

# REPORT ON BOILERS.

No. 15563

Received at London Office

JUL 17 1923

Date of writing Report 5<sup>th</sup> July 1923 When handed in at Local Office 19 Port of HAMBURG  
 No. in Survey held at Rostock Date, First Survey 4<sup>th</sup> January Last Survey 4<sup>th</sup> July 1923.  
 Reg. Book. on the Steel S. Grete (Number of Visits 13) Gross 6568 Tons Net 3994.  
 Master ✓ Built at Rostock By whom built Actien Ges. Neptun When built 1923.  
 Engines made at Rostock By whom made Actien Gesellschaft Neptun When made 1923.  
 Boilers made at Rostock By whom made Actien Gesellschaft Neptun When made 1923.  
 Registered Horse Power ✓ Owners Carl Wohlenberg Port belonging to Hamburg.

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Mannemann-Rohrwerke, Abt. Schulz, Knauth, Henckingen.

(Letter for record S.) Total Heating Surface of Boilers 840 sqm <sup>9041 sq. ft.</sup> Is forced draft fitted yes No. and Description of Boilers 3, single ended, multitubular Working Pressure 214 lbs Tested by hydraulic pressure to 370 lbs Date of test 12/5 & 7/6/23.  
 No. of Certificate 337/333 Can each boiler be worked separately yes Area of fire grate in each boiler 2.24 sqm <sup>66 sq. ft.</sup> No. and Description of safety valves to each boiler 2, spring loaded Area of each valve 7088 sq. mm Pressure to which they are adjusted 214 lbs.  
 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 300 mm <sup>woodwork</sup> Mean dia. of boilers 4800 mm Length 3760 mm.  
 Material of shell plates steel Thickness 37.5 mm Range of tensile strength 45-53 kg Are the shell plates welded or flanged flanged  
 Descrip. of riveting: cir. seams double riv. long. seams quadr. riveted Diameter of rivet holes in long. seams 40 mm Pitch of rivets 520 mm.  
 Lap of plates or width of butt straps 886 mm Per centages of strength of longitudinal joint rivets 105% Working pressure of shell by rules 234 lbs plate 92%  
 Size of manhole in shell 400 x 300 mm Size of compensating ring 800 x 700 x 27.5 mm No. and Description of Furnaces in each boiler 3, Leighton Material steel Outside diameter 1310 mm Length of plain part top 250 mm Thickness of plates crown 19 mm bottom 350 bottom }  
 Description of longitudinal joint welded No. of strengthening rings 10 Working pressure of furnace by the rules 214 lbs Combustion chamber plates: Material steel Thickness: Sides 19 mm Back 17.5 mm Top 17.5 mm Bottom 19 mm Pitch of stays to ditto: Sides 200 mm Back 190 mm.  
 Top 250 mm If stays are fitted with nuts or riveted heads nuts Working pressure by rules 282 lbs Material of stays steel Area at smallest part 495 sq. mm Area supported by each stay 361 sq. mm Working pressure by rules 278 lbs End plates in steam space: Material steel Thickness 27 mm  
 Pitch of stays 400 mm How are stays secured double nuts Working pressure by rules 287 lbs Material of stays steel Area at smallest part 5026 sq. mm.  
 Area supported by each stay 1660 sq. mm Working pressure by rules 340 lbs Material of Front plates at bottom steel Thickness 27 mm Material of Lower back plate steel Thickness 27 mm Greatest pitch of stays 600 mm Working pressure of plate by rules 215 lbs Diameter of tubes 76 mm  
 Pitch of tubes 104 mm Material of tube plates steel Thickness: Front 27 mm Back 25 mm Mean pitch of stays 208 mm Pitch across wide water spaces 360 mm Working pressures by rules 212 lbs. Girders to Chamber tops: Material steel Depth and thickness of girder at centre 250 x 20 mm Length as per rule 880 mm Distance apart 200 mm Number and pitch of Stays in each 3, 200 mm.  
 Working pressure by rules 262 lbs Steam dome: description of joint to shell none % of strength of joint ✓  
 Diameter ✓ Thickness of shell plates ✓ Material ✓ Description of longitudinal joint ✓ Diam. of rivet holes ✓  
 Pitch of rivets ✓ Working pressure of shell by rules ✓ Crown plates ✓ Thickness ✓ How stayed ✓

UPERHEATER. Type Schmidt Date of Approval of Plan Standard type Tested by Hydraulic Pressure to 710 lbs  
 Date of Test 22<sup>nd</sup> June 1923 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler yes.  
 Diameter of Safety Valve 50 mm Pressure to which each is adjusted 214 lbs Is Easing Gear fitted yes.

The foregoing is a correct description,  
**Actien-Gesellschaft „Neptun“**  
**Schiffswerft u. Maschinenfabrik** Manufacturer.

Dates of Survey } During progress of work in shops - - } 4/1, 7/2, 3/3, 16/3, 28/3, 12/5, 7/6/23. Is the approved plan of boiler forwarded herewith yes.  
 while building } During erection on board vessel - - - } 1/6, 22/6, 27/6, 30/6, 3/7, 4/7/23. Total No. of visits 13.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The material and workmanship are of good quality and when tested by hydraulic pressure to 370 lbs resp. 710 lbs the boilers and superheaters were found tight and sound in every respect.

Survey Fee ... .. £ : : } When applied for, ..... 19.  
 Travelling Expenses (if any) £ : : } When received, ..... 19.

Committee's Minute FRI. 3 AUG 1923  
 Assigned See other Ham 15563

*M. Stolle* 2020  
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 Lloyd's Register Foundation