

REPORT ON BOILERS.

No. 22238

Received at London Office 17 MAR 1937

Date of writing Report 11th March 1937 When handed in at Local Office 10 Port of Hamburg

No. in Reg. Book Survey held at Hamburg Date, First Survey 8th January Last Survey 18th February 1937

on the (Number of Visits 10) Gross Tons Net

Built at Wesermünde By whom built Deschimag "Seelack" Wesermünde Yard No. 578 When built 1937

Engines made at By whom made Engine No. When made

Boilers made at Hamburg By whom made Messrs. Deutsche Werft A.G. Boiler No. 696 When made 1937

Owners Port belonging to

VERTICAL DONKEY BOILER.

Made at Hamburg By whom made Messrs. Deutsche Werft A.G. Boiler No. 696 When made 1937 Where fixed

Manufacturers of Steel Messrs. Eisenhüttenwerke Abt. Walzwerk Oberhausen.

Total Heating Surface of Boiler 23 m² Is forced draught fitted yes Coal or Oil fired Oil

No. and Description of Boilers one Vertical Donkey Boiler Working pressure 7 kgs/sq cm

Tested by hydraulic pressure to 14 kgs/sq cm Date of test 18-3-37 No. of Certificate 657

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

Area of each set of valves per boiler per rule 1240 mm² Pressure to which they are adjusted as fitted 3/50 mm² Are they fitted with easing gear

State whether steam from main boilers can enter the donkey boiler no Smallest distance between boiler or uptake and bunkers

Woodwork Is oil fuel carried in the double bottom under boiler Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated Largest internal dia. of boiler 1400 mm Height 3325 mm

Shell plates: Material S.M. Steel Tensile strength 41-47 kgs/sq mm Thickness 10 mm

Are the shell plates welded or flanged flanged Description of riveting: circ. seams single row long. seams two rows

Dia. of rivet holes in circ. seams 20 mm Pitch of rivets 48 mm Percentage of strength of circ. seams plate 58.3% of Longitudinal joint plate 69.4%
long. seams 20 mm 65.5 mm rivets 57.4% rivets 84.2%
 combined 81%

Working pressure of shell by rules 7.95 kgs/sq cm Thickness of butt straps outer 10 inner 10

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat yes Material S.M. Steel

Tensile strength 41-47 kgs/sq mm Thickness 12 mm Radius 1120 mm Working pressure by rules 8.75 kgs/sq cm

Description of Furnace: Plain, spherical, or dished crown yes Material S.M. Steel Tensile strength 41-47 kgs/sq mm

Thickness 15 mm External diameter top 1050 mm Length as per rule 1150 mm Working pressure by rules 7.85 kgs/sq cm
bottom 1150 mm

Pitch of support stays circumferentially ✓ and vertically ✓ Are stays fitted with nuts or riveted over ✓

Diameter of stays over thread ✓ Radius of spherical or dished furnace crown ✓ Working pressure by rule ✓

Thickness of Ogee Ring 15 mm Diameter as per rule D 1400 mm Working pressure by rule 7.85 kgs/sq cm
a 1150 mm

Combustion Chamber: Material S.M. Steel Tensile strength 41-47 kgs/sq mm Thickness of top plate 15 mm

Radius if dished 1120 mm Working pressure by rule 4.1 kgs/sq cm Thickness of back plate 15 mm Diameter if circular 1150 mm

Length as per rule 1150 mm Pitch of stays 180/180 mm Are stays fitted with nuts or riveted over filled with nuts

Diameter of stays over thread 26.17 mm Working pressure of back plate by rules 10.4 kgs/sq cm

Tube Plates: Material front S.M. Steel Tensile strength 41-47 kgs/sq mm Thickness 18 mm Mean pitch of stay tubes in nests 178/267 mm
back S.M. Steel 41-47 kgs/sq mm 18 mm

Comprising shell, Dia. as per rule front 89 mm Pitch in outer vertical rows 89 mm Dia. of tube holes FRONT stay 70 mm BACK stay 63.5 mm
back 89 mm plain 63.5 mm plain 63.5 mm

Each alternate tube in outer vertical rows a stay tube ✓ Working pressure by rules front 9.56 kgs/sq cm
back 9.56 kgs/sq cm

Stays to combustion chamber tops: Material ✓ Tensile strength

Position and thickness of girder at centre ✓ Length as per rule

Distance apart ✓ No. and pitch of stays in each ✓ Working pressure by rule

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Crown 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 S.M. Steel Tensile strength 41.47 kgs/sq mm Diameter at turned off part, 33.17 mm or over threads, 26.17 mm No. of threads per inch 9

Area supported by each stay 62500 Working pressure by rules as approved Are the stays drilled at the outer ends no

Tubes: Material S.M. Steel External diameter plain 63.5 mm stay 70 mm Thickness 3.25 mm 8.00 mm

No. of threads per inch 9 Pitch of tubes 89/89 mm Working pressure by rules 12.5 kgs/sq cm

Manhole Compensation: Size of opening in shell plate 300/400 Section of compensating ring 600/200/20 mm No. of rivets and diam

of rivet holes 27 rivets 20 mm φ Outer row rivet pitch at ends 135 mm Depth of flange if manhole flanged

Uptake: External diameter Thickness of uptake plate

Cross Tubes: No. External diameters Thickness of plates

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

The foregoing is a correct description,

DEUTSCHE WERFT

AKTIENGESELLSCHAFT

Manufactur

Galen in Marne

Dates of Survey while building

During progress of work in shops - 8th/14th/20th/23rd/30th January.

During erection on board vessel - 1st/6th/8th/17th/18th February 1937

Is the approved plan of boiler forwarded herewith 2. 10. 36 (If not state date of approval.)

Total No. of visits 10

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **Material and workmanship of this vertical donkey boiler are of good quality. The materials used in it's construction are made at Work recognised by the Committee and tested by the Society's Survey in accordance with the requirements of the Rules.**

This donkey boiler havind been made under Special Survey in conformity with the approved plan, the Secretary's Letter and otherwise in compliance with the requirements of the Rules is eligible in my opinion to be classed in the Society's Rule Book with the notation:- **+D.B. pressure 7 kgs/sq.cm.**

This donkey boiler has been shipped to **Flensburg** where it will be fitted on board of the vessel No 572 now under construction:-

Survey Fee ... Rm 84:00 : When applied for. 12th March 1937

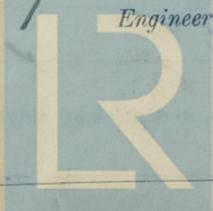
Travelling Expenses (if any) Rm 5:00 : When received. 16.4 1937 378,614

H. Pehlthauer

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI 6 AUG 1937

Assigned Su Ann 1935



Lloyd's Register Foundation