5a.

REPORT ON BOILERS.

No. 4160 a.

Received at London Office 27 OCT 1933

Writing Report 24/10 1933 When handed in at Local Office 24/10 1933 Port of Oslo

Survey held at Oslo Date, First Survey 30/1.31 Last Survey 6/2. 1931

on the S/S. 'SVEND FOYN' (Number of Visits 4) Tons { Gross 14596 / Net 8032

Built at Hamilton By whom built Furness S.B. & Co. Yard No. When built 1931

made at Harlepool By whom made Richardson, Westgarth & Co Ltd. Engine No. When made 1931
oil extractors

made at Oslo By whom made Kvaerner Brug A/S. Boiler No. When made 1931.

l Horse Power Owners St Helier Shipowners Ltd. Port belonging to London.

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ale oil extractors

TITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

ter be shut

cturers of Steel approved makes (Letter for Record)

ng pressur **eating Surface of Boilers** – Is forced draught fitted – Coal or Oil fired –

ulic test pr **d Description of Boilers** 8 whale oil extractors **Working Pressure** 60 lb.

ks or valv by hydraulic pressure to 120 lb. Date of test 30/11, 3.5.6/2.31 No. of Certificate – Can each boiler be worked separately –

f Firegrate in each Boiler – No. and Description of safety valves to each boiler 1 off single spring loaded 1" dia

f each set of valves per boiler { per Rule / as fitted 0.44 sq inch } Pressure to which they are adjusted – Are they fitted with easing gear –

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

st distance between boilers or uptakes and bunkers or woodwork – Is oil fuel carried in the double bottom under boilers –

st distance between shell of boiler and tank top plating – Is the bottom of the boiler insulated –

t internal dia. of boilers 2250 m/m. Length 2600 m/m. **Shell plates:** Material S.M. Steel Tensile strength 28-35

ess 10 m/m. Are the shell plates welded or flanged end plates flanged Description of riveting: circ. seams { end single rets. / inter. }

ams double riveted Diameter of rivet holes in { circ. seams 20 m/m. / long. seams 20 } Pitch of rivets { 52.2 m/m. / 66 m/m. }

tage of strength of circ. end seams { plate 66.7 / rivets 44.4 } Percentage of strength of circ. intermediate seam { plate – / rivets – }

tage of strength of longitudinal joint { plate 75.2 / rivets 69.5 / combined } Working pressure of shell by Rules 5.6 Kg/cm²

ess of butt straps { outer / 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

sions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules

lates in steam space: Material S.M. Steel Tensile strength 26-30 Thickness Top 20 m/m. bottom 17 " Pitch of stays

re 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 }

s to combustion chamber tops: Material Tensile strength Depth and thickness of girder

re Length as per Rule Distance apart No. and pitch of stays

h Working pressure by Rules **Combustion chamber plates:** Material

e strength Thickness: Sides Back Top Bottom

of stays to ditto: Sides Back Top Are stays fitted with nuts or riveted over

ng 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

ng Pressure **Main stays:** Material Tensile strength

ter { At body of stay, / or / Over threads } No. of threads per inch Area supported by each stay

ng pressure by Rules **Screw stays:** Material Tensile strength

ter { At turned off part, / or / Over threads } No. of threads per inch Area supported by each stay

Working pressure by Rules ..... *Are the stays drilled at the outer ends* ..... *Margin stays: Diameter* { *At turned off part,* / *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 op*

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 dia*

stays ..... *Inner radius of crown* ..... *Working pressure by Rules* .....

How connected to shell ..... *Size of doubling plate under dome* ..... *Diameter of rivet holes a*

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*

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 pressu*

Rules ..... *Pressure to which the safety valves are adjustea* ..... *Hydraulic test p*

tubes ....., *castings* ..... *and after assembly in place* ..... *Are drain cocks or val*

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,

..... *Manu*

Dates of Survey while building { *During progress of work in shops* - - } 30/1, 3/2, 5/2 - 6/2.1931 *Are the approved plans of boiler and superheater forwarded herewith* .....
(If not state date of approval.) 4/7.1930.

{ *During erection on board vessel* - - - } ..... *Total No. of visits* 4

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.*) .....

There whole six extractors have been constructed in accordance with the appro
plans. The extractors examined during construction and tested by hydraulic
pressure to 120 lbs per sq inch and found in order. The workmanship is good.
The extractors were marked:

Lloyd's test
120 lbs.
W.P. 60 lb.
30/1, 3/2, 5/2 x 6/2.31
P.B.R. & P.E.

Survey Fee ... ... £ : : | When applied for, ... 19

Travelling Expenses (if any) £ : : | When received, ... 19

Per Jour-Rol

Engineer Surveyor to Lloyd's Register of Shi

Committee's Minute TUE. 12 DEC 1939

Assigned See Bl Rpt. 4160