

9-7460

pt. 5a.

# REPORT ON BOILERS.

No. 15979

17 SEP 1945

Received at London Office

Date of writing Report 20th May, 1941 When handed in at Local Office

Port of Amsterdam

No. in Survey held at Amsterdam

Date, First Survey 16 April, 1940 Last Survey 9 May 19 41

(Number of Visits 10) Tons { Gross Net

Built at Kumpin 1/2 Gmel By whom built C. v. d. Grooten & Z<sup>m</sup> Yard No. 667 When built 1941  
 Engines made at Amsterdam By whom made N. V. Werkspoor Engine No. 785/786 When made 1941  
 Boilers made at Amsterdam By whom made N. V. Werkspoor Boiler No. 2903 When made 1941  
 Owners \_\_\_\_\_ Port belonging to \_\_\_\_\_

## MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Colvilles & Co. and Brown & Colvilles Glasgow. Kerpin (Letter for Record)

Total Heating Surface of Boilers 203 M<sup>2</sup> 2100 Is forced draught fitted yes Coal or Oil fired oil

Name and Description of Boilers one Multitubular boiler Working Pressure 18.0 kg / 12.65 kg

Tested by hydraulic pressure to 300 kg Date of test 15/8/41 No. of Certificate 1030 Can each boiler be worked separately ✓

No. and Description of safety valves to each boiler 2 sprung loaded

Pressure to which they are adjusted as per Rule Are they fitted with easing gear yes

Is oil fuel carried in the double bottom under boilers no

Is the bottom of the boiler insulated yes

Shell plates: Material SMS Tensile strength 47.5 kg

Description of riveting: circ. seams end abt welded lap

Pitch of rivets 0.5 m M / 1.92 m M

Percentage of strength of circ. intermediate seam plate 67 / rivets 42.2 Working pressure of shell by Rules 13.6 kg

Percentage of strength of longitudinal joint plate 0.564 / rivets 0.0 / combined 0.04

No. and Description of Furnaces in each Boiler 2 Morrison's

Tensile strength 41-47 kg Smallest outside diameter 1130 m M

Description of longitudinal joint welded

Working pressure of furnace by Rules 13.6 kg

Material SMS Tensile strength 41-47 kg Thickness 27 m M Pitch of stays 400 x 450 m M

Working pressure by Rules 13 kg

Thickness 23 m M / 22 m M

Working pressure front 14.6 kg / back 14.2 kg

Material SMS Tensile strength 44-50 kg Depth and thickness of girder

Length as per Rule 700 m M Distance apart 225 m M No. and pitch of stays

Working pressure by Rules 15 kg Combustion chamber plates: Material SMS

Thickness: Sides 19 m M Back 19 m M Top 19 m M Bottom 25 m M

Are stays fitted with nuts or riveted over welded over

Working pressure by Rules 14.0 kg Front plate at bottom: Material SMS Tensile strength 41-47 kg

Thickness 23 m M Lower back plate: Material SMS Tensile strength 41-47 kg Thickness 23 m M

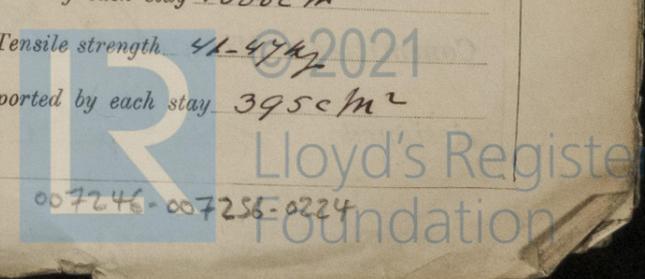
Are stays fitted with nuts or riveted over with nuts

Working Pressure 10 kg Main stays: Material SMS Tensile strength 44-50 kg

At body of stay, No. of threads per inch 8 Area supported by each stay 1800 cm<sup>2</sup>

Working pressure by Rules 14 kg Screw stays: Material SMS Tensile strength 41-47 kg

At turned off part, No. of threads per inch 9 Area supported by each stay 395 cm<sup>2</sup>



Working pressure by Rules *14.3 kg* Are the stays drilled at the outer ends *Yes* Margin stays: Diameter *{ At turned off part, or Over threads 1 5/8"*

No. of threads per inch *9* Area supported by each stay *500 cm<sup>2</sup>* Working pressure by Rules *13.8 kg*

Tubes: Material *SM5* External diameter *{ Plain 2 3/4" Stay 2 3/4"* Thickness *{ 3.65 mm 5/16" - 2.7/16"* No. of threads per inch *9*

Pitch of tubes *100 x 98 mm* Working pressure by Rules *15 kg* Manhole compensation: Size of opening *54.52 mm*

shell plate *390 x 490* Section of compensating ring *179 cm<sup>2</sup>* No. of rivets and diameter of rivet holes *54.52 mm*

Outer row rivet pitch at ends *220 mm* Depth of flange if manhole flanged *20 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 *{ Plate Rivets*

Internal diameter \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_ Thickness of crown \_\_\_\_\_ No. and diameter of stays \_\_\_\_\_

Inner radius of crown \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_

How connected to shell \_\_\_\_\_ Size of doubling plate under dome \_\_\_\_\_ Diameter of rivet holes and of rivets in outer row in dome connection to shell \_\_\_\_\_

Type of Superheater \_\_\_\_\_ Manufacturers of *{ Tubes Steel forgings Steel castings*

Number of elements \_\_\_\_\_ Material of tubes \_\_\_\_\_ Internal diameter and thickness of tubes \_\_\_\_\_

Material of headers \_\_\_\_\_ Tensile strength \_\_\_\_\_ Thickness \_\_\_\_\_ Can the superheater be shut off 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 as Rules \_\_\_\_\_ Hydraulic test pressure \_\_\_\_\_

Pressure to which the safety valves are adjusted \_\_\_\_\_ and after assembly in place \_\_\_\_\_ Are drain 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 \_\_\_\_\_

**WERKSPROOF N.V.**

*The foregoing is a correct description,*  
*[Signature]*  
 Manufacturer

Dates of Survey while building *{ During progress of work in shops - - 1940 - April 16 July 20-21 Sept 16 Oct 20 Nov 20 1941 Jan 3 March 17 April 1* Are the approved plans of boiler and superheater forwarded herewith *E.N.* (If not state date of approval.)

*{ During erection on board vessel - - - }* Total No. of visits \_\_\_\_\_

Is this Boiler a duplicate of a previous case *Yes* If so, state Vessel's name and Report No. *M.V. TARIA Ans up 15788*

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

*The Boiler has been made under special survey in accordance with the approved plan & Secretary's letter. Material duly tested, workmanship throughout good.*

*The Boiler has been shipped to Krumpholtz yard to be placed aboard M<sup>rs</sup> C. v. d. Guesten in yard No 667.*

*Remains to be done. All tubes to fitted and on completion Boiler to be hydraulic tested.*

*All boiler tubes have been satisfactorily fitted and the boiler tested upon completion by hydraulic pressure to 320 lbs and was found sound and tight. Fitting on board satisfactory.*

*[Signature]*

*Substitute boiler Waggon type? made by de Kuyperme West Paslack WP 14185 and not tested survey has been filled.*

Survey Fee ... *10.00* : } When applied for, *29.5.1941*

Travelling Expenses (if any) *£* : } When received, *19*

*[Signature]*  
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute *FRI. 11 JAN 1946*

Assigned *See minute on Fe. rpt.*

