

REPORT ON WATER TUBE BOILERS.

No. 14790

6 JUN 1958

Received at London Office

Date of writing Report 29th May 1958 When handed in at Local Office 31.5 1958 Port of TRIESTE

No. in Survey held at Trieste Date, First Survey _____ Last Survey _____ 1958

Reg. Book. _____ (Number of Visits _____) Gross 23108

2168 on the "MARIAROSA AUGUSTA" Tons Net _____

Built at Trieste By whom built C.R.D. Adriatico Yard No. 1826 When built 1958 - 4

Engines made at Trieste By whom made -do- Engine No. 306/307 When made 1958

Boilers made at Glasgow & Trieste By whom made Babcock & Wilcox & C.R.D.A. Boiler No. 2041/2042 When made 1957

HS for Register Book 19,490 sq.ft. Owners Soc. Armatoriale PRORA S.p.A. Port belonging to Palermo

WATER TUBE BOILERS—MAIN, ~~XXXXXXXXXXXXXXXXXXXX~~—Manufacturers of Steel Chesterfield Tube Co., Ltd. & Dalmine

Date of Approval of plan Glasgow letter 23.10.56 to Babcock & Wilcox, Ltd. No. and Description or Type of Boilers 2. Two drum welded B. & W. Working Pressure 950 PSI Tested by Hydraulic Pressure to 1475 PSI Date of Test 30.1.58

No. of Certificate 438/9 Can each boiler be worked separately yes Total Heating Surface of Boilers 8615 x 2 Superheaters 1130 x 2 sq.ft.

Half Economisers none Is forced draught fitted yes Area of Fire Grate (coal) in each Boiler oil fired

No. and type of burners (oil) in each boiler 4 DEWRANCE Glasgow Cert. N° C.38930 No. and description of safety valves on each boiler Two 1 3/4 dia. Foster type spring loaded full bore

Area of each set of valves per boiler per rule 3.28 sq.inches Pressure to which they are adjusted 950 & 945 PSI 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 bunkers or woodwork ample Height of boiler about 21'-0"

Width and length about 15' x 21' Steam Drums:—Number in each boiler one Inside diameter 1236 mm

Thickness of plates 128 & 42 mm Range of tensile strength 32 - 35 tons sq.inch. Are drum shell plates welded or flanged welded If fusion welded, state name of welding firm Babcock & Wilcox Renfrew Have all the requirements of the Rules for Class I vessels been complied with See Glasgow Cert. C.41492 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 32.3 mm Pitch of tube holes 48 x 455 mm

Percentage strength of shell in way of tubes As appd. Steam Drum Heads or Ends:—Range of tensile strength 32 - 35 tons sq.inch.

Thickness of plates 60.3 mm Radius or how stayed ellipsoidal Size of manhole or handhole 16" x 12" Water Drums:—Number in each boiler one Inside diameter 719.1 mm Thickness of plates 81 mm Range of tensile strength 34 - 40 T/mm² Are drum shell plates welded or flanged forged If fusion welded, state name of welding firm ends to shell B. & W. 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 32.3 mm Pitch of tube holes 48 x 45.5 mm

Percentage strength of drum shell in way of tubes as appd. Water Drum Heads or Ends:—Range of tensile strength 31.25 - 38 Tons sq.inch

Thickness of plates 42.9 mm Radius or how stayed ellipsoidal Size of manhole or handhole 16" x 12"

Headers or Sections:—Number three Material steel Thickness 31.75 mm Tested by hydraulic pressure to 1502 PSI

Tubes:—Diameter 32, 51, 82.5 Thickness 3, 5, 7 mm Number 167, 199, 1, 3, 13 Steam Dome or Collector:—Description of joint to shell _____ Inside diameter 8 & 11 mm 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 two Inside diameter 176 mm

Thickness 32 mm Material 1/2 % Moly steel 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 headers 32.2 mm Pitch of tube holes 50.8 mm Percentage strength of drum shell in way of tubes as appd. Drum Heads or Ends:—Thickness _____ Range of tensile strength _____

Radius or how stayed _____ Size of ~~manhole~~ handhole 100 x 85 mm Number, diameter, and thickness of tubes 140 x 32 x 3.5 mm

Tested by hydraulic pressure to 1475 PSI Date of test 27.2 & 3.3.1958 Is a safety valve fitted to each section of the superheater which can be shut off from the boiler yes No. and description of safety valves One. 1.0625" dia. spring loaded full bore (Crosby) Area of each set of valves 0.8866 sq.inches Pressure to which they are adjusted 900 PSI 860°F Is easing gear fitted yes

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

Cantieri Riuniti Dell'Adriatico
FABBRICA MACCHINE S. ANTONIO
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 No If so, state vessel's name and report No. _____

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c) The steam and water drums, water wall headers, superheater headers and stud water wall tubes were manufactured by Babcock & Wilcox (See Glasgow Cert. C. 41492).

The steam and water drums were drilled by C.R.D. Adriatico Trieste and the remaining tubes were supplied by Dalmine (Italy).

Both boilers and superheaters have been assembled by Messrs. C.R.D. Adriatico Trieste, in accordance with the approved plans

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

Date TUESDAY - 1 JUL 1958 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute See Rep. 1.

