

## REPORT ON BOILERS.

No. 1392.

10 SEP 1935

Received at London Office

Date of writing Report

6<sup>th</sup> Sept. 1935.

When handed in at Local Office

9<sup>th</sup> Sept. 1935.

Port of

Mahmō.

No. in Survey held at

Mahmō

Date, First Survey

16<sup>th</sup> Nov. 1934

Last Survey

30<sup>th</sup> Aug. 1935.

6239 on the

Single Screw Motor Tanker "HAVPRINS"

(Number of Visits 35.)

Gross 8066  
Net 4754

Master

Built at

Mahmō

By whom built

Hockmms M. V. A. - B.

Yard No. 183

When built 1935.

Engines made at

Mahmō

By whom made

Hockmms M. V. A. - B.

Engine No. 107

When made 1935.

Boilers made at

Mahmō

By whom made

Hockmms M. V. A. - B.

Boiler No. 927/8

When made 1935.

Nominal Horse Power

1166.8

Owners

Akties. Havprins

Port belonging to

Oslo.

## MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Measures The Steel Company of Scotland, Limited.

(Letter for Record S. ✓)

Total Heating Surface of Boilers

 $2 \times 122 = 244 \text{ m}^2$ 

Is forced draught fitted

Yes

Coal or Oil fired

Oil

No. and Description of Boilers

Two S.B.

Working Pressure

12 kg. cm<sup>2</sup> = 171 lb.

Tested by hydraulic pressure to

306 lbs.

Date of test

15-2-1935

No. of Certificates

64 &amp; 65

Can each boiler be worked separately

Yes

Area of Firegrate in each Boiler

✓

No. and Description of safety valves to each boiler

Two direct spring loaded.

Area of each set of valves per boiler

per Rule 6871 mm<sup>2</sup>

as fitted 7647 "

Pressure to which they are adjusted

175 lbs.

Are they fitted with easing gear

Yes.

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

✓

Smallest distance between boilers

O.F. side

1050 mm.

Is oil fuel carried in the

Drip tank

under boilers

Yes.

Smallest distance between shell of boiler and tank top plating

540 mm.

Is the bottom of the boiler insulated

Yes.

Largest internal dia. of boilers

3400 mm.

Length

also 3400 mm.

Shell plates: Material

Steel

Tensile strength

44-50 kg. mm<sup>2</sup>.

Thickness

22.5 mm.

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

end D.R.

Long. seams

T.R.D.B.S.

Diameter of rivet holes in

circ. seams

26 mm.

long. seams

23.5 mm.

Pitch of rivets

83 mm.

inter. 171.5 mm.

Percentage of strength of circ. end seams

plate 68.6 %

rivets 46.7 %

Percentage of strength of circ. intermediate seam

plate ✓

rivets ✓

Percentage of strength of longitudinal joint

plate 86.3 %

rivets 86.2 %

combined 89.8 %

Working pressure of shell by Rules

12.14 kg. cm<sup>2</sup>.

Thickness of butt straps

outer 17 mm.

inner 20 mm.

No. and Description of Furnaces in each Boiler

Two corrugated.

Material

Steel

Tensile strength

41-47 kg. mm<sup>2</sup>.

Smallest outside diameter

1076 mm.

Length of plain part

top ✓

bottom ✓

Thickness of plates

13 mm.

Description of longitudinal joint

Welded

Dimensions of stiffening rings on furnace or c.c. bottom

✓

Working pressure of furnace by Rules

12.5 kg. cm<sup>2</sup>.

End plates in steam space: Material

Steel

Tensile strength

41-47 kg. mm<sup>2</sup>.

Thickness

22 mm.

Pitch of stays 350 x 406 mm.

How are stays secured

Std. nuts and washers.

Working pressure by Rules

12.9 kg. cm<sup>2</sup>.

Tube plates: Material

front Steel

back "

Tensile strength

41-47 kg. mm<sup>2</sup>.41-47 kg. mm<sup>2</sup>.

Thickness

22 mm.

21 mm.

Mean pitch of stay tubes in nests

240 mm.

Pitch across wide water spaces

330 mm.

Working pressure

front 14.5 kg. mm<sup>2</sup>.back 17.8 kg. mm<sup>2</sup>.

Girders to combustion chamber tops: Material

Steel

Tensile strength

44-50 kg. cm<sup>2</sup>.

Depth and thickness of girder

at centre

2 (180 x 20) mm.

Length as per Rule

735 mm.

Distance apart

210 mm.

No. and pitch of stays

in each

2 - 228 mm.

Working pressure by Rules

15.6 kg. cm<sup>2</sup>.

Combustion chamber plates: Material

Steel.

Tensile strength

41-47 kg. mm<sup>2</sup>.

Thickness: Sides

17.5 mm.

Back 18 mm.

Top 17.5 mm.

Bottom 17.5 mm.

Pitch of stays to ditto:

Sides 228 x 210 - 190

Back 216 x 203 mm.

Top 228 x 210 mm.

Are stays fitted with nuts or riveted over

Both

Working pressure by Rules

12.01 kg. cm<sup>2</sup>.

Front plate at bottom: Material

Steel

Tensile strength

41-47 kg. mm<sup>2</sup>.

Thickness

22 mm.

Lower back plate: Material

Steel

Tensile strength

41-47 kg. mm<sup>2</sup>.

Thickness

22 mm.

Pitch of stays at wide water space

330 x 216 mm.

Are stays fitted with nuts or riveted over

Margin stays with nuts.

Working Pressure

17.8 kg. cm<sup>2</sup>.

Main stays: Material

Steel

Tensile strength

45.4-48.2 kg. mm<sup>2</sup>.

Diameter

At body of stay,

2 3/8" &amp; 3"

No. of threads per inch

6

Area supported by each stay

142100 mm<sup>2</sup>.

Working pressure by Rules

12.6 kg. cm<sup>2</sup>.

Screw stays: Material

Steel

Tensile strength

42.3-42.5 kg. mm<sup>2</sup>.

Diameter

At turned off part,

24 &amp; 37 mm.

No. of threads per inch

9

Area supported by each stay

43320 mm<sup>2</sup>.



*The foregoing is a correct description,*  
**ROCKUMS MEKANISKA VERKSTADS**  
**AKTIE-BOLAG** *Manufacturer.*

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

The materials used in the construction have been tested as per Rule and the workmanship is good.

Asunden  
Engineer Surveyor to Lloyd's Register of Shipping.

Assigned See Machz. J. E. Report.

Lloyd's Register  
Foundation