

# REPORT ON BOILERS.

No. 88731

Received at London Office 11 JUN 1932

ing Report 7.6. 1932 When handed in at Local Office 9.6. 1932 Port of Newcastle-on-Tyne  
Survey held at Newcastle-on-Tyne Date, First Survey 22 Jan Last Survey 7.6. 1932  
on the *Maryemite Final* (Number of Visits 14) Tons }  
Net }  
Built at *Monfalcone* By whom built *G. Ruzhelli dell' Adriatico* Yard No. 251 When built  
By whom made Engine No. When made  
*(Nos 5+6)*  
Newcastle-on-Tyne By whom made *R. & W. Hawthorn, Leslie & Co. Ltd* Boiler No. 9648 When made 1932  
orse Power 306 Owners Port belonging to

## TUBULAR BOILERS - ~~MAIN, AUXILIARY, OR~~ DONKEY.

ers of Steel *The Steel Company of Scotland Ltd, Girdlingham Iron & Steel Co. Ltd* (Letter for Record *S.*)  
ting Surface of Boilers *4598* Is forced draught fitted Coal or Oil fired *oil*  
escription of Boilers *Two Single Ended* Working Pressure *200 lbs./sq*  
hydraulic pressure to *350 lbs./sq* Date of test *7.6.32* No. of Certificate *582* Can each boiler be worked separately  
iregrate in each Boiler *76.1* No. and Description of safety valves to each boiler *Two Spring loaded*  
ach set of valves per boiler { *per Rule 17.32* Pressure to which they are adjusted Are they fitted with easing gear  
as fitted *19.24*  
donkey boilers, state whether steam from main boilers can enter the donkey boiler  
istance between boilers or uptakes and bunkers or woodwork Is oil fuel carried in the double bottom under boilers  
istance between shell of boiler and tank top plating Is the bottom of the boiler insulated  
nternal dia. of boilers *14'-1"* Length *12'-0"* Shell plates: Material *Steel* Tensile strength *28732 tons/sq*  
*19/32* Are the shell plates welded or flanged *20* Description of riveting: circ. seams { *DR Lap*  
end }  
inter. }  
s *T.R.D.B.S.* Diameter of rivet holes in { circ. seams *13/8* Pitch of rivets { *37/8*  
long. seams *13/8* }  
e of strength of circ. end seams { plate *64.5* Percentage of strength of circ. intermediate seam { plate  
rivets *49* rivets }  
e of strength of longitudinal joint { plate *85.2* Working pressure of shell by Rules *200 lbs./sq*  
rivets *96.8*  
combined *89.5*  
of butt straps { outer *13/16* No. and Description of Furnaces in each Boiler *3 Morrison*  
inner *13/16* }  
Steel Tensile strength *26/30 tons/sq* Smallest outside diameter *3'-6 3/16*  
f plain part { top Thickness of plates { crown *19/32* Description of longitudinal joint *weld*  
bottom }  
ms of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules *204 lbs./sq*  
tes in steam space: Material *Steel* Tensile strength *26/30 tons/sq* Thickness *1 1/8* Pitch of stays *16 3/4 x 16*  
stays secured *D. Nuts* Working pressure by Rules *219 lbs./sq*  
tes: Material { front *Steel* Tensile strength { *26/30 tons/sq* Thickness { *15/16*  
back *Steel* } *15/16* }  
tch of stay tubes in nests *8 23/32* Pitch across wide water spaces *13 3/4* Working pressure { front *213 lbs./sq*  
back *204 lbs./sq*  
to combustion chamber tops: Material *Steel* Tensile strength *28732 tons/sq* Depth and thickness of girder  
*10" x 2 @ 21/32* Length as per Rule *34 7/16* Distance apart *6 3/4 Centre 8 1/2 wings* No. and pitch of stays  
*3 @ 8"* Working pressure by Rules *205 lbs./sq* Combustion chamber plates: Material *Steel*  
strength *26/30 tons/sq* Thickness: Sides *21/32* Back *5/8* Top *21/32* Bottom *7/8*  
of stays to ditto: Sides *8" x 7 3/4* Back *7 3/8 x 7 5/8* Top *8 1/2 x 8* Are stays fitted with nuts or riveted over *nuts*  
ng pressure by Rules *223 lbs./sq* Front plate at bottom: Material *Steel* Tensile strength *26/30 tons/sq*  
ess *5/16* Lower back plate: Material *Steel* Tensile strength *26/30 tons/sq* Thickness *1"*  
of stays at wide water space *15"* Are stays fitted with nuts or riveted over *nuts*  
Shipping Pressure *248 lbs./sq* Main stays: Material *Steel* Tensile strength *28732 tons/sq*  
ter { At body of stay, *2 3/4* No. of threads per inch *6* Area supported by each stay *264*  
or }  
Over threads }  
ng pressure by Rules *248 lbs./sq* Screw stays: Material *Steel* Tensile strength *26/30 tons/sq*  
ter { At turned off part, No. of threads per inch *9* Area supported by each stay *66.72 x 56.2*  
or }  
Over threads } *15/8 x 1 1/2*

