

# REPORT ON BOILERS.

Primen  
No. 1935

Copied from Hamburg Rpt. 22240  
now completed in Primen

JUL 28 1937

Primen 23<sup>rd</sup> July 1937

Date of writing Report 13<sup>th</sup> Feb 1937 When handed in at Local Office

Received at London Office

Port of HAMBURG & BREMEN

No. in Survey held at HAMBURG & WESERMÜNDE  
Reg. Book.

Date, First Survey 7<sup>th</sup> Jan.

Last Survey 23<sup>rd</sup> Jan 1937

90466 on the Singl. Sc. Vessel TAKORADIAN

(Number of Visits 5)  
Gross 5452  
Tons Net 3106

Master Built at WESERMÜNDE By whom built DESCHIMAG, SEEBECK Yard No. 572 When built 1937

Engines made at BREMEN By whom made DESCHIMAG, WERK: AG. WESER Engine No. 140/41 When made 1937

Boilers made at HAMBURG By whom made DEUTSCHE WERFT A.G. Boiler No. 693/4 When made 1937

Nominal Horse Power Owners ELMINA CO LTD. ACCRA Port belonging to FREETOWN

## WASTE HEAT LA MONT DONKEY BOILER COIL SYSTEM

### MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

HEADERS: Kleichner Werke A.-G. Ost. Georgsmarienhütte

Manufacturers of Steel TUBES: Mannmann Röhrenwerke, Witten

(Letter for Record 5)

Total Heating Surface of Boilers 40 m<sup>2</sup> Is forced draught fitted

Coal or Oil fired waste gas heater

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

Working Pressure 7 kg/cm<sup>2</sup>

Tested by hydraulic pressure to 14 kg/cm<sup>2</sup> Date of test 23. 1. 37 No. of Certificate 653/54

Can each boiler be worked separately only in combination with vertical Donkey 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 2, 30 p Pressure to which they are adjusted 100 lb

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

HEIGHT Length 2700 2

HEADERS

Shell plates: Material round less Tensile strength 41-47 kg/cm<sup>2</sup>

Thickness 100 2 mm. 60 2 mm. Are the shell plates welded or flanged

Description of riveting: circ. seams {end inter.

2 donkey coils  
2 quadruple coil  
10 of coils 121 x 121

Diameter of rivet holes in {circ. seams 26/32 2

Pitch of rivets 3 2

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 16.2 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

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

How are stays secured Working pressure by Rules

Tube plates: Material {front back Tensile strength Thickness

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

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

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

003525-003532-5265

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

No. of threads per inch Area supported by each stay Working pressure by Rules

Tubes: Material External diameter { Plain Stay Thickness { No. of threads per inch

Pitch of tubes Working pressure by Rules Manhole compensation: Size of opening in

shell plate Section of compensating ring No. of rivets and diameter of rivet holes

Outer row rivet pitch at ends Depth of flange if manhole flanged Steam Dome: Material

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 of

stays Inner radius of crown Working pressure by Rules

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

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 and

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 per

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

tubes forgings and castings and after assembly in place Are drain cocks

valves fitted to free the superheater from water where necessary

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

The foregoing is a correct description,

*signd.* DEUTSCHE WERFT

Manufacture

Dates of Survey { During progress of work in shops - - } *January 7. 8. 14. 21. 23.*  
while building { During erection on board vessel - - - } *25.6. 2.7. 17.7. 21.7. 27*

Are the approved plans of boiler and superheater forwarded herewith *2. 10. 36*  
(If not state date of approval.)

Total No. of visits *5 + 4*

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

B.M.N. 1925  
A.M. 22159

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *Materials and workmanship of these*

*Waste Heat Donkey Boilers (Coil System) are of good quality. They have been constructed under Special Survey, in accordance with the appr. plans and the Purday's letter.*

*The materials used in the construction are made at works recognised by the Committee and tested by the Port Surveyors. These W.H.D.B. are eligible in my opinion for notation + D.B. premium 100 lbs.*

*Both W.H.D. Boilers are shipped to Wismaründe where they will be fitted on board of Muns. Deschimag yard No 572*

*These two La Mont Boilers have been satisfactorily installed on board. During the recent trial trip they have been tested under steam and found tight and in order. Their safety valves were found to be of sufficient size and have been adjusted to 100 lbs of pressure.*

*Witnessed by adjusting washers:*

*Per 10.52 start. 72*

*S. Carstensen*

Survey Fee ... .. *RM 108.00*

Travelling Expenses (if any) *5.00*

*Hamberg*  
When applied for, *11. 3. 1937*

When received, *13.4 1937*

*signd.* F. WITT.

Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute *FRI 6 AUG 1937*

Assigned *See other F.E. rpt*



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