

REPORT ON BOILERS.

No. 12106

NOV 25 1938

Received at London Office

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No. 10.12.3

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Horse Power

644

Owners

SKIBS A/S CORONA

Port belonging to

HAUGESUND

18th November 1938

When handed in at Local Office

22nd November 1938

Port of **GOTHENBURG**

Survey held at **GOTHENBURG**

Date, First Survey

9th February

Last Survey

15th November 1938

(Number of Visits **19**)

Gross **8259.29**

Net **4958.56**

Built at **GOTHENBURG**

By whom built **ERIKSBERGS M.V. AB**

Yard No. **283**

When built **1938**

Made at **GOTHENBURG**

By whom made **ERIKSBERGS M.V. AB.**

Engine No. **205**

When made **1938**

Made at **GOTHENBURG**

By whom made **ERIKSBERGS M.V. AB.**

Boiler No. **578**
579

When made **1938**

Horse Power **644**

Owners **SKIBS A/S CORONA**

Port belonging to **HAUGESUND**

TUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Furnaces: Messrs Deutsche Rohrenwerke A.G., Mülheim, Ruhr.

Plates: Messrs. Ruhrstahl A.G., Gladungen

(Letter for Record **S**)

Working Surface of Boilers **2x130 = 260 m²**

Is forced draught fitted **Yes**

Coal or Oil fired **Oil fired**

Description of Boilers **Two cylindrical, multitubular**

Working Pressure **142 lbs/ft²**

hydraulic pressure to **265 lbs/ft²** Date of test **21.5.38.**

No. of Certificate **304-305**

Can each boiler be worked separately **Yes**

Regulate in each Boiler **Yes**

No. and Description of safety valves to each boiler **Double spring loaded.**

Each set of valves per boiler { per Rule **67.5 mm**
as fitted **85 mm.**

Pressure to which they are adjusted **142 lbs/ft²** Are they fitted with easing gear **Yes**

donkey boilers, state whether steam from main boilers can enter the donkey boiler **No main boilers fitted.**

Distance between boilers or uptakes and bunkers or woodwork **900 mm**

Is oil fuel carried in the double bottom under boilers **No**

Distance between shell of boiler and tank top plating **Yes**

Is the bottom of the boiler insulated **Yes**

Internal dia. of boilers **3352 mm**

Length **3350 mm**

Shell plates: Material **SM-steel**

Tensile strength **44.2-50.0 kg/mm²**

Are the shell plates welded or flanged **No**

Description of riveting: circ. seams **Double riv. lap**
inter. **none**

Double butt straps

Diameter of rivet holes in { circ. seams **26.5 mm**
long. seams **24 mm.**

Pitch of rivets { **79 mm**
145 mm.

of strength of circ. end seams { plate **66.5**
rivets **57.0**

Percentage of strength of circ. intermediate seam { plate **83.5**
rivets **100**

Working pressure of shell by Rules **10 kg/cm²**

of butt straps { outer **14.5 mm**
inner **17.5 mm.**

No. and Description of Furnaces in each Boiler **Two, Morison**

Tensile strength **42.4-46.3 kg/mm²**

Smallest outside diameter **920 mm**

plain part { top **10 mm**
bottom **10 mm.**

Thickness of plates { crown **10 mm**
bottom **10 mm.**

Description of longitudinal joint **Lap welded.**

of stiffening rings on furnace or c.c. bottom **Yes**

Working pressure of furnace by Rules **10.8 kg/cm²**

in steam space: Material **SM-steel**

Tensile strength **46.7-47.1 kg/mm²**

Thickness **20 mm**

Pitch of stays **405 x 350 mm**

Nuts inside, riveted washers and nuts outside

Working pressure by Rules **10.4 kg/cm²**

Material { front **SM-steel**
back **SM-steel**

Tensile strength { **47 kg/cm²**
47 kg/cm²

Thickness { **21 mm.**
21 mm.

