

Received at London Office.....

Date of writing Report...20.10.1964... When handed in at Local Office...21.10.64...19..... Port of...Rijeka

No. in Reg. Book... Survey held at...Zagreb... Date, First Survey...13.2.64... Last Survey...28.8.1964

(Number of Visits...20.....) Tons {Gross..... Net.....}

Built at...Trogir... By whom built...Shipyard Trogir... Yard No...137... When built.....

Engines made at... By whom made... Engine No... When made.....

Boilers made at...Zagreb... By whom made...Tvornica Parnih Kotlova... Boiler No...5162... When made...1964

MN as per Rule... Owners... Port belonging to.....

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel...Phoenix Rheinrohr, Mannesman, A.F.L. Falck

Total Heating Surface of Boilers...250 m²... Of Superheaters...-Total for Register Book...2700 ft²... Is forced draught fitted...yes... Coal or Oil fired...oil

No. and Description of Boilers...One cylindrical multitubular Boiler with riveted steel and welded furnaces and combustion chambers... Working Pressure...12 kg/sq. cm

Tested by hydraulic pressure to...21.5 kg/cm²... Date of test...25.8.64... No. of Certificate...103... Can each boiler be worked separately...-

Area of Firegrate in each Boiler...-... No. and Description of safety valves to each boiler...1 Double High Lift (size? 2 x 80 mm)

Area of each set of valves per boiler {per Rule...8050 mm²... as fitted...10050 mm²... Pressure to which they 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 bunkers or woodwork... Is oil fuel carried in the double bottom under boilers.....

Smallest distance between boilers or uptakes and bunkers or woodwork... Is the bottom of the boiler insulated.....

Largest internal dia. of boilers...4400 mm... Length...3646 mm... Shell plates: Material...SM steel... Tensile strength...47-54 kg/mm²

If fusion welded, state name of welding Firm... Have all the requirements of the Rules for Class I vessels been complied with...-

Thickness...3 mm... Are the shell plates welded or flanged...no... Description of riveting: circ. seams...end Double riveted lap

long. seams...with double butt straps... Diameter of rivet holes in {circ. seams...34 mm... long. seams...34 mm... Pitch of rivets {102.34 mm... 152 mm...

Percentage of strength of circ. end seams {plate...66.7%... rivets...59%... Percentage of strength of circ. intermediate seam {plate...-... rivets...-...

Percentage of strength of longitudinal joint {plate...77.6%... rivets...78%... combined...77.6%...

Thickness of butt straps {outer...26 mm... inner...26 mm... No. and Description of Furnaces in each Boiler...3 Fox corrugated fusion welded

Material...S.M. Steel... Tensile strength...41-47 kg/sq. mm... Smallest outside diameter...924 mm

Length of plain part {front...106.5 mm... back...200 mm... Thickness of plates...12 mm... Description of longitudinal joint...Fusion welded

Dimensions of stiffening rings on furnace or c.c. bottom...-

End plates in steam space: Material...SM steel... Tensile strength...41-47 kg/sq. mm... Thickness...24 mm... Pitch of stays...d = 520 mm

How are stays secured...Nuts inside and outside

Tube plates: Material {front...SM steel... back...-... Tensile strength {41-47 kg/sq. mm... Thickness {24 mm... 18 mm...

Mean pitch of stay tubes in nests...230 mm... Pitch across wide water spaces...between nests 340 mm...

Girders to combustion chamber tops: Material...SM steel... Tensile strength...44-50 kg/sq. cm... Depth and thickness of girder at centre...140 mm x 30 mm... Length as per Rule...780 mm... Distance apart...165 mm... No. and pitch of stays in each Girders welded to C.C. Combustion chamber plates: Material...SM Steel... Tensile strength...41-47 kg/sq. mm... Thickness: Sides...18 mm... Back...18 mm... Top...18 mm... Bottom...18 mm... Pitch of stays to ditto: Sides...200 mm... Back...200 mm... Top...-... Are stays fitted with nuts or riveted over...Fusion welded

Front plate at bottom: Material...SM Steel... Tensile strength...41-47 kg/sq. mm

Thickness...24 mm... Lower back plate: Material...SM steel... Tensile strength...41-47 kg/sq. mm... Thickness...24 mm

Pitch of stays at wide water space...470 & 480 mm... Are stays fitted with nuts or riveted over...fitted with nuts

Main stays: Material...SM Steel... Tensile strength...44-50 kg/sq. mm

Diameter {At body of stay...5 at 63-5 mm, and 20 at 59 mm... Over threads...63-5 mm... No. of threads per inch...9

Screw stays: Material...SM steel... Tensile strength...41-47 kg/sq. mm

Diameter {At turned off part...48 mm... Over threads...48 mm... No. of threads per inch...Welded to C.C. and end plates and screwed through shell 8.55 T.P.I.

PLEASE RETURN THIS REPORT WITH YOUR FIRST ENTRY.

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

(MADE AND PRINTED IN ENGLAND.)

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Are the stays drilled at the outer ends yes Margin stays: Diameter At turned off part, stay tubes...
 No. of threads per inch welded
 Tubes: Material SM steel External diameter 63.5 mm Thickness 3.2 mm No. of threads per inch welded
 Pitch of tubes 92 mm Manhole compensation: Size of opening in
 shell plate 406 x 506 mm Section of compensating ring 30 mm No. of rivets and diameter of rivet holes 32, 34 mm
 Outer row rivet pitch at ends 143.5 mm Depth of flange if manhole flanged 110 mm Steam Dome: Material -
 Tensile strength - Thickness of shell - Description of longitudinal joint -
 Diameter of rivet holes - Pitch of rivets - Percentage of strength of joint -
 Internal diameter - Thickness of crown - No. and diameter of
 stays - Inner radius of crown -
 How connected to shell - Size of doubling plate under dome - Diameter of rivet holes and pitch
 of rivets in outer row in dome connection to shell -
 Type of Superheater - Manufacturers of -
 Number of elements - Material of tubes - Internal diameter and thickness of tubes -
 Material of headers - Tensile strength - Thickness - Can the superheater be shut off and
 the boiler be worked separately - Is a safety valve fitted to every part of the superheater which can be shut off from the boiler -
 Area of each safety valve - Are the safety valves fitted with easing gear -
 Pressure to which the safety valves are adjusted - Hydraulic test pressure:
 tubes - forgings and castings - and after assembly in place - Are drain cocks or
 valves fitted to free the superheater from water where necessary -
 Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with yes

The foregoing is a correct description,
 Signature N. Diens Manufacturer 19.9.63
 No. 24.1.64

Dates of Survey During progress of work in shops - - From 13.2.64. to 28.8.64. Are the approved plans of boiler and superheater forwarded herewith -
 while building During erection on board vessel - - Total No. of visits -
 (If not state date of approval.)

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.) This Boiler has been constructed under
Special Survey of tested material in accordance with the Rules, Approved Plans and Secretary's
letters. The workmanship is good, the boiler was found sound and tight under hydraulic test
and is eligible in my opinion to be fitted in a classed vessel.

Survey Fee £ 37.16 : 0 + When applied for 19.....
 Travelling Expenses (if any) £ 79.380.-din. When received 19.....
 20.000.-din.

Signature N. Diens

N. Diens
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRIDAY 28 MAY 1965

Assigned See Rpt. 1.



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