Port of KOBE

No. in Survey held at Innoshima Date, First Survey 7-2-52 Last Survey 20-7-1952

Reg. Book. T.S.S. "TSUKUSHI MARU" (Number of Visits 5) Gross 8135.67

Built at Kobe By whom built Kawasaki Dockyard Yard No. 653 When built Mar. 1943

Engines made at Kobe By whom made " Engine No. 77778 When made Mar. 1943

Boilers made at Kobe By whom made " Boiler No. 333 When made JAN. 1943

Nominal Horse Power 1306.37 Owners Pan Islamic Steam Ship Co., Ltd. Port belonging to Karachi

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel

No record

Date of Approval of plan 21-12-51 No. and Description or Type of Boilers Lamont Type 3 sets Working Pressure 27 kg/cm² Tested by Hydraulic Pressure to 40 kg/cm² Date of Test 20-2-52

No. of Certificate Yes 3 Can each boiler be worked separately Yes Total Heating Surface of Boilers 310 x 3 = 930M²

Is forced draught fitted 2 forced draft fans Area of Fire Grate (coal) in each Boiler -

No. and type of burners (oil) in each boiler 5 each Kawasaki Dock yard Type No. and description of safety valves on each boiler Full Open Type One set on Dram & One set on Superheater

are adjusted 27.5 kg/cm² Are they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler No

Smallest distance between boilers or uptakes and bunkers or woodwork 950 m/m Height of boiler 5.515 m/m

Width and length 4.440 m/m & 4.111 m/m Steam Drums:—Number in each boiler One Inside diameter 1,200 m/m

Thickness of plates 22 m/m Range of tensile strength No record Are drum shell plates welded or flanged Rivetting

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 long seams Double rivetted

Diameter of rivet holes in long. seams 26.5 mm Pitch of rivets 101.5 mm Thickness of straps 17 mm Percentage strength of long. joint:—Plate 74% Rivet 71.8%

Diameter of tube holes in drum 100 mm Percentage strength of shell in way of tubes - Steam Drum Heads or Ends:—Range of tensile strength -

Thickness of plates 35 & 32 mm Radius or how stayed 960 m/m R Size of manhole or handhole 305 mm x 405 mm Water Drums:—Number in each boiler None

Inside diameter - Thickness of plates - Range of tensile strength - Are drum shell plates welded or flanged -

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 - long seams -

Diameter of rivet holes in long. seams - Pitch of rivets - Thickness of straps -

Percentage strength of long. joint:—Plate - Rivet - Diameter of tube holes in drum - Pitch of tube holes -

Percentage strength of drum shell in way of tubes - Water Drum Heads or Ends:—Range of tensile strength -

Thickness of plates - Radius or how stayed - Size of manhole or handhole -

Headers or Sections:—Number 2 sets Material F.S. Thickness 20 m/m Tested by hydraulic pressure to 40 kg/cm²

Tubes:—Diameter 32 m/m (out) Thickness 4 m/m Number 29 wall tubes Steam Dome or Collector:—Description of joint to shell None

Inside diameter - Thickness of shell plates - Range of tensile strength -

Description of longitudinal joint - If fusion welded, state name of welding firm -

Have all the requirements for the Rules for Class I vessels been complied with - Diameter of rivet holes -

Pitch of rivets - Thickness of straps - Percentage strength of long. joint - plate - rivet -

Crown or End Plates:—Range of tensile strength - Thickness - Radius or how stayed -

SUPERHEATER Headers:—Number in each boiler One set (2 Headers) Inside diameter 140 m/m

Thickness 20 m/m Material F.S. Range of tensile strength No record Are drum shell plates welded or flanged -

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 None long seams -

Diameter of rivet holes in long. seams - Pitch of rivets - Thickness of straps - Percentage strength of long. joint:—Plate - Rivet -

Diameter of tube holes in drum 25.4 m/m Pitch of tube holes 37.5 mm Percentage strength of drum shell in way of tubes -

Drum Heads or Ends:—Number One end-EW Thickness 20 m/m Range of tensile strength No record

Radius or how stayed - Size of manhole or handhole No Manhole Number, diameter, and thickness of tubes 70 tubes 25 (out) Thick 21.9mm 19.2 (inside)

Tested by hydraulic pressure to 40 kg/cm² Date of test 20-2-52 Is a safety valve fitted to each section of the superheater Yes

No. and description of safety valves Full open type One set (spring loaded) Area of each set of valves 1256 mm²

Pressure to which they are adjusted 27 kg/cm² Is easing gear fitted Yes

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

The foregoing is a correct description, Manufacturer.

Dates of Survey } During progress of work in shops - - } Is the approved plan of boiler forwarded herewith -

while building } During erection on board vessel - - - } Total No. of visits -

Is this boiler a duplicate of a previous case - If so, state vessel's name and report No. -

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c. See Rpt. 9 attached hereto.)

Survey Fee ... £ : : } When applied for 19

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



Date -

Committee's Minute See F.E. Mchly rpt.

Is a Report also sent on the Hull of the Ship? If not, state whether, and when, one will be sent?

232.53

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