

REPORT ON BOILERS.

No. 5231.

Received a London Office

Date of writing Report 12th Febr. 44 When handed in at Local Office 19 Port of Stockholm

No. in Survey held at Norrköping & Stockholm Date, First Survey 1.2.43 Last Survey 22nd Nov. 43
Reg. Book- on the tanker "SKANSEN" (Number of Visits 10) Tons {Gross 717
Net 446

Built at Stockholm By whom built A.-B. Ekensbergs Varv Yard No. 179 When built 1943

Engines made at Stockholm By whom made A.-B. Atlas-Diesel Engine No. 85991 When made 1943

Boilers made at Norrköping By whom made W. Söderströms Mek. Verkstad Boiler No. 1450 When made 1943

Owners Enhörnings Kemisk-Tekniska A.-B. Port belonging to Stockholm

VERTICAL DONKEY BOILER.

Made at Norrköping By whom made W. Söderströms Mek. Verkst. Boiler No. 1450 When made 1943 Where fixed Eng. room, sld. forwrd.

Manufacturers of Steel Degerfors Järnverks A.-B.

Total Heating Surface of Boiler 15 m² Is forced draught fitted No Coal or Oil fired Oil firedNo. and Description of Boilers One Rapid Donkey Boiler Working pressure 8 kg/cm²Tested by hydraulic pressure to 16 kg/cm² Date of test 26.2.43 No. of Certificate -Area of Firegrate in each Boiler 0.55 m² No. and Description of safety valves to each boiler 2 spring loaded safety valvesArea of each set of valves per boiler {per rule - as fitted 227 cm² Pressure to which they are adjusted 8 kg/cm² Are they fitted with easing gear Yes

State whether steam from main boilers can enter the donkey boiler No main boilers 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

680 mm Is the base of the boiler insulated Largest internal dia. of boiler 1000 mm Height 2850 mm

Shell plates: Material S.M. steel Tensile strength 46.7 kg/mm² Thickness 11 mm

Are the shell plates welded or flanged No Description of riveting: circ. seams {end single inter - long seams double Rivets lap (see Plan)

Dia. of rivet holes in {circ. seams 20.0 mm Pitch of rivets {48 mm Percentage of strength of circ. seams {plate 58.4 rivets 45.7 of Longitudinal joint {plate 70.0 rivets 64.5 combined -

Working pressure of shell by rules 15.2 kg/cm² 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 47.0 kg/mm² Thickness 12 mm Radius 800 mm Working pressure by rules 14.1 kg/cm²Description of Furnace: Plain, spherical, or dished crown dished crown Material S.M. steel Tensile strength 42.2 kg/mm²Thickness 14 mm External diameter {top 810 mm bottom 765 mm Length as per rule - Working pressure by rules 10.0 kg/cm²

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 11 mm Diameter as per rule {D 950 mm Working pressure by rule 8.6 kg/cm²
{d 820 mmCombustion Chamber: Material S.M. steel Tensile strength 45.0 kg/mm² Thickness of top plate 14.0 mm

Radius if dished not dished Working pressure by rule - Thickness of back plate 11 mm Radius Diameter if circular 380 to 400 mm

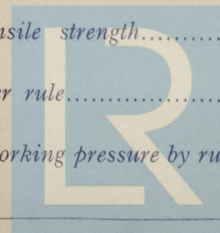
Length as per rule - Pitch of stays 225 x 170 mm Are stays fitted with nuts or riveted over shell and electro-welded in Combustion Chamber

Diameter of stays over thread 32.0 mm Working pressure of back plate by rules 10.1 kg/cm²Tube Plates: Material {front S.M. steel Tensile strength {46.8 kg/mm² Thickness {14.00 mm Mean pitch of stay tubes in nests 160 mm
{back " " {42.3 " {14.00 mmIf comprising shell, Dia. as per rule {front - Pitch in outer vertical rows {Dia. of tube holes FRONT {stay 54.5 mm BACK {stay 51.0 mm
{back - {plain 54.5 mm {plain 51.0 mmIs each alternate tube in outer vertical rows a stay tube No Working pressure by rules {front 11.4 kg/cm² back 11.4 kg/cm²

Girders to combustion chamber tops: Material Tensile strength 2021

Depth 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.....None..... 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...46.6 kg/mm²... Diameter { at turned off part, 28.0 mm
or
over threads 32.0 mm... No. of threads per inch...9.....
Area supported by each stay...225 x 170 mm... Working pressure by rules...9.6 kg/cm²... Are the stays drilled at the outer ends.....-.....
Tubes: Material...S.M. steel... External diameter { plain 51.0 mm
stay 51.0 mm... Thickness { 3.0 mm
6.5 mm
No. of threads per inch...9... Pitch of tubes...90 x 80 mm... Working pressure by rules...11 kg/mm²...
Manhole Compensation: Size of opening in shell plate 300 x 400 mm... Dimensions 530 x 630 x 15 mm
Section of compensating ring 100 x 15 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 withYes.....

The foregoing is a correct description,
H. Söderströms Gjuteri & Mek. Verkstads A.B.
L. Söderström Manufacturer.

Dates { During progress of 1st & 26th Februar., 1943... Is the approved plan of boiler forwarded herewith 21.7.42...
of Survey { work in shops - - -
while { During erection on 24th Sept. - 27th Nov., 1943... Total No. of visits Ten
building { board vessel - - -
(If not state date of approval.)

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 Donkey 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 plans.

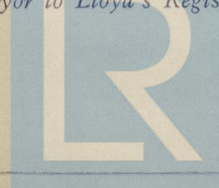
The boiler has been fitted onboard under my supervision and to my satisfaction.

Survey Fee ... Kr 80:- : } When applied for, 12th Feb., 1944...
Travelling Expenses (if any) Kr 59:50 : } When received, 19.....

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned



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