

REPORT ON BOILERS.

No. 22159

Received at London Office 14 JAN 1937

of writing Report 9th Jan. 1937 When handed in at Local Office 10 Port of Hamburg

in Survey held at Hamburg Date, First Survey 20th Nov. 1936 Last Survey 14th Decemb. 1936

(Number of Visits 4) } Gross
Tons } Net

ter Built at Wesermünde By whom built Messrs. Deschimag Seehafen Yard No. 571 When built 1937

diameter By whom made _____ Engine No. _____ When made _____

s and plates made at Hamburg By whom made Messrs. Deutsche Werft A.G. Boiler No. 691/92 When made 1936

inal Horse Power _____ Owners United Africa Co. Port belonging to Liverpool

Waste Heat La Mont Donkey Boiler Coil System:

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Headers: - Klöckner Werke A.G. Abt. Georgsmarienhütte.

Manufacturers of Steel Tubes: - Mannesmann Röhren-Werke, Witten. (Letter for Record 5)

total Heating Surface of Boilers 40 m² Is forced draught fitted Coal or Oil fired Waste Gas

and Description of Boilers 2 Waste Heat La Mont Donkey Boilers Working Pressure 7 Kgs/cm²

tested by hydraulic pressure to 14 Kgs/cm² Date of test 14-12-36 No. of Certificate 646/47 Can each boiler be worked separately only in connect. with a perfect Donkey boiler.

Area of Firegrate in each Boiler _____ No. and Description of safety valves to each boiler 1; one spring loaded.

Area of each set of valves per boiler per Rule Pressure to which they are adjusted as fitted 707 mm = 300 Are they fitted with easing gear

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

Is oil fuel carried in the double bottom under boilers

Is the bottom of the boiler insulated

largest internal dia. of boilers 970 mm height = 2700 mm Distributor 5.11. steel Shell plates: Material Round bars Tensile strength 41-47 Kgs/mm²

Are the shell plates welded or flanged Description of riveting: circ. seams end inter.

Diameter of of coil tubes circ. seams 26 inside Thickness 32 mm. Pitch of rivets 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 Tubes shell by Rules 19.8 Kgs/cm²

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 crow 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 _____

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 _____

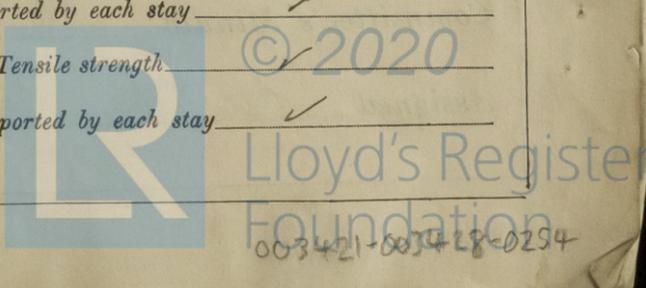
Pitch of stays at wide water space _____ Are stays fitted with nuts or riveted over _____

Working Pressure _____ Main stays: Material _____ Tensile strength _____

Diameter 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 _____



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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 _____ Working pressure by Rules _____

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

Tubes: Material _____ External diameter { Plain _____ Stay _____ Thickness { _____ No. of threads per inch _____ Working pressure by Rules _____

Pitch of tubes _____

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 _____ **Manhole compensation:** Size of opening _____

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 rivets _____

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

How connected to shell _____ Size of doubling plate under dome _____

of rivets in outer row in dome connection to shell _____ Diameter of rivet holes and _____

Type of Superheater _____ Manufacturers of { Tubes _____ 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 _____, castings _____ and after assembly in place _____ Are drain cocks or 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 _____

The foregoing is a correct description,
DEUTSCHE WERFT
 AKTIENGESELLSCHAFT
 Manufacturers

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 30/9/37 (If not state date of approval.)
 while building { During erection on board vessel - - - ✓ Total No. of visits 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 and the Secretary's letters. The materials used in the construction are of good quality and have been tested by the Society's Surveyors. The workmanship is good. These W.H.D.B. Coil systems are eligible in my opinion for notation in the Society's Register Book, with + D.B. pressure 100 lbs. when these D.B. have been satisfactorily fitted onboard and tested under steam.*

Survey Fee ... Rem. 168.00 When applied for, M^o Jan 1937
 Travelling Expenses (if any) Rem. : 5.00 When received, 19

M. M. M. M.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **FRI 2 JUL 1937**
 Assigned *See Ann 1935*