of stay tubes in nests **276 mm.**

Pitch across wide water spaces **330 mm.**

Working pressure { front **13.2 kg/cm²**
back **14.5 kg/cm²**

combustion chamber tops: Material **SM-steel**

Tensile strength **45.4 kg/cm²**

Depth and thickness of girder

Length as per Rule **735 mm.**

Distance apart **205 mm.**

No. and pitch of stays

Working pressure by Rules **11 kg/cm²**

Combustion chamber plates: Material **SM-steel**

Thickness: Sides **16 mm.**

Back **18 mm**

Top **16 mm.**

Bottom **16 mm.**

Sides **225-240 mm**

Back **241 x 212 mm**

Top **225 x 205 mm**

Are stays fitted with nuts or riveted over **As per plan**

Pressure by Rules **10.2 kg/cm²**

Front plate at bottom: Material **SM-steel**

Tensile strength **46.2-47.0 kg/mm²**

Lower back plate: Material **SM-steel**

Tensile strength **46.2-47.0 kg/mm²**

Thickness **20 mm.**

Stays at wide water space **320 mm.**

Are stays fitted with nuts or riveted over **Fitted with nuts**

Pressure **15 kg/cm²**

Main stays: Material **SM-steel**

Tensile strength **As per Rule**

body of stay, or threads **2 1/4"**

No. of threads per inch **6**

Area supported by each stay **142000 mm²**

Pressure by Rules

Screw stays: Material **SM-steel**

Tensile strength **As per Rule**

turned off part, or threads **1 1/2"**

No. of threads per inch **9**

Area supported by each stay **542000 mm²**

As per

Register of

Pressure by Rules

turned off part,

or threads



Lloyd's Register Foundation

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Working pressure by Rules 10.4 kg/cm^2 Are the stays drilled at the outer ends *No* Margin stays: Diameter $\left\{ \begin{array}{l} \text{At turned off part} \\ \text{or} \\ \text{Over threads} \end{array} \right. 15/8''$

No. of threads per inch *9* Area supported by each stay 58300 mm^2 Working pressure by Rules 11.8 kg/cm^2

Tubes: Material *Steel* External diameter $\left\{ \begin{array}{l} \text{Plain} \\ \text{Stay} \end{array} \right. 2\frac{1}{2}''$ Thickness $\left\{ \begin{array}{l} \text{LSG No 10} \\ \text{LSG No 1} \end{array} \right.$ No. of threads per inch *9*

Pitch of tubes $95 \times 89 \text{ mm}$ Working pressure by Rules 12.3 kg/cm^2 Manhole compensation: Size of shell plate $420 \times 520 \text{ mm}$ Section of compensating ring $275 \times 25 \text{ mm}$ No. of rivets and diameter of rivet holes $40 - 1\frac{1}{16}''$

Outer row rivet pitch at ends 175 mm Depth of flange if manhole flanged 75 mm Steam Dome: Material

Tensile strength Thickness of shell Description of longitudinal joint

Diameter of rivet holes Pitch of rivets Percentage of strength of joint $\left\{ \begin{array}{l} \text{Plate} \\ \text{Rivets} \end{array} \right.$

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

of rivets in outer row in dome connection to shell

Type of Superheater *No superheater fitted* Manufacturers of $\left\{ \begin{array}{l} \text{Tubes} \\ \text{Steel forgings} \\ \text{Steel castings} \end{array} \right.$

Number of elements Material of tubes Internal diameter and thickness of tubes

Material of headers Tensile strength Thickness Can the superheater be shut off from the boiler

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

Rules Pressure to which the safety valves are adjusted Hydraulic test

tubes forgings and castings and after assembly in place Are drawn

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,
Eriksbergs Mek. Verkstads Aktieföretag

Dates of Survey $\left\{ \begin{array}{l} \text{During progress of work in shops} \\ \text{while building} \end{array} \right. \left\{ \begin{array}{l} \text{1938 Feb. 9, 14, 22, March 10, April 19, 27,} \\ \text{May 4, 18, 19, 21, Aug. 11, 29, Sept. 1, 2,} \\ \text{1938 Oct. 8, 19, 22, Nov. 11, 15.} \end{array} \right.$ Are the approved plans of boiler and superheater forwarded herewith *No*

Total No. of visits *19*

Is this Boiler a duplicate of a previous case *Yes* If so, state Vessel's name and Report No. *m/s Solör, Got. report no 11*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
*These donkeyboilers have been built under special survey in accordance with approved plan and the Society's Rules.
 The workmanship is good.
 Test sheets of the material are attached.*

The boilers are marked as below:

Nos 304 - 305
 LLOYD'S TEST 18.6 Kg
 WP 10 Kg
 R 21.5.38 SR

Survey Fee ... *Sk* : 354.00 When applied for *23rd Nov.* 1938
 Travelling Expenses (if any) £ : : When received, *12/12* 1938
MR 13/12

J. Aspelin
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute *TUE 29 NOV 1938*
 Assigned *See PE machy H.*