

# REPORT ON BOILERS.

6 - JUN 1930

Received at London Office

Date of writing Report 4th June 1930 When handed in at Local Office 102 Port of Stockholm

No. in Survey held at Stockholm Date, First Survey 26 April 1930 Last Survey 31 May 1930

Reg. Book. Steel Sc. Wingo (Number of Visits 4) Gross 701 Tons Net 258

Master ✓ Built at Stockholm By whom built Åkkel. Finnbocka Varf Yard No. 312 When built 1930

Engines made at Elsinore By whom made A/S. Helsingørs Jernstøbe og Maskinbyggeri Engine No. 272 When made 1930-1

Boilers made at " By whom made " Boiler No. 771 When made 1930-1

Nominal Horse Power 150 Owners Stockholms Rederiaktiel. Sæa Port belonging to Stockholm

## MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel \* see foot note (Letter for Record \* ( ))

Total Heating Surface of Boilers \* Is forced draught fitted \* Coal or Oil fired \*

No. and Description of Boilers \* Working Pressure \*

Tested by hydraulic pressure to \* Date of test \* No. of Certificate \* Can each boiler be worked separately yes

Area of Firegrate in each Boiler \* No. and Description of safety valves to each boiler \*

Area of each set of valves per boiler { per Rule \* as fitted \* } Pressure to which they are adjusted 205 lbs. Are they fitted with casing gear yes

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler no donkey boiler is fitted.

Smallest distance between boilers and ship's framing or uptakes and bunkers or woodwork 25" Is oil fuel carried in the double bottom under boilers ✓

Smallest distance between shell of boiler and tank top plating The two boilers = 18" 19" Is the bottom of the boiler insulated yes

Largest internal dia. of boilers \* Length \* Shell plates: Material \* Tensile strength \*

Thickness \* Are the shell plates welded or flanged \* \* Description of riveting: circ. seams { end \* inter. \* }

long. seams { diam. of rivet holes in circ. seams \* long. seams \* } Pitch of rivets { \* }

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 shell by Rules \*

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 { crown \* 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 \*

\* see Gen. report no. 8153.



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Working pressure by Rules *see foot note* Are the stays drilled at the outer ends \* Margin stays: Diameter <sup>(At turned off part, or Over threads)</sup> \* Working pressure by Rules \*

No. of threads per inch \* Area supported by each stay \* Working pressure by Rules \*

Tubes: Material \* External diameter <sup>Plain</sup> \* Thickness \* No. of threads per inch \*

Pitch of tubes \* Working pressure by Rules \* Manhole compensation: Size of opening in 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 \* Steam Dome: Material \*

Tensile strength \* Thickness of shell \* Description of longitudinal joint \*

Diameter of rivet holes \* Pitch of rivets \* Percentage of strength of joint <sup>(Plate Rivets)</sup> \*

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 and pitch of rivets in outer row in dome connection to shell \*

Type of Superheater \* Manufacturers of <sup>Tubes</sup> \* <sup>Steel castings</sup> \*

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

Material of headers \* Tensile strength \* Thickness \* Can the superheater be shut off and the boiler be worked separately *yes* Is a safety valve fitted to every part of the superheater which can be shut off from the boiler *yes*

Area of each safety valve *3.14 sq"* Are the safety valves fitted with easing gear *yes* Working pressure as per Rules *320 lbs.* Pressure to which the safety valves are adjusted *205 lbs.* Hydraulic test pressure tubes \* castings \* and after assembly in place \* Are drain cocks or valves fitted to free the superheater from water where necessary *yes*

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with *yes* The foregoing is a correct description, Manufacture

Dates of Survey <sup>(During progress of work in shops - -)</sup> \* *26, 13, 27, 30 & 31* Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)

while building <sup>(During erection on board vessel - - -)</sup> *4, 5, 30* Total No. of visits *during erection 5*

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.)

*These boilers and superheaters have been built under the special survey of the Copenhagen Surveyors - see Gen. Report no. 8153 - and have now been fitted on board under my supervision and to my satisfaction. The boilers and superheaters have been found perfectly tight under full working pressure.*

Survey Fee <i>noted on the machinery Report.</i>	When applied for,	192
Travelling Expenses (if any) £	When received,	192

*A. Saxon*  
 Engineer Surveyor to Lloyd's Register of Shipping  
 Assisted by Mr. R. J. Rudenasson

Committee's Minute WED 11 JUN 1930

Assigned *See Report attached*

\* See Gen. report no. 8153.

