

REPORT ON WATER TUBE BOILERS.

No. 29129

Date of writing Report 20/6/1964 When handed in at Local Office 19 Port of GENOA
 No. in Survey held at GENOA Date, First Survey 21/10/1963 Last Survey 26/3/1964
 Reg. Book. on the m.s. "GIORDANO BRUNO" (Number of Visits 20) Gross Tons
 Built at GENOA SESTRI By whom built ANSALDO S.A. CANTIERE NAVALE Yard No. 1595 When built 1964
 Engines made at TURIN By whom made FIAT GRANDI MOTORI Engine No. 5065 When made 1963
 Boilers made at GENOA SAMPIERDARENA By whom made ANSALDO S.A. STAB. MECCANICO Boiler No. 492.495 When made 1963
 HS for Register Book 770m2 Owners BLACKSEA STATE STEAMSHIP LINES USSR Port belonging to ODESSA

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY

Date of Approval of plan 16th April, 1962. Manufacturers of Steel FALCK MILANO DAIMLER MILANO
 of Boilers two ANSALDO F.W. type two drum boilers Working Pressure 12 Kg/cm² Tested by Hydraulic Pressure to 21.5 Kg/cm² No. and Description or Type
 No. of Certificate 492.495 Can each boiler be worked separately yes Total Heating Surface of Boilers 770m² Superheaters none
 Half Economisers — Is forced draught fitted yes Area of Fire Grate (coal) in each Boiler
 No. and type of burners (oil) in each boiler one — oil
 each boiler one double Cockburn type full bore pilot operated Area of each set of valves per boiler per rule as approved
 are adjusted 12 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 — Smallest distance between boilers or uptakes and drums or woodwork 750mm. Height of boiler 5000mm.
 Width and length 4750x3750mm. Steam Drums:—Number in each boiler one Inside diameter 1082mm.
 Thickness of plates 18/30mm. Range of tensile strength 42-48 Kg/mm² Are drum shell plates welded
 or flanged fusion welded If fusion welded, state name of welding firm ANSALDO S.A. STAB. MECCANICO GENOA Have all the requirements of the Rules
 for Class I vessels been complied with yes 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 38.35mm. Pitch of tube holes 60mm. long
 Percentage strength of shell in way of tubes as approved Steam Drum Heads or Ends:—Range of tensile strength 42-48 Kg/cm² 46mm. circ.
 Thickness of plates 18mm. Radius or how stayed 880mm. Size of manhole or handhole 300x400mm. Water Drums:—Number
 in each boiler one Inside diameter 760mm. Thickness of plates 28mm. Range of tensile strength 42-48 Kg/mm² Are drum shell plates
 welded or flanged fusion welded If fusion welded, state name of welding firm ANSALDO S.A. STAB. MECCANICO GENOA Have all the requirements of the Rules
 for Class I vessels been complied with yes Description of riveting:—Circ. seams — long. seams —
 Diameter of rivet holes in long. seams — Pitch of rivets — Thickness of straps — Percentage strength of
 Percentage strength of long. joint:—Plate — Rivet — Diameter of tube holes in drum 38.35mm. Pitch of tube holes 60mm. long
 Percentage strength of drum shell in way of tubes as approved Water Drum Heads or Ends:—Range of tensile strength 42-48 Kg/mm² 46mm. circ.
 Thickness of plates 15mm. Radius or how stayed 700mm. Size of manhole or handhole 300x400mm.
 Headers or Sections:—Number one Material seamless steel tube Thickness 24mm. Tested by hydraulic pressure to 21.5 Kg/cm²
 Tubes:—Diameter 38mm. Thickness 3mm. Number 946 956 Steam Dome or Collector:—Description of
 joint to shell — 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, Drums or Headers:—Number in each boiler — Inside diameter —
 Thickness — Material — 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 Heads or Ends:—Thickness — Range of tensile strength —
 Radius or how stayed — Size of manhole or handhole — Number, diameter, and thickness of tubes —
 Tested by hydraulic pressure to — Date of test — Is a safety valve fitted to each section of the superheater which
 can be shut off from the boiler — No. and description of safety valves — Area of each set
 of valves — Pressure to which they are adjusted — Is easing gear fitted —
 Spare Gear. Has the spare gear required by the Rules been supplied —

The foregoing is a correct description,
 ANSALDO S.P.A.
 STABILIMENTO MECCANICO Manufacturer.

Dates During progress of work in shops — First 21/10/63 last 9/1/64
 Survey while building During erection on board vessel — First 17/2/64 last 3/7/64

Is the approved plan of boiler forwarded herewith no
 Total No. of visits 12

this boiler a duplicate of a previous case. yes If so, state vessel's name and report No. ANSALDO SESTRI YARD NO. 1593 m.v. "LEONARDO DA VINCI" — Report No. 28667.
 GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
 These boilers have been constructed under special survey of tested materials and are in accordance with the approved
 plans, Rule requirements and Secretary's letters. The materials, workmanship and welding techniques are good. The
 boiler drums have been manufactured in accordance with Rule Requirements for Class I fusion welded pressure vessels.
 All radiographic examination of the drum longitudinal and circumferential seams has been carried out with satisfacto-
 ry results. The results of routine mechanical tests on the drum longitudinal weld coupon pla-
 tes were also satisfactory. Upon completion the
 boilers have been examined under hydraulic pressure
 of 21.5 Kg/cm² and found sound and tight in all
 respects at that pressure.
 Survey Fee Lit. 325.060 plus Lit. 120.200 When applied for 7/8/1964
 Travelling Expenses (if any) Lit. 1.200 When received 19
 A.T. 1 See out Ac. no 6243 dd. 7/8/1964

Engineer Surveyor B.S. THOMPSON
 (B.S. THOMPSON)

Date FRIDAY 30 OCT 1964

Committee's Minute See Rpt. 1

Lloyd's Register
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