

REPORT ON BOILERS.

No. 24176^a

Received at London Office

Date of writing Report 19 1939 When handed in at Local Office 19 1939 Port of Hamburg

No. in Survey held at 83490 Reg. Book. S.H.D. Date, First Survey 1939 Last Survey 1939

83490 on the SINGLE SCREW MOTOR VESSEL "DRUPA" (Number of Visits 8102) Tons { Gross 8102 Net 4754

Master Built at HAMBURG By whom built DEUTSCHE WERFT. A.G. Yard No. 218 When built 1939

Engines made at AUGSBURG By whom made MASCHFAB. AUGSBURG - NÜRNBERG Engine No. When made 1939

Boilers made at HAMBURG By whom made DEUTSCHE WERFT A.G. Boiler No. 766 When made 1939

Nominal Horse Power 502 Owners Port belonging to

MULTITUBULAR BOILERS ~~MAIN MULTITUBULAR~~ DONKEY.

Manufacturers of Steel (Letter for Record S)

Total Heating Surface of Boilers 2515 sq. ft. Is forced draught fitted Coal or Oil fired Oil

No. and Description of Boilers One Cylindrical multitubular Working Pressure 180 lb/in²

Tested by hydraulic pressure to 320 lb/in² Date of test No. of Certificate ? Can each boiler be worked separately ?

Area of Firegrate in each Boiler Oil fired No. and Description of safety valves to each boiler 1 double

Area of each set of valves per boiler { per Rule 16.1 sq. ins as fitted 20.6 } Pressure to which they are adjusted ? Are they fitted with easing gear ?

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

Smallest distance between boilers or uptakes and bunkers or woodwork ? Is oil fuel carried in the double bottom under boilers No

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

Largest internal dia. of boilers 4362 mm Length 3505 mm Shell plates: Material Steel Tensile strength 47-53 Kgs/cm²

Thickness 29 mm Are the shell plates welded or flanged No Description of riveting: circ. seams { end D.R. 19b inter. }

long. seams T.R. D.B.S. Diameter of rivet holes in { circ. seams 32 mm long. seams 32 mm } Pitch of rivets { 100 mm 245 mm }

Percentage of strength of circ. end seams { plate 68 rivets 42.5 } Percentage of strength of circ. intermediate seam { plate 85 rivets 92.6 }

Percentage of strength of longitudinal joint { plate 85 rivets 92.6 combined 88.7 } Working pressure of shell by Rules 186 lb/in²

Thickness of butt straps { outer 29 mm inner 29 mm } No. and Description of Furnaces in each Boiler 3 Morrison corrugated

Material Steel Tensile strength 41-47 Kgs/cm² Smallest outside diameter 1080 mm

Length of plain part { top 217 mm bottom 217 mm } Thickness of plates { crown 15 mm bottom 15 mm } Description of longitudinal joint Welded

Dimensions of stiffening rings on furnace or c.c. bottom X Working pressure of furnace by Rules 202 lbs/in²

End plates in steam space: Material Steel Tensile strength 41-47 Kgs/cm² Thickness 29 mm Pitch of stays 420 x 410 mm

How are stays secured Double nuts & washers Working pressure by Rules 288 lbs/in²

Tube plates: Material { front Steel back Steel } Tensile strength { 41-47 Kgs/cm² 41-47 Kgs/cm² } Thickness { 26 mm 26 mm }

Mean pitch of stay tubes in nests 208 mm Pitch across wide water spaces 360 x 208 mm Working pressure { front 570 lbs/in² back " }

Girders to combustion chamber tops: Material Steel Tensile strength 47-53 Kgs/cm² Depth and thickness of girder

at centre 230 x 24 mm Length as per Rule 774 mm Distance apart 180 mm No. and pitch of stays

in each 2 x 210 mm Working pressure by Rules 192 lbs/in² Combustion chamber plates: Material Steel

Tensile strength 41-47 Kgs/cm² Thickness: Sides 19 mm Back 20 mm Top 19 mm Bottom 25 mm Margin - nuts

Pitch of stays to ditto: Sides 200 x 220 mm Back 200 x 200 mm Top 210 x 180 mm Are stays fitted with nuts or riveted over Others - Riveted

Working pressure by Rules 222 lbs/in² Front plate at bottom: Material Steel Tensile strength 41-47 Kgs/cm²

Thickness 26 mm Lower back plate: Material Steel Tensile strength 41-47 Kgs/cm² Thickness 26 mm

Pitch of stays at wide water space 360 x 200 mm Are stays fitted with nuts or riveted over Margin - nuts. Others - riveted

Working Pressure 262 lbs/in² Main stays: Material Steel Tensile strength 47-53 Kgs/cm²

Diameter { At body of stay, 76 mm or } No. of threads per inch 8 Area supported by each stay 410 x 420 mm

Working pressure by Rules 258 lbs/in² Screw stays: Material Steel Tensile strength 41-47 Kgs/cm²

Diameter { At turned off part, 39 mm or } No. of threads per inch 9 Area supported by each stay 208 x 200 mm

