

REPORT ON BOILERS.

No. 4085

5a.

Received at London Office

11 JUL 1933

Writing Report

When handed in at Local Office

Port of *Oslo*

Survey held at *Oslo*

Date, First Survey *10/6*

Last Survey *28/6*

19 *33*

2 on the

s/s

"Kosmos"

(Number of Visits *4*)

Gross *17801*

Net *11789*

Built at *Belfast*

By whom built *Workman Clark*

Yard No.

When built *1929*

made at

Belfast

By whom made

Engine No.

When made *1929*

made at

Oslo

By whom made *A/S Kampens Mek. Verhsted*

Boiler No.

When made *1933*

Horse Power

Owners *Støvsfærveselsk. Kosmos A/S*

Port belonging to *Sandefjord*

WHALE OIL APPARATUS.

TUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Constructors of Steel

approved works

(Letter for Record *E 12/4/33*
29/8/33)

Heating Surface of Boilers

Is forced draught fitted

Coal or Oil fired

Description of Boilers

2 whale oil apparatus, rotating boilers

Working Pressure *5 kg/cm²*

by hydraulic pressure to *10 kg*

Date of test *10-14-22-28/1933*

No. of Certificate

Can each boiler be worked separately

Firegrate in each Boiler

No. and Description of safety valves to each boiler

each set of valves per boiler

per Rule

as fitted *2" diam.*

Pressure to which they are adjusted *3.14 in²*

Are they fitted with easing gear

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

distance between boilers or uptakes and bunkers or woodwork

Is oil fuel carried in the double bottom under boilers

distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

internal dia. of boilers

2600 mm

Length

6300 mm

Shell plates: Material

steel

Tensile strength

28-35

Are the shell plates welded or flanged

one end flanged

Description of riveting: circ. seams

end

inter.

single butt strap

seams

single butt strap

Diameter of rivet holes in

circ. seams

20 mm

long. seams

20 mm

Pitch of rivets

67 mm

percentage of strength of circ. end seams

plate

58.4

rivets

38.6

Percentage of strength of circ. intermediate seam

plate

58.4

rivets

65.8

percentage of strength of longitudinal joint

plate

55.4

combined

70.4

Working pressure of shell by Rules

67

5.05 kg./cm²

ess of butt straps

outer

16 mm

inner

No. and Description of Furnaces in each Boiler

al

Tensile strength

Smallest outside diameter

of plain part

top

bottom

Thickness of plates

crown

bottom

Description of longitudinal joint

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

Working pressure of furnace by Rules

plates in steam space: Material

S. M. Steel

Tensile strength *26-30 tons/in²*

Thickness

25 mm

Pitch of stays

are stays secured

Working pressure by Rules

plates: Material

front

back

Tensile strength

Thickness

pitch of stay tubes in nests

Pitch across wide water spaces

Working pressure

front

back

ers to combustion chamber tops: Material

Tensile strength

Depth and thickness of girder

entre

Length as per Rule

Distance apart

No. and pitch of stays

ch

Working pressure by Rules

Combustion chamber plates: Material

ile strength

Thickness: Sides

Back

Top

Bottom

of stays to ditto: Sides

Back

Top

Are stays fitted with nuts or riveted over

king pressure by Rules

Front plate at bottom: Material

Tensile strength

ness

Lower back plate: Material

Tensile strength

Thickness

of stays at wide water space

Are stays fitted with nuts or riveted over

king Pressure

Main stays: Material

Tensile strength

meter { At body of stay,
Over threads

No. of threads per inch

Area supported by each stay

king pressure by Rules

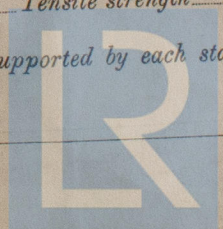
Screw stays: Material

Tensile strength

meter { At turned off part,
Over threads

No. of threads per inch

Area supported by each stay



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K 45-0132

Working pressure by Rules Are the stays drilled at the outer ends Margin stays: Diameter { At turned off part, or Over threads
No. of threads per inch Area supported by each stay Working pressure by Rules
Tubes: Material External diameter { Plain Stay Thickness { No. of threads per inch
Pitch of tubes Working pressure by Rules Manhole compensation: Size of opening
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 { Plate Rivets
Internal diameter Working pressure by Rules Thickness of crown No. and diameter
stays Inner radius of crown Working pressure by Rules
How connected to shell Size of doubling plate under dome Diameter of rivet holes and
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
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
Rules Pressure to which the safety valves are adjusted Hydraulic test pressure
tubes, castings and after assembly in place Are drain cocks or valves
to free the superheater from water where necessary

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with

The foregoing is a correct description,

pr. pr. A/s Kampus Verktsted
L. Thomsen

Dates of Survey { During progress of work in shops - - - 10/6, 14/6, 22/6 - 28/6. 1933. Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) approved 28/8. 1933.
while building { During erection on board vessel - - - Total No. of visits 4. 12/4 = 1

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

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

Then whole oil apparatus (boiler) have been examined during construction at Kampus Verktsted, Oslo and subsequently tested by hydraulic pressure to 10 kg per cm², and the workmanship found good. The cast steel material delivered from Raufoss Ammunisjonsfabrik, tested and found in order. The steel plating delivered from approved works, tested by the Society's Surveyor and found in order.

The boiler have been marked: Sleepers, 10 atm. W.P. 4.5 atm, date 10-14-22 and 28/6 and initials P.B.R. or P.E. as per attached reports Rps 10 date 16th & 29th June 1933.

The safety valves were not adjusted now, the boilers not being put under steam until the vessel's arrival on the whaling grounds.

It is recommended that this vessel's whole oil boilers be classed in the Society's Register Book

Survey Fee 16.360.- : When applied for, 15/6. 1933.
Travelling Expenses (if any) 16.48.- : When received, 19

Phide
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute TUE. 12 DEC 1933

Assigned

FRI. 28 SEP 1933

TUE. 16 OCT 1933

TUE. 23 OCT 1933

FRI. 5 JUL 1935

TUE. 26 NOV 1935

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Foundation