

# REPORT ON BOILERS.

No. 23097

Received at London Office

MAR 22 1939

Writing Report 16<sup>th</sup> March 1939 When handed in at Local Office

Port of **HAMBURG**

Survey held at

**HAMBURG**

Date, First Survey 1<sup>st</sup> October 1938 Last Survey 10<sup>th</sup> March 1939

1933 on the Twin Screw Motor Vessel

## BRITANNIA

(Number of Visits 6) Tons { Gross 9977 Net 5801

Built at **HAMBURG** By whom built Deutsche Werft A.G. Yard No. 217 When built 1939

Machinery made at **Angsburg** By whom made Maschinenfabrik Augsburg-Kunling Engine No. 681459/460 When made 1939

Boilers made at **HAMBURG** By whom made Deutsche Werft A.G. Boiler No. 833/834 When made 1939

Indicated Horse Power 1170 Owners The Texas Co. (Norway) A/S Port belonging to Oslo

### WASTE HEAT LAMONT DONKEY BOILER COIL SYSTEM. ~~TUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY~~

Manufacturers of Steel Tubes: Mannesmannröhrenwerke Abt. Renscheid. Headers: Gutehoffnungshütte A.G. Werk Stalderade (Letter for Record 5)

Total Heating Surface of Boilers each boiler 100 sq. metres Is forced draught fitted - Coal or Oil fired exhaust gas fired

Name and Description of Boilers Two Waste Heat La Mont Donkey Boiler Coil Systems Working Pressure 12 kg/cm<sup>2</sup> 171 lb

Tested by hydraulic pressure to 307 lbs Date of test 5. 11. 38 No. of Certificate 714, 715 Can each boiler be worked separately with cylinder donkey?

Area of Firegrate in each Boiler - No. and Description of safety valves to each boiler one, spring loaded

Area of each set of valves per boiler { as fitted } 35 mm φ Pressure to which they are adjusted 12 kg/cm<sup>2</sup> 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 or woodwork - Is oil fuel carried in the double bottom under boilers -

Smallest distance between shell of boiler and tank top plating - Is the bottom of the boiler insulated -

Largest internal dia. of boilers 1280 mm Length 3300 mm HEADERS Shell plates: Material S-M-STEEL Tensile strength 44-50 kg/mm<sup>2</sup>

Thickness of shell 10 mm Are the shell plates welded or flanged yes Description of riveting: circ. seams { end - inter -

No. of coils { 4 double coils 3 treble coils 2 quadruple coils } Diameter of rivet holes in { coil tubes } 32 / 26 mm Thickness of shell 3 mm

Percentage of strength of circ. end seams { plate rivets } Percentage of strength of circ. intermediate seam { plate rivets }

Percentage of strength of longitudinal joint { plate rivets combined } Working pressure of shell by Rules 16.25 kg/cm<sup>2</sup>

Thickness of butt straps { outer inner } No. and Description of Furnaces in each Boiler

Material Tensile strength Smallest outside diameter

Length of plain part { top bottom } Thickness of plates { crown bottom } Description of longitudinal joint

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules

Head plates in steam space: Material Tensile strength Thickness Pitch of stays

How are stays secured Working pressure by Rules

Side plates: Material { front back } Tensile strength Thickness

Lean pitch of stay tubes in nests Pitch across wide water spaces Working pressure { front back }

Orders to combustion chamber tops: Material Tensile strength Depth and thickness of girder

Centre Length as per Rule Distance apart No. and pitch of stays

Working pressure by Rules Combustion chamber plates: Material

Tensile strength Thickness: Sides Back Top Bottom

Pitch of stays to ditto: Sides Back Top Are stays fitted with nuts or riveted over

Working pressure by Rules Front plate at bottom: Material Tensile strength

Thickness Lower back plate: Material Tensile strength Thickness

Pitch of stays at wide water space Are stays fitted with nuts or riveted over

Working Pressure Main stays: Material Tensile strength

Diameter { At body of stay, or Over threads } No. of threads per inch Area supported by each stay

Working pressure by Rules Screw stays: Material Tensile strength

Diameter { At turned off part, or Over threads } No. of threads per inch Area supported by each stay