*CWP*  
*15.6.32*

Working pressure by Rules 223 lbs./sq. in. Are the stays drilled at the outer ends No Margin stays: Diameter <sup>At turned off part,</sup> 1 3/8" + 1/8"  
 No. of threads per inch 9 Area supported by each stay 83.4 sq. in. Working pressure by Rules 218 lbs./sq. in.  
 Tubes: Material 1/2 Steel External diameter <sup>Plain</sup> 2 3/4" Thickness 9 W.G. No. of threads per inch 9  
 Pitch of tubes 3 7/8" x 3 7/8" Working pressure by Rules 215 lbs./sq. in. Manhole compensation: Size of shell plate 17" x 13" Section of compensating ring 9 1/2" x 1 7/8" No. of rivets and diameter of rivet holes 30 R. 1"  
 Outer row rivet pitch at ends 10 3/8" Depth of flange if manhole flanged - Steam Dome: Material -  
 Tensile strength - Thickness of shell - Description of longitudinal joint -  
 Diameter of rivet holes - Pitch of rivets - Percentage of strength of joint <sup>Plate</sup> - <sup>Rivets</sup> -  
 Internal diameter - Working pressure by Rules - Thickness of crown - No. and stays -  
 How connected to shell - Inner radius of crown - Working pressure by Rules -  
 Size of doubling plate under dome - Diameter of rivet holes of rivets in outer row in dome connection to shell -

Type of Superheater None Manufacturers of <sup>Tubes</sup> - <sup>Steel castings</sup> -  
 Number of elements - Material of tubes - Internal diameter and thickness of tubes -  
 Material of headers - Tensile strength - Thickness - Can the superheater be 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 - Working pressure Rules -  
 Pressure to which the safety valves are adjusted - Hydraulic test tubes -, castings - and after assembly in place - Are drain cocks or to free the superheater from water where necessary -

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with For

The foregoing is a correct description of the boiler and superheater forwarded herewith

R. B. Johnson  
 GENERAL MANAGER

Dates of Survey <sup>During progress of work in shops - -</sup> 1931 Dec. 22, 24, 31. 1932 Jan 8, 26, Feb 2, 9, 16, 22, Mar 1, 4. Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)  
<sup>while building</sup> <sup>During erection on board vessel - - -</sup> Apr. 7, 11, June 7. Total No. of visits 14

Is this Boiler a duplicate of a previous case Yes If so, state Vessel's name and Report No. C.R.A. M.Vs 249 & 250

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been constructed under special survey in accordance with the rules and approved plan; the construction and workmanship are good.  
The boilers are to be despatched to Genoa to be fitted in the vessel.

Survey Fee ... .. £ 27 : 16 : 0 When applied for 10 JUN 1932  
 Travelling Expenses (if any) £ : : : When received 5/7/1932

H. B. Forster  
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute TUE. 2 JAN 1934  
 Assigned See Tri. F.C. 10248

