

## REPORT ON BOILERS.

No. 9558.

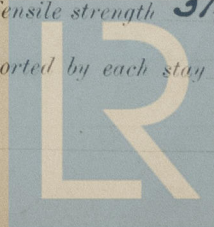
Received at London Office

15 MAR 1935

Date of writing Report 11<sup>th</sup> March 1935 When handed in at Local OfficePort of CopenhagenNo. in Reg. Book. 90291 Survey held at CopenhagenDate, First Survey 23<sup>rd</sup> June 1934 Last Survey 28<sup>th</sup> February 1935on the Twin Screw Motor Trawler "MOSVOLD"(Number of Visits 20) Gross Tons 9107.91 Net Tons 5572.72

Master J. M. Built at Copenhagen By whom built Ast. Burmeister & Wain's Yard No. 612 When built 1935  
 Engines made at Copenhagen By whom made Ast. Burmeister & Wain's Engine No. 2324 When made 1935  
 Boilers made at Copenhagen By whom made Ast. Burmeister & Wain's Boiler No. 1879 When made 1935  
 Nominal Horse Power 811 Owners A/S Mosvold's Rederi 4. Port belonging to Farsund.

## MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Rivets: Lewis Bros, Stays: United Steel Companies Ltd. Sheffield.Manufacturers of Steel Plates: The Steel Company of Scotland, Furnaces: The Broomside Boiler Works (Letter for Record)Total Heating Surface of Boilers 2 x 1300 sq. feet Is forced draught fitted yes Coal or Oil fired oil & kerosene gasNo. and Description of Boilers 2 off single ended, cylindrical, horizontal Working Pressure 180 lb/sq. in.Tested by hydraulic pressure to 320 lb/sq. in. Date of test 29.12.34 No. of Certificate 557 & 58 Can each boiler be worked separately yesArea of Firegrate in each Boiler 8.33 sq. ft. No. and Description of safety valves to each boiler 2 off direct spring loaded & (75 lb/sq. in.)Area of each set of valves per boiler 13.7 sq. ft. Pressure to which they are adjusted 180 lb/sq. in. Are they fitted with easing gear yesIn case of donkey boilers, state whether steam from main boilers can enter the donkey boiler no main boilersSmallest distance between boilers or uptakes and bunkers or woodwork no woodwork Is oil fuel carried in the double bottom under boilers yesSmallest distance between shell of boiler and tank top plating on a platform, upper deck level The bottom of the boiler insulated yesLargest internal dia. of boilers 11'-5" Length 10'-11 1/2" Shell plates: Material S.M. Steel Tensile strength 28.34 lb/sq. in.Thickness 1" Are the shell plates welded or flanged no Description of riveting: circ. seams doubleLong. seams 2 1/2" butt straps, 3 1/2" rivets Diameter of rivet holes in circ. seams 1 1/8" long. seams 1 1/16" Pitch of rivets 3 7/16" 7 5/8"Percentage of strength of circ. end seams plate 67.4 rivets 46.7 Percentage of strength of circ. intermediate seam plate 86.1 rivets 89.9Percentage of strength of longitudinal joint combined 90.1 Working pressure of shell by Rules 192 lb/sq. in.Thickness of butt straps outer 1" inner 1" No. and Description of Furnaces in each Boiler 2 off corrugated Deighton sectionMaterial S.M. Steel Tensile strength 28.5 - 29.0 lb/sq. in. Smallest outside diameter 3'-4 1/2"Length of plain part top 9 1/16" + 1/32" bottom 9 1/16" + 1/32" Description of longitudinal joint noneDimensions of stiffening rings on furnace or c.c. bottom yes Working pressure of furnace by Rules 203 lb/sq. in.End plates in steam space: Material S.M. Steel Tensile strength 26.8 - 30.34 lb/sq. in. Thickness 1" Pitch of stays 17" x 14"How are stays secured Screwed in both plates, nuts inside & outside Working pressure by Rules 186 lb/sq. in.Tube plates: Material front S.M. Steel back S.M. Steel Tensile strength 26.8 - 30.34 lb/sq. in. 27.9 - 28.2 lb/sq. in. Thickness 3/4"Lean pitch of stay tubes in nests 8 15/16" Pitch across wide water spaces 14" Working pressure front 233 lb/sq. in. back 225 lb/sq. in.Girders to combustion chamber tops: Material S.M. Steel Tensile strength 28 lb/sq. in. Depth and thickness of girdercentre 9" x (2 x 3/4") Length as per Rule 2'-5 1/4" Distance apart 8 1/2" No. and pitch of stayseach 3 of 1 1/2" - 7" apart Working pressure by Rules 260 lb/sq. in. Combustion chamber plates: Material S.M. SteelTensile strength 28.2 - 28.84 lb/sq. in. Thickness: Sides 9 1/16" + 1/32" Back 5/8" Top 9 1/16" + 1/32" Bottom 3/4"Pitch of stays to ditto: Sides 7" x 8 1/2" Back 7 1/2" x 7 1/2" Top 7" x 8 1/2" Are stays fitted with nuts or riveted over filled with nuts inside & outsideWorking pressure by Rules 240 lb/sq. in. Front plate at bottom: Material S.M. Steel Tensile strength 26.8 - 30.34 lb/sq. in.Thickness 1" Lower back plate: Material S.M. Steel Tensile strength 26.8 - 30.34 lb/sq. in. Thickness 1"Pitch of stays at wide water space d = 20" 14 1/2" Are stays fitted with nuts or riveted over filled with nuts inside & outsideWorking Pressure 231 lb/sq. in. Main stays: Material S.M. Steel Tensile strength 28.28 - 30.31 lb/sq. in.Diameter At body of stay, 3 3/4" Bottom 2 1/2" No. of threads per inch 11 Area supported by each stay 238 sq. in.Working pressure by Rules 232 lb/sq. in. Screw stays: Material S.M. Steel Tensile strength 31.36 - 31.66 lb/sq. in.Diameter At turned off part, 1 1/2" Over threads 1 1/2" No. of threads per inch 11 Area supported by each stay 59.5 sq. in.

