

# REPORT ON BOILERS.

No. 13245

28 MAR 1949

Received at London Office

Date of writing Report 16.3.49 When handed in at Local Office 24TH MARCH 1949 Port of TRIESTE

TRIESTE

Date, First Survey SEE Rpt 4b

Last Survey

19

No. in Reg. Book 95603 on the M/v. "Port Said" (Number of Visits ) Gross Tons Net Tons

Built at Trieste By whom built Cant. Riuniti dell' Adriatico Yard No. 1747 When built 1949  
Engines made at Trieste By whom made do Engine No. 5494 When made 1949  
Boilers made at Trieste By whom made do Boiler No. 1921 When made 1949  
Owners Mistr Navigation Co. Port belonging to Alexandria

## VERTICAL DONKEY BOILER.

Made at Trieste By whom made Cantieri Riun. dell' Adr. Boiler No. 1921 When made 1949 Where fixed funnel  
Manufacturers of Steel Acc. "Terni" - Osterr. Alpine Montangesellschaft Donawitz - Steel Work N.C. Viteovice  
Total Heating Surface of Boiler 132 sq.m. (exh. gas & oil) Is forced draught fitted no Coal or Oil fired oil & exh. gas  
No. and Description of Boilers one - Clarkson type - thimble tube Working pressure 7 kgs/cm<sup>2</sup>  
Tested by hydraulic pressure to 14 kgs/cm<sup>2</sup> Date of test 4th October 1948 No. of Certificate 342  
Area of Firegrate in each Boiler No. and Description of safety valves to each boiler two - spring loaded  
Area of each set of valves per boiler per rule 6120 mm<sup>2</sup> as fitted 8820 mm<sup>2</sup> Pressure to which they are adjusted 7 kgs/cm<sup>2</sup> Are they fitted with easing gear yes  
State whether steam from main boilers can enter the donkey boiler Smallest distance between boiler or uptake and bunkers  
Is oil fuel carried in the double bottom under boiler Smallest distance between base of boiler and tank top plating  
Is the base of the boiler insulated yes Largest internal dia. of boiler 1800 mm. Height 5546 mm.  
Shell plates: Material S.M.S. Tensile strength 44 kgs/mm<sup>2</sup> Thickness 19 mm.  
Are the shell plates welded or flanged no Description of riveting: circ. seams D.R. Lap long. seams D.R.D.B.S.  
Dia. of rivet holes in circ. seams 29 mm. Pitch of rivets 90.17 mm. Percentage of strength of circ. seams plate 67.8 rivets 52 of Longitudinal joint plate 74.4 rivets 78 combined.  
Working pressure of shell by rules 16.5 at joint - 11 at tubes Thickness of butt straps outer 16 mm. inner 16 mm.  
Shell Crown: Whether complete hemisphere, dished partial spherical, or flat dished Material S.M.S.  
Tensile strength 41 kgs/mm<sup>2</sup> Thickness 20 mm. Radius 1800 mm. Working pressure by rules  
Description of Furnace: Plain, spherical, or dished crown dished Material S.M.S. Tensile strength 41 kgs/mm<sup>2</sup>  
Thickness crown 22 mm. External diameter top 980 mm. bottom 1768 mm. Length as per rule Working pressure by rules  
Pitch of support stays circumferentially and vertically Are stays fitted with nuts or riveted over  
Diameter of stays over thread Radius of dished furnace crown 1800 mm. Working pressure by rule  
Thickness of Ogee Ring furnace crown Diameter as per rule Working pressure by rule  
Combustion Chamber: Material S.M.S. Tensile strength 41 kgs/mm<sup>2</sup> Thickness of top plate 16 mm.  
Radius if dished 800 mm. Working pressure by rule Thickness of back plate Diameter if circular 900 mm.  
Length as per rule Pitch of stays Are stays fitted with nuts or riveted over  
Diameter of stays over thread Working pressure of back plate by rules  
Tube Plates: Material inner S.M.S. Tensile strength 41 kgs/mm<sup>2</sup> Thickness 20 mm. pitch of tubes 163.97 x 76 mm. outer S.M.S. Tensile strength 44 kgs/mm<sup>2</sup> Thickness 19 mm. 138 x 80 mm.  
Comprising shell, Dia. as per rule front back Pitch in outer vertical rows Dia. of tube holes inner stay 70.5 outer stay 64 plain  
Each alternate tube in outer vertical rows a stay tube Working pressure by rules front back  
Tenders to combustion chamber tops: Material Tensile strength  
Pitch and thickness of girder at centre Length as per rule  
Distance apart No. and pitch of stays in each Working pressure by rule



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**Crown stays:** Material ☒ Tensile strength ☒ Diameter ☒ at body of stay, ☒ or over threads, ☒  
 No. of threads per inch ☒ Area supported by each stay ☒ Working pressure by rules ☒  
**Screw stays:** Material ☒ Tensile strength ☒ Diameter ☒ at turned off part, ☒ or over threads, ☒ No. of threads per inch ☒  
 Area supported by each stay ☒ Working pressure by rules ☒ Are the stays drilled at the outer ends ☒  
**Tubes:** Material steel External diameter ☒ { plain { outer 63 mm. ☒ inner 70 mm. ☒ Thickness { outer 3.75 mm. ☒ inner 3.75 mm. ☒  
 No. of threads per inch ☒ Pitch of tubes { outer 138 mm. ☒ inner 163.97 mm. ☒ Working pressure by rules ☒  
**Manhole Compensation:** Size of opening in shell plate 300 x 400 Section of compensating ring 379 x 19 mm. No. of rivets and diameter ☒  
 of rivet holes 36 - 26 mm. Outer row rivet pitch at ends 110 mm. Depth of flange if manhole flanged ☒  
**Uptake:** External diameter 532 mm. ☒ Thickness of uptake plate 16 mm. ☒  
**Cross Tubes:** No. ☒ External diameters ☒ Thickness of plates ☒  
 Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with yes ☒

The foregoing is a correct description,  
 Cantieri Riuniti Dell'Adriatico  
 FABRICA MACCHINE S. ANDREA *Stittu* Manufacturer

Dates of Survey ☒ During progress of work in shops - - ☒ Is the approved plan of boiler forwarded herewith (If not state date of approval.) yes  
 while building ☒ During erection on board vessel - - ☒ See Rpt. 4 b Total No. of visits ☒

# GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

This boiler has been constructed under special survey from tested material in accordance with the Society's Rules and approved plan. -  
 The materials and workmanship are good. -  
 The boiler was efficiently installed on board the vessel, found tight under steam, the safety valves adjusted for a working pressure of 100 lbs/sq. in. a satisfactory accumulation test made under exhaust gas and oil fuel firing.  
 The boiler, in my opinion, is eligible to be classed with record of:

1 DB - 100 lb.

Survey Fee ... £ 24 000. When applied for, ☒ 19  
 Travelling Expenses (if any) £ ✓ When received, ☒ 19

Committee's Minute FRI 29 APR 1915  
 Assigned See F.E. mch. rpt.

*John M'Gee*  
 Engineer Surveyor to Lloyd's Register of Shipping  
 Lloyd's Register Foundation