

# REPORT ON BOILERS.

No. 13923

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Date of writing Report 12<sup>th</sup> March 1914 When handed in at Local Office 191 Port of Hamburg

No. in Survey held at Kiel Date, First Survey 17<sup>th</sup> Septbr. Last Survey 10<sup>th</sup> March 1914

Reg. Book. 32 Logg. on the Steel Co. Lr. "Jupiter" (Number of Visits 18) Gross 10073  
 Tons Net 5903

Master Dalldorf Built at Kiel By whom built Howaldtswerke When built 1914

Engines made at Kiel By whom made Howaldtswerke When made 1914

Boilers made at Kiel By whom made Howaldtswerke When made 1914

Registered Horse Power 651 Owners Deutsch Amerikan. Petroleum Ges. Port belonging to Hamburg

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Messrs Thyssen & Co., Mülheim

(Letter for record S) Total Heating Surface of Boilers 1345 sq. ft. Is forced draft fitted no No. and Description of Boilers 1 Single ended multitubular Working Pressure 120 lbs. Tested by hydraulic pressure to 240 lbs. Date of test 15.12.13

No. of Certificate 237 Can each boiler be worked separately yes Area of fire grate in each boiler 40 sq. ft. No. and Description of safety valves to each boiler 2 Spring loaded Area of each valve 7.06 sq. ins. Pressure to which they are adjusted 120 lbs.

Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler no

Smallest distance between boilers or uptakes and bunkers of woodwork Mean dia. of boilers 11' 9 3/4" Length 10' 2 1/8"

Material of shell plates Steel Thickness 7/32" Range of tensile strength 28-32 Tons Are the shell plates welded or flanged —

Descrip. of riveting: cir. seams lap, dbl. riv. long. seams dbl. butt. trip. riv. Diameter of rivet holes in long. seams 9" Pitch of rivets 5.9"

Lap of plates or width of butt straps 12 1/2 X 7" Per centages of strength of longitudinal joint rivets 120% Working pressure of shell by plate 84.6% rules 135.2 lbs. Size of manhole in shell 11.8 X 15.75" Size of compensating ring 26 X 30 X 3/4" No. and Description of Furnaces in each boiler 2 Morrisons Material Steel Outside diameter 45.3" Length of plain part top 3" Thickness of plates crown 7/32" bottom 5/32"

Description of longitudinal joint welded No. of strengthening rings none Working pressure of furnace by the rules 139 lbs. Combustion chamber plates: Material Steel Thickness: Sides 5/16" Back 5/16" Top 5/16" Bottom 7/16" Pitch of stays to ditto: Sides 7.87" Back 7.87"

Top 7.8 X 7.5" If stays are fitted with nuts or riveted heads nuts + riv. head. Working pressure by rules 145.3 lbs. Material of stays Steel Diameter at smallest part 1.13" Area supported by each stay 62 sq. in. Working pressure by rules 129 lbs. End plates in steam space: Material Steel Thickness 9/16"

Pitch of stays 21.7" How are stays secured dbl. riv. + wash. Working pressure by rules 25.5 lbs. Material of stays Steel Diameter at smallest part 3.06"

Area supported by each stay 470 sq. in. Working pressure by rules 16.5 lbs. Material of Front plates at bottom Steel Thickness 9" Material of Lower back plate Steel Thickness 9" Greatest pitch of stays 17.7" Working pressure of plate by rules 16.5 lbs. Diameter of tubes 3.28"

Pitch of tubes 4.4" Material of tube plates Steel Thickness: Front 9" Back 7.5" Mean pitch of stays 8.88" Pitch across wide water spaces 14.18" Working pressures by rules 145.5 lbs. Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 6 X 1.08" Length as per rule 26.75" Distance apart 7.5" Number and pitch of Stays in each 2 - 7.87"

Working pressure by rules 129.9 lbs. Superheater or Steam chest; how connected to boiler riveted Can the superheater be shut off and the boiler worked separately no Diameter 35.4" Length 35.4" Thickness of shell plates 5/16" Material Steel Description of longitudinal joint: lap Diam. of rivet holes 8.6" Pitch of rivets 3.16" Working pressure of shell by rules — Diameter of flue — Material of flue plates — Thickness —

If stiffened with rings — Distance between rings — Working pressure by rules — End plates: Thickness — How stayed —

Working pressure of end plates — Area of safety valves to superheater — Are they fitted with easing gear —

checked from "Ceda" report HOWALDTSWERKE Manufacturer.  
 Han. Rpt No. 13804. Schwaninger App. Deput.

Dates of Survey } During progress of work in shops - - } 9/8, 11/9, 17/9, 2/10, 28/10, 7/11, 29/11, 11/12, 17/12, 13  
 while building } During erection on board vessel - - - } 29/12, 14/1, 21/1, 7/1, 15/1, 22/1, 29/1, 10/2, 24/2, 27/2, 5/3 Total No. of visits 20

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) This Donkey Boiler has been built under Special Survey in accordance with the approved plan, the workmanship and material are of best quality. For further particulars please see the main Report on this Vessel's 1st Entry.

Survey Fee ... £ : : When applied for, 192  
 Travelling Expenses (if any) £ : : When received, 191

J. Köhler  
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI. MAR. 20. 1914

Assigned