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Working pressure by Rules *21846/0"* Are the stays drilled at the outer ends *no* Margin stays: Diameter *At turned off part, 1 3/4"*  
No. of threads per inch *11* Area supported by each stay *8250"* Working pressure by Rules *22046/0"*  
Tubes: Material *S.M. Steel* External diameter *Plain 2 1/2"* Thickness *S.W.G. No. 9 3/8"* No. of threads per inch *11*  
Pitch of tubes *3 1/2" x 3 5/8"* Working pressure by Rules *23046/0"* Manhole compensation: Size of opening in  
shell plate *12" x 16" 16 x 20* Section of compensating ring *34" x 28" x 1"* No. of rivets and diameter of rivet holes *46 of 1 1/16"*  
Outer row rivet pitch at ends *5"* Depth of flange if manhole flanged *3 1/8"* Steam Dome: Material *✓*  
Tensile strength *✓* Thickness of shell *✓* Description of longitudinal joint *✓*  
Diameter of rivet holes *✓* Pitch of rivets *✓* Percentage of strength of joint *Plate 100% Rivets 100%*  
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 *Tubes Steel castings*  
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 *✓* 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 as per  
Rules *✓* Pressure to which the safety valves are adjusted *✓* Hydraulic test pressure:  
tubes *✓* castings *✓* and after assembly in place *✓* Are drain cocks or 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*

AKTIESELSKABET  
p.pa. BURMEISTER & WAIN'S MASKIN- & SKIBSBYGERI

Manufacturer.

Dates of Survey *During progress of work in shops - 22/8-28/9-2/10-9/10-23/10-30/10-13/11-19/11*  
while building *During erection on board vessel - 24/11-12/12-29/12-34*  
Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)  
Total No. of visits *20*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *The above boilers have been built and fitted on board in accordance with the Rules, the approved plans and the requirements contained in the Sorensen's letter E dated 15/5-1934.*

*The material used in construction has been tested by us as required by the Rules by us or as per certificates produced by the builders and the workmanship is of good description throughout.*

*Two Duplex feed pumps 5 1/4" x 3 1/2" x 8" has been fitted.*

Survey Fee *fr. 388.27*

Travelling Expenses (if any) *✓*

When applied for. *13.3.1935*

When received. *2/5/1935*

*L. Clausen*  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUE. 26 MAR 1935

Assigned

*see Macky & Co*



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Foundation

Rpt. 13.

Date of writing

No. in Series  
Reg. Book.

90291 on

Built at

Owners

Electric Light

Is the Vessel

System of

Pressure of

Direct or Alternating

If alternating

Has the Auto

Generators,

are they over

Where more than

series with each

approved

Are all terminals

short circuited,

Position of

in way of the

woodwork or of

are the generator

Earthing, are

in metallic con

a fuse on each

Switchboard

injury and dam

horizontally fro

materials

is it of an appr

non-hygroscopic

type

yes

yes

omnibus bars

"off" position

switches

For each gen

For each tur

Are turbine dri

fire-resisting m

voltmeters

One voltme

One "

do these comply