

REPORT ON BOILERS.

No. 6954

Received at London Office 22 NOV 1924

Date of writing Report 7/11 1924 When handed in at Local Office 19 Port of Copenhagen.

No. in Reg. Book. 20159 Survey held at Copenhagen & Elsinore Date, First Survey 6/5 24 Last Survey 4/11 19 24

on the S.S. Motor vessel "ODENSE" (Number of Visits 10) Tons Gross 555.08 Net 251.33

Built at Elsinore By whom built A/S Helsingørsk Jernskibs-og Maskinbyggeri Yard No. 170 When built 1924

Engines made at Høstby By whom made A/S Høstby Dieselmotor Fabrik Engine No. 170 When made 1924

Boilers made at Copenhagen By whom made A/S Petersen & Wraae Boiler No. 217 When made 1924

Owners Det Frenck Dampskibs Selskab. Port belonging to Odense.

VERTICAL DONKEY BOILER.

Made at Copenhagen By whom made A/S Petersen & Wraae Boiler No. 217 When made 1924 Where fixed in motor room.

Manufacturers of Steel Plates: David Colville & Sons Ltd. Glasgow; Sinter: Kevan & Lloyd Ltd. London.

Total Heating Surface of Boiler 8.3 m² Is forced draught fitted No Coal or Oil fired oil.

No. and Description of Boilers 1 off, vertical, return tubular Working pressure 50 lbs. per sq. in.

Tested by hydraulic pressure to 100 lbs. per sq. in. Date of test 16th July 1924 No. of Certificate 444

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler 1 off 50 mm dia, direct spring loaded.

Area of each set of valves per boiler per rule as fitted 19.63 cm² Pressure to which they are adjusted 50 lbs. per sq. in. Are they fitted with easing gear yes.

State whether steam from main boilers can enter the donkey boiler Is oil fuel carried in the double bottom under boiler yes.

Smallest distance between boiler or uptake and bunkers or woodwork 16" Is the base of the boiler insulated No Largest internal dia. of boiler 1000 mm Height 2300 mm

Shell plates: Material S.M. steel Tensile strength 27.94 - 31.75 t. Thickness 3/8"

Are the shell plates welded or flanged No Description of riveting: circ. seams end single inter single long seams single

Dia. of rivet holes in circ. seams 19 mm Pitch of rivets 45 mm Percentage of strength of circ. seams plate 57.8 rivets 54.0 of Longitudinal joint plate 57.8 rivets 54.0 combined

Working pressure of shell by rules 8.14 kg/cm² Thickness of butt straps outer inner

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat dished partial spherical Material S.M. steel.

Tensile strength 26.03 t. Thickness 3/8" Radius 1000 mm Working pressure by rules 7.66 kg/cm²

Description of Furnace: Plain, spherical, or dished crown Material Tensile strength

Thickness External diameter Length as per rule Working pressure by rules

Pitch of support stays circumferentially and vertically Are stays fitted with nuts or riveted over

Diameter of stays over thread Radius of spherical or dished furnace crown Working pressure by rule

Thickness of Ogee Ring Diameter as per rule Working pressure by rule

Combustion Chamber: Material S.M. steel Tensile strength 26.03 t. Thickness of top plate 5/8"

Radius if dished Working pressure by rule 7 kg/cm² Thickness of back plate 3/8" Diameter if circular 820 mm

Length as per rule 1380 mm Pitch of stays No stays. Are stays fitted with nuts or riveted over

Diameter of stays over thread Working pressure of back plate by rules 4.37 kg/cm²

Tube Plates: Material front S.M. steel back Tensile strength 26.03 t. Thickness 5/8" Mean pitch of stay tubes in nests 204 mm

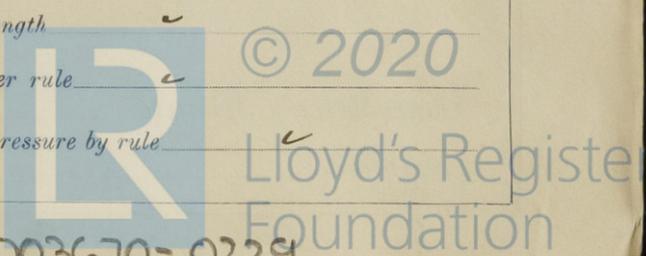
If comprising shell, Dia. as per rule front back Pitch in outer vertical rows 102 mm Dia. of tube holes FRONT stay 3" plain 3" BACK stay 3" plