

REPORT ON BOILERS.

BREMEN No. 1925.
HAM No. 22159

*Copied from Hamburg Rpt. 22159
now Completed Bremen*

Received at London Office

JUN 26 1937

BREMEN 24. 6. 37

Date of writing Report 9th Jan. 1937 When handed in at Local Office

19

Port of Hamburg & Bremen

No. in Survey held at HAMBURG & WESERMÜNDE

Date, First Survey 20th Novemb 1936 Last Survey 14th Dec. 1936

8442 on the Single Sc. Vessel

GAMBIAN

(Number of Visits 4 + 4)

Gross 5452
Tons Net 3106

Built at WESERMÜNDE By whom built DESCHIMAG, WERK: SEEBECK Yard No. 571 When built 1937

Engines made at BREMEN By whom made DESCHIMAG, WERK: A.G. WEIER Engine No. 138/139 When made 1937

Boilers made at HAMBURG By whom made DEUTSCHE WERFT A.G. Boiler No. 64/92 When made 1937

Nominal Horse Power 577 Owners LEVER BROS. TORONTO. Port belonging to FREETOWN

WASTE HEAT LA-MONT DONKEY BOILER COIL SYSTEM

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel COILS: *HERSCHMANN Werke & Co. Abt. Eisenmanufaktur*
MANNESSMANN Röhrenwerke, Witten

(Letter for Record 5)

Total Heating Surface of Boilers 40 m²

Is forced draught fitted ☒

Coal or Oil fired *Waste gas heated*

No. and Description of Boilers 2, Waste heat La Mont Donkey Boilers

Working Pressure 7 kg/cm²

Tested by hydraulic pressure to 14 kg/cm² Date of test 14. 12. 36 No. of Certificate 646/47

Can each boiler be worked separately *only in connection with a Vertical D. Boiler*

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler 1 spring loaded

Area of each set of valves per boiler *per Rule as fitted 707 cm² 30 f*

Pressure to which they are adjusted 7 kg/cm² Are they fitted with easing gear ☒

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 970 mm *HEIGHT 2700 mm*

Length 2700 mm

DISTRIBUTOR *Material 1. m. steel*

Tensile strength 41-47 kg/cm²

Are the shell plates welded or flanged ☒

Description of riveting: circ. seams ☒ end ☒ inter.

Thickness of shell plates *100 mm 2 double coils 12 quadruple 1 triple*

Diameter of rivet holes in circ. seams 26/32 mm

Pitch of rivets 32

Percentage of strength of circ. end seams ☒

Percentage of strength of circ. intermediate seam ☒

Percentage of strength of longitudinal joint ☒

Working pressure of shell by Rules

Thickness of butt straps ☒

No. and Description of Furnaces in each Boiler

Material Tensile strength Smallest outside diameter

Length of plain part ☒ Thickness of plates ☒ Description of longitudinal joint

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

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

How are stays secured Working pressure by Rules

Tube plates: Material ☒ Tensile strength Thickness

Mean pitch of stay tubes in nests Pitch across wide water spaces Working pressure ☒

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

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

in each 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 ☒ No. of threads per inch Area supported by each stay

Working pressure by Rules Screw stays: Material Tensile strength

Diameter ☒ No. of threads per inch Area supported by each stay

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Foundation

Working pressure by Rules _____ Are the stays drilled at the outer ends _____ Margin stays: Diameter { At turned off part, or Over threads _____ Working pressure by Rules _____

No. of threads per inch _____ Area supported by each stay _____ Thickness { _____ No. of threads per inch _____

Tubes: Material _____ External diameter { Plain _____ Stay _____ Working pressure by Rules _____ Manhole compensation: Size of opening _____

Pitch of tubes _____ Working pressure by Rules _____ No. of rivets and diameter of rivet holes _____

shell plate _____ Section of compensating ring _____ Depth of flange if manhole flanged _____ Steam Dome: Material _____

Outer row rivet pitch at ends _____ Tensile strength _____ Thickness of shell _____ Description of longitudinal joint _____

Diameter of rivet holes _____ Pitch of rivets _____ Percentage of strength of joint { Plate _____ Rivets _____

Internal diameter _____ Working pressure by Rules _____ Thickness of crown _____ No. and diameter _____

stays _____ Inner radius of crown _____ Working pressure by Rules _____

How connected to shell _____ Size of doubling plate under dome _____ Diameter of rivet holes and _____

of rivets in outer row in dome connection to shell _____

Type of Superheater _____ Manufacturers of { Tubes _____ Steel forgings _____ Steel castings _____

Number of elements _____ Material of tubes _____ Internal diameter and thickness of tubes _____

Material of headers _____ Tensile strength _____ Thickness _____ Can the superheater be shut off _____

the boiler be worked separately _____ Is a safety valve fitted to every part of the superheater which can be shut off from the boiler _____

Area of each safety valve _____ Are the safety valves fitted with easing gear _____ Working pressure as _____

Rules _____ Pressure to which the safety valves are adjusted _____ Hydraulic test pressure _____

tubes _____ forgings and castings _____ and after assembly in place _____

valves fitted to free the superheater from water where necessary _____ Are drain cocks _____

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with _____

The foregoing is a correct description,
 Signl. DEUTSCHE WERFT A.G. Manufacturer malleus

Dates of Survey { During progress of work in shops - - } Nov. 20. 25. 26. Dec. 14 Are the approved plans of boiler and superheater forwarded herewith 15. 12. 1917
 { During erection on board vessel - - } 2/4. 3/5. 5/6. 8/6. 17 (If not state date of approval.) 30. 9. 18
 Total No. of visits 4 + 4

Is this Boiler a duplicate of a previous case no If so, state Vessel's name and Report No. _____

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These Waste Heat Donkey Boilers
Boil Systems have been constructed under Special Permit, the approved plans,
and the Permit's letters. The materials used in the construction are of good
quality and have been tested by the Port Surveyors. The workmanship is good.
These W.H.D.B. Boil Systems are eligible in my opinion for notation in the Port Reg
Book with + D.B. pressure 100 lbs. when these D.B. have been satisfactorily fitted
on board and tested under steam.

The 2 Re Mount Boilers have been satisfactorily installed on board.
During the vessel's trial trip they have been tested under steam and found
tight and in order. Their Safety Valves were found to be of sufficient rise and
have been adjusted to 100 lbs of pressure. Thickness of adjusting washers

Port 7.5 Z
 Starb. 8.0 Z Pressure 25.6

Survey Fee ... RM 168.00 Hamburg
 Travelling Expenses (if any) RM : 5.00 { When applied for, 11. 11. 1917
 { When received, 9. 2. 1918 } see also Ham 22159
R. Carstensen

Sign. H. SCHNEIDER.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI 2 JUL 1917

Assigned See other F. B. report