

# REPORT ON BOILERS.

Received at London Office

Date of writing Report 27th Aug 41 When handed in at Local Office 19 41 Port of Stockholm

No. in Survey held at Norköping & Stockholm Date, First Survey 11.9.40 Last Survey 21.8.41

Reg. Book on the steel ss. motor-tanker "Glan" (Number of Visits 5) Tons } Gross 640  
Net 362

Built at Stockholm By whom built A/B Skensbergs Varv Yard No. 177 When built 1941

Engines made at Stockholm By whom made A/B Atlas-Diesel Engine No. 85889 When made 1941

Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓

Owners Rederi A/B Transocean Port belonging to Gothenburg

## VERTICAL DONKEY BOILER.

Made at Norköping By whom made V. Söderströms G. & A. A/B Boiler No. 1384 When made 1940 Where fixed ✓

Manufacturers of Steel Westa Jernverks A/B

Total Heating Surface of Boiler 10 m<sup>2</sup> Is forced draught fitted ✓ Coal or Oil fired Oil fired

No. and Description of Boilers One Rapid Donkey Boiler Working pressure 8 kgs/cm<sup>2</sup>

Tested by hydraulic pressure to 16 kgs/cm<sup>2</sup> Date of test 11.9.40 No. of Certificate 8162

Area of Firegrate in each Boiler 0.5 m<sup>2</sup> No. and Description of safety valves to each boiler 2 spring loaded safety valves

Area of each set of valves per boiler { per rule 22.68 cm<sup>2</sup> as fitted } Pressure to which they are adjusted 8 kgs/cm<sup>2</sup> Are they fitted with easing gear Yes

State whether steam from main boilers can enter the donkey boiler ✓ Smallest distance between boiler or uptake and bunkers or woodwork ✓ Is oil fuel carried in the double bottom under boiler Yes Smallest distance between base of boiler and tank top plating 650 mm. Is the base of the boiler insulated Yes<sup>†</sup> Largest internal dia. of boiler 850 mm. Height 9485 mm.

Shell plates: Material S. M. Steel Tensile strength 46.7 kgs/mm<sup>2</sup> Thickness 10 mm.

Are the shell plates welded or flanged ✓ Description of riveting: circ. seams { end single } long seams double

Dia. of rivet holes in { circ. seams 20 mm. } Pitch of rivets { 48 mm. } Percentage of strength of circ. seams { plate 58.4 } of Longitudinal joint { plate 70.0 }  
{ long seams 20 mm. } { 67 mm. } { rivets 50.9 } { rivets 79.2 }  
{ combined ✓ }

Working pressure of shell by rules 15.9 kgs/cm<sup>2</sup> Thickness of butt straps { outer ✓ } inner ✓

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

Tensile strength 41.9 kgs/mm<sup>2</sup> Thickness 13 mm. Radius 680 mm. Working pressure by rules 16 kgs/cm<sup>2</sup>

Description of Furnace: Plain, spherical, or dished crown Material S. M. Steel Tensile strength 38.9 kgs/mm<sup>2</sup>

Thickness 14.5 mm. External radius { top 754.5 mm } Length as per rule ✓ Working pressure by rules 11.2 kgs/cm<sup>2</sup>

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 10 mm. Diameter as per rule { D 810 mm } Working pressure by rule 21.1 kg./cm<sup>2</sup>  
{ d 760 mm }

Combustion Chamber: Material S. M. Steel Tensile strength 38.8 kgs/mm<sup>2</sup> Thickness of top plate 13 mm.

Radius if dished not dished Working pressure by rule ✓ Thickness of back plate 10 mm. Diameter if circular 330 to 380 mm.

Length as per rule ✓ Pitch of stays 265 x 140 mm. Are stays fitted with nuts or riveted over E.W. & riveted over.

Diameter of stays over thread 32 mm. Working pressure of back plate by rules 8.5 kgs/cm<sup>2</sup>

Tube Plates: Material { front S. M. Steel } Tensile strength { 41.9 kgs/mm<sup>2</sup> } Thickness { 13 mm. } Mean pitch of stay tubes in nests 205 mm.  
{ back — }

If comprising shell, Dia. as per rule { front ✓ } Pitch in outer vertical rows { ✓ } Dia. of tube holes FRONT { stay 53 mm. } BACK { stay 49 mm. }  
{ back ✓ } { ✓ } { plain 52 mm. } { plain 51 mm. }

Is each alternate tube in outer vertical rows a stay tube ✓ Working pressure by rules { front 9.6 kgs/cm<sup>2</sup> }  
{ back — }

Girders to combustion chamber tops: Material ✓ Tensile strength ✓

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

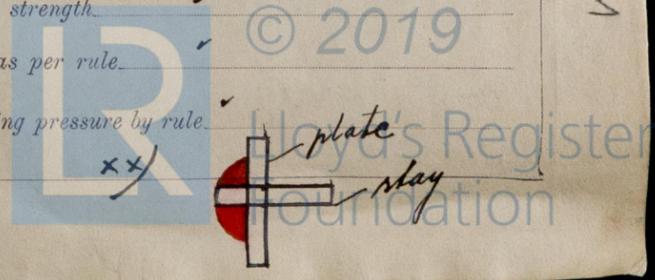
Distance apart ✓ No. and pitch of stays in each ✓ Working pressure by rule ✓

<sup>†</sup>Fire bricks fitted.

If not, state whether, and when, one will be sent?

Is a Report also sent on the Hull of the Ship?

[Im. 11.57.—Copyright Ink.] (MADE IN ENGLAND.)



W170-0180

**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 *41.5 kgs/mm<sup>2</sup>* Diameter  { at turned off part, or over threads *32 mm.* No. of threads per inch *9*

Area supported by each stay *265 x 140 mm.* Working pressure by rules *9.8 kgs/cm<sup>2</sup>* Are the stays drilled at the outer ends

**Tubes:** Material *S.M. Steel* External diameter  { plain *51 mm.* stay *51 mm.* Thickness  { *3 mm.* *4.75 mm.*

No. of threads per inch *9* Pitch of tubes *90 x 80 mm.* Working pressure by rules *11 kgs/cm<sup>2</sup>*

**Manhole Compensation:** Size of opening in shell plate *230 x 300 mm.* Section of compensating ring *500 x 410 x 12 mm.* No. of rivets and diameter of rivet holes *E.W.* Outer row rivet pitch at ends *E.W.* 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,  
**W. Söderströms Gjuteri & Mek. Verkstads A.B.**  
*Lustig & Kristensson* Manufacturer.

Dates of Survey  { During progress of work in shops - - *28, 4, 40.* Is the approved plan of boiler forwarded herewith *6.5.40.*  
 while building  { During erection on board vessel - - *24, 12, 21, 41* (If not state date of approval.)  
 Total No. of visits *5*

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.)

*This boiler has been built under Special Survey and all the requirements of the Rules have been complied with. The workmanship is good and the material fulfils the requirements of the Rules. The dimensions are as specified and in accordance with the Rules and approved plan.*

*The boiler has been fitted on board under my supervision and to my satisfaction.*

*This boiler is, in my opinion, eligible to be classed in the Register Book and to have the notation of D.B.S. 7, 41.*

Survey Fee ... .. *Kr. 80.-* : } When applied for, *28.8.19* *41*  
 Travelling Expenses (if any) *Kr. 46.75* : } When received, *19*

*R. J. Andersson*  
 Engineer/Surveyor to Lloyd's Register of Shipping.

Committee's Minute  
 Assigned

