

REPORT ON BOILERS.

No. 11814

Received at London Office

Date of writing Report 12 December 1945 When handed in at Local Office

Port of Copenhagen

No. in Reg. Book.

Survey held at

Copenhagen - Skatshov

Date, First Survey

26th June 1941

Last Survey

30th November 1945

on the

Single Sc. Motor Vessel FALSTRIA

(Number of Visits 15.)

Gross 6992.78

Net 4234.42

Master

Built at

Skatshov

By whom built

H. Skatshov Skibsværft

Hull No.

98

When built

1945

Engines made at

Copenhagen

By whom made

A.B. Bunnike & Wain

Engine No.

3267

When made

1945

Boilers made at

Copenhagen

By whom made

M. Skatshov Skibsværft

Boiler No.

2015

When made

1945

Nominal Horse Power

1277

Owners

H. Skatshov Skibsværft

Port belonging to

Copenhagen

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Stays: Collapsible, Sliding, Riveted, Screw, etc.

Manufacturers of Steel

Plates: M. Skatshov, Bergmann, Eisenhütten; Tubes: Deutsche Rohrenwerke, etc.

(Letter for Record)

Total Heating Surface of Boilers

oil fired 30 m²; Exhaust fired 70 m²

Is forced draught fitted

yes

Coal or Oil fired & exhaust gas

No. and Description of Boilers

1 off multitubular, horizontal composite

Working Pressure

8 kg/cm²

Tested by hydraulic pressure to

5.5 kg/cm²

Date of test

31.7.41

No. of Certificate

672

Can each boiler be worked separately

yes

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler

2 off direct spring loaded 65 mm diam.

Area of each set of valves per boiler

per Rule 3600 m²; as fitted 5000 m²

Pressure to which they are adjusted

8 kg/cm²

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 or uptakes and bunkers or woodwork

Is oil fuel carried in the double bottom under boilers

yes

Smallest distance between shell of boiler and tank top plating

2 1/2 m above floor plates

Is the bottom of the boiler insulated

yes

Largest internal dia. of boilers

2550 mm

Length

2810 mm

Shell plates: Material

S. cl. Steel

Tensile strength

47.5-53.5 kg/cm²

Thickness 15.5 mm

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

single

long. seams

double riv. lap joint

Diameter of rivet holes in

circ. seams 25 mm

long. seams 25 mm

Pitch of rivets

55 mm

Percentage of strength of circ. end seams

plate 43.7

rivets 54.6

Percentage of strength of circ. intermediate seam

plate

Percentage of strength of longitudinal joint

plate 65.8

rivets 66.0

combined

Working pressure of shell by Rules

8.4 kg/cm²

Thickness of butt straps

outer -

inner -

No. and Description of Furnaces in each Boiler

1 off corrugated, Morrison's section

Material S. cl. Steel

Tensile strength

41-47 kg/cm²

Smallest outside diameter

720 mm

Length of plain part

top -

bottom -

Thickness of plates

crown 10 mm

bottom -

Description of longitudinal joint

Water gas lap welded

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

Working pressure of furnace by Rules

13.8 kg/cm²

End plates in steam space: Material

S. cl. Steel

Tensile strength

41-47 kg/cm²

Thickness

22 mm

Pitch of stays

D = 585 mm

How are stays secured

Screwed in both plates, nuts inside & outside

Working pressure by Rules

8.1 kg/cm²

Tube plates: Material

front S. cl. Steel

back S. cl. Steel

Tensile strength

41-47 kg/cm²

Thickness

22 mm

Mean pitch of stay tubes in nests

all 245 mm

Pitch across wide water spaces

345 x 90 mm

Working pressure

front 13.5 kg/cm²back 13.2 kg/cm²

Girders to combustion chamber tops: Material

S. cl. Steel

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

S. cl. Steel

Tensile strength

41-47 kg/cm²

Thickness: Sides

15 mm

Back

15 mm

Top

15 mm

Bottom

15 mm

Pitch of stays to ditto: Sides

-

Back

218 x 190 mm

Top

-

Are stays fitted with nuts or riveted over

Working pressure by Rules

13 kg/cm²

Front plate at bottom: Material

S. cl. Steel

Tensile strength

41-47 kg/cm²

Thickness

22 mm

Lower back plate: Material

S. cl. Steel

Tensile strength

41-47 kg/cm²

Thickness

22 mm

Pitch of stays at wide water space

D = 410 mm

Are stays fitted with nuts or riveted over

filled with nuts

Working Pressure

16.5 kg/cm²

Main stays: Material

S. cl. Steel

Tensile strength

44-50 kg/cm²

Diameter

At body of stay, 2 1/4"

or Over threads 2 1/4" - 2 1/2"

No. of threads per inch

11

Area supported by each stay

157000 mm²

Working pressure by Rules

10.05 kg/cm²

Screw stays: Material

S. cl. Steel

Tensile strength

44-50 kg/cm²

Diameter

At turned off part, 1 1/4"

or Over threads 1 1/4"

No. of threads per inch

11

Area supported by each stay

41400 mm²

004394-004404-0251

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Working pressure by Rules 8.75 kg/cm² Are the stays drilled at the outer ends no Margin stays: Diameter 1 1/2" At turned off part, or Over threads ✓ pt. 4c.

No. of threads per inch 11 Area supported by each stay 44000 mm² Working pressure by Rules 12.9 kg/cm² te of wt

Tubes: Material S.M. Steel External diameter 2 1/2" Thickness 5/16" = 8 mm No. of threads per inch 11 No. in

Pitch of tubes 90 x 91 mm Working pressure by Rules 16 kg/cm² Manhole compensation: Size of opening ig. Book

End shell plate 300 x 400 mm Section of compensating ring - No. of rivets and diameter of rivet holes -

Outer row rivet pitch at ends - Depth of flange if manhole flanged 85 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 Plate Rivets

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 BURMEISTER & WAINZALASKIN COOKBOYGERY Manufacturer.

Dates of Survey while building { During progress of work in shops - - 24/6-1/7-4/7-11/7-31/7-4/1 Are the approved plans of boiler and superheater forwarded herewith yes (If not state date of approval.)

{ During erection on board vessel - - - 18/9-3/10-27/10-11/11-24/11-16/12-20/12-2/1-30/1-4/5 Total No. of visits 15

Is this Boiler a duplicate of a previous case no If so, state Vessel's name and Report No. -

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The above donkey boiler has been constructed and fitted under special survey in accordance with the Rules, the approved plans and to my satisfaction.

The material used in construction has been tested as required by the Rules and the workmanship is good.

Survey Fee ... £150.00 When applied for, 27.7.1945

Travelling Expenses (if any) £ - When received, 10.8.1945

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

Committee's Minute FRI. 1 FEB 1946

Assigned See Cpn 11875