

REPORT ON BOILERS.

No. 24168

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Date of writing Report 22/8/39 10 When handed in at Local Office 10 Port of **HAMBURG**

No. in Survey held at **HAMBURG** Date, First Survey 15/6/38 Last Survey 11/8/39 19

1861 on the **Steel Scr. "VACPORT"** (Number of Visits 31) Gross 6774 Tons Net 3970

Master Built at **HAMBURG** By whom built **Howaldtswerke A.G.** Yard No. 744 When built 1939

Engines made at **Berlin - Tegel** By whom made **Rheinmetall-Borsig A.G.** Engine No. 8338 When made 1939

Boilers made at **HAMBURG** By whom made **Howaldtswerke A.G.** Boiler No. 1553/4/5 When made 1939

Nominal Horse Power 550 Owners **Standard Transportation Co. Ltd.** Port belonging to **London**

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel **Mannesmannröhren-Werke, Heint. Bierwies-Hütte, Huckingen.** (Letter for Record **S**)

Total Heating Surface of Boilers **3x260 = 780 m²** 8393 Is forced draught fitted **yes** Coal or Oil fired **oil**

No. and Description of Boilers **3 Scotch Marine Boilers** Working Pressure **228 lb**

Tested by hydraulic pressure to **392 lb** Date of test **2/12/38** No. of Certificate **718/19/20** Can each boiler be worked separately **yes**

Area of Firegrate in each Boiler **oil fired** No. and Description of safety valves to each boiler **1, 2 springs loaded**

Area of each set of valves per boiler { per Rule **9280 mm²** as fitted **8396 mm²** Pressure to which they are adjusted **228 lb** Are they fitted with easing gear **yes**

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler **yes**

Smallest distance between boilers or uptakes and bunkers or woodwork **600 mm** Is oil fuel carried in the double bottom under boilers **NO**

Smallest distance between shell of boiler and tank top plating **600 mm** Is the bottom of the boiler insulated **yes**

Largest internal dia. of boilers **4700 mm** Length **3620 mm** Shell plates: Material **O.H. Steel** Tensile strength **47.82 kg/mm²**

Thickness **38 mm** Are the shell plates welded or flanged **flanged** Description of riveting: circ. seams { end **D.F.** inter. **yes**

Long. seams **double butt straps** Diameter of rivet holes in { circ. seams **36.5 mm** long. seams **37.8 mm** Pitch of rivets { **99.9 mm** **241 mm**

Percentage of strength of circ. end seams { plate **63.4** rivets **42.2** Percentage of strength of circ. intermediate seam { plate **✓** rivets **✓**

Percentage of strength of longitudinal joint { plate **84.4** rivets **86.6** combined **100.2** Working pressure of shell by Rules **16.92 kg/cm²**

Thickness of butt straps { outer **32 mm** inner **32 mm** No. and Description of Furnaces in each Boiler **3 MORISON**

Material **O.H. Steel** Tensile strength **41 ÷ 47 kg/mm²** Smallest outside diameter **1188.8 mm**

Length of plain part { top **288 mm** bottom **19.4 mm** Thickness of plates { crown **19.4 mm** bottom **19.4 mm** Description of longitudinal joint **lap welded water gas**

Dimensions of stiffening rings on furnace or c.c. bottom **none** Working pressure of furnace by Rules **16.9 kg/cm²**

End plates in steam space: Material **O.H. Steel** Tensile strength **41 ÷ 47 kg/mm²** Thickness **30 mm** Pitch of stays **450 × 405 mm**

How are stays secured **screwed through plates, nuts in- and outside** Working pressure by Rules **16.08 kg/cm²**

Tube plates: Material { front **O.H. Steel** back **O.H. Steel** Tensile strength { **41 ÷ 47 kg/mm²** Thickness { **29 mm** **24 mm**

Mean pitch of stay tubes in nests **330 × 220 mm** Pitch across wide water spaces **368 mm** Working pressure { front **16.38 kg/cm²** back **19.48 kg/cm²**

Girders to combustion chamber tops: Material **O.H. Steel** Tensile strength **41 ÷ 47 kg/mm²** Depth and thickness of girder

at centre **220, 2 × 25 mm** Length as per Rule **770 mm** Distance apart **max. 210 mm** No. and pitch of stays

in each **3, 200 mm** Working pressure by Rules **20.5 kg/cm²** Combustion chamber plates: Material **O.H. Steel**

Tensile strength **41 ÷ 47 kg/mm²** Thickness: Sides **18 mm** Back **18 mm** Top **18 mm** Bottom **25 mm**

Pitch of stays to ditto: Sides **200 × 200 mm** Back **192.5 × 220 mm** Top **200 × 210 mm** Are stays fitted with nuts or riveted over **with nuts**

Working pressure by Rules **19.95 18.85 19.14** Front plate at bottom: Material **O.H. Steel** Tensile strength **41 ÷ 47 kg/mm²**

Thickness **29 mm** Lower back plate: Material **O.H. Steel** Tensile strength **41 ÷ 47 kg/mm²** Thickness **23.8 mm**

Pitch of stays at wide water space **4 × 40 mm** Are stays fitted with nuts or riveted over **with nuts & d.b.g. plate 22 mm**

Working Pressure **29.2 kg/cm²** Main stays: Material **O.H. Steel** Tensile strength **41 ÷ 47 kg/mm²**

Diameter { At body of stay, **74.6 mm** or **80. mm** No. of threads per inch **6** Area supported by each stay **405 × 405 mm²**

Working pressure by Rules **17.48 kg/cm²** Screw stays: Material **O.H. Steel** Tensile strength **41 ÷ 47 kg/mm²**

Diameter { At turned off part, **38.4 mm** or **42. mm** No. of threads per inch **9** Area supported by each stay **192.5 × 220 mm**

