

RECEIVED

Rpt. 5b. 2² MAY 1946
IN D.O.

REPORT ON BOILERS.

No. 14721.

Received at London Office 22 MAY 1946

Date of writing Report **13th May** 19 **46**. When handed in at Local Office **17th May** 19 **46**. Port of **Gothenburg**.

No. in Survey held at **Gothenburg** Date, First Survey **8th December 1945** Last Survey **11th January** 19 **46**.

Reg. Book. on the (Number of Visits **4**) Tons Gross **1800** Net

Built at **Malmö** By whom built **Kockums Mek. Verkstads A-B.** Yard No. **28/5** When built **1946**

Engines made at **Malmö** By whom made **Kockums Mek. Verkstads A-B.** Engine No. --- When made **1946**

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

Owners **Rederi A-B. Activ** Port belonging to **Hälsingborg**

VERTICAL BOILER.

Made at **Motala** By whom made **A-B. Motala Verkstad** Boiler No. **3153** When made **1946** Where fixed ---

Manufacturers of Steel **Avesta Jernverks A-B., Avesta, Sweden.**

Total Heating Surface of Boiler **5 M²** Is forced draught fitted --- Coal or Oil fired **Oil**

No. and Description of Boilers **One vertical multitubular donkey boiler** Working Pressure **2 kg/cm²**

Tested by hydraulic pressure to **4 kg/cm²** Date of test **11th January 1946** No. of Certificate **483**

Area of fire grate in each Boiler --- No. and description of safety valves to each boiler **One double spring loaded**

Diam. of each set of valves per boiler { per Rule **50 mm.** ✓
as fitted **2 x 38 mm.** Pressure to which they are adjusted --- 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 --- Smallest distance between base of boiler and tank top plating --- Is the base of the boiler insulated --- Largest internal dia. of boiler **700 mm.** Height **2200 mm.**

Shell plates: Material **S.M. Steel** Tensile strength **41-55 kg/mm²** Thickness **7 mm.**

Are the shell plates welded or flanged **No** If fusion welded, state name of welding firm ---

Have all the requirements of the Rules for Class I vessels been complied with --- Description of riveting: circ. seams { end **Single lap**
inter. ---

long. seams **Single lap** Dia. of rivet holes in { circ. seams **17 mm.** ✓ Pitch of rivets { **41.5 mm.**
long. seams **17 mm.** ✓ { **41.5 mm.** Percentage of strength of circ. seams { plate **59 %**
rivets **68.6 %** } rivets **68.6 %**

of longitudinal joint { plate **59 %** ✓
rivets **68.6 %** ✓ Thickness of butt straps { outer ---
combined --- inner --- Shell Crown: Whether complete hemisphere, dished partial spherical, or flat **Dished partial spherical** Material **S.M. Steel** Tensile strength **41-47 kg/mm²** Thickness **10 mm.**

Radius **560 mm.** Description of Furnace: Plain, spherical, or dished crown. **Part dished** Material **S.M. Steel**

Tensile strength **41-47 kg/mm²** Thickness **Top 10 mm.** External diameter { top **520 mm.**
Side **7 mm.** } bottom **564 mm.** Length as per Rule **875 mm.**

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

Diameter of stays over thread --- **Combustion Chamber Crown 410 mm.** ✓
Radius of ~~combustion~~ dished furnace crown **450 mm.** ✓

Thickness of Ogee Ring **7 mm.** Diameter as per Rule { D **650 mm.** ✓
d. **564 mm.** ✓

Combustion Chamber: Material --- Tensile strength --- Thickness of top plate ---

Radius if dished --- Thickness of back plate --- Diameter if circular ---

Length as per Rule --- Pitch of stays ---

Are stays fitted with nuts or riveted over --- Diameter of stays over thread ---

Tube Plates: Material { front **S.M. Steel** Tensile strength **41-47 kg/mm²** Thickness { **12 mm.** ✓
back **S.M. Steel** } **41-47 kg/mm²** } **12 mm.** ✓ Mean pitch of stay tubes in nests **170 mm.**

If comprising shell, dia. as per Rule { front --- Pitch in outer vertical rows { --- Dia. of tube holes FRONT { stay ---
back --- } plain --- BACK { stay ---
plain ---

Is each alternate tube in outer vertical rows a stay tube ---

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 ---

J.S.
24/6/46

Crown Stays: Material **None** Tensile strength --- Diameter { at body of stay... ---
 No. of threads per inch --- Screw Stays: Material **S.M. Steel** Tensile strength **41-47 kg/mm²**
 Diameter { **35 mm.** No. of threads per inch --- Are the stays drilled at the outer ends ---
 Tubes: Material **S.M. Steel** External diameter { plain **51 mm.** Thickness { **3 mm.**
 stay **51 mm.** **7 mm.**
 No. of threads per inch **9** Pitch of tubes **8 x 80 or 100 mm.**

Manhole Compensation: Size of opening in shell plate **300 x 230 mm.** Section of compensating ring **2 x 15 x 55 mm.** No. of rivets and diameter of rivet holes **25** $\phi = 17$ mm. Outer row rivet pitch at ends **42 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.

ARKENBOLAGET ROTALA VERKSTAD
 ANGEKTEKNISKA AVDELNINGEN Manufacturer.
Toril Vengren

Dates of Survey { During progress of work in shops - - **8th December 1945 - 11th January 1946** Is the approved plan of boiler forwarded herewith **Got. 28.8.1945**
 while building { During erection on board vessel - - - } Total No. of visits **4**

Is this Boiler a duplicate of a previous case... **No** If so, state Vessel's name and Report No. --- **See Kockkums 283 for plan**

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
 This donkey boiler has been built under special survey and the Rule requirements have been complied with.

The workmanship is good and the materials are as per test sheets attached to Gothenburg Report No. on a duplicate boiler for Kockkums Mek. Verkstads A-B., Yard No. 283 now forwarded.

The boiler has been marked:
 No. 483
 LLOYD'S TEST 4 kg.
 WP 2 kg.
 AS11.1.46

A plan of the boiler as built is attached.

Survey Fee ... **Kr. 80:00** : } When applied for **17th May 19 46.**
 Travelling Expenses (if any) £ --- : --- } When received **19 --**

Anders Sjögren
 Engineer Surveyor to Lloyd's Register of Shipping.

FRI. 12 MAR 1946

Date ---
 Committee's Minute **For minute see J.E. Rpt**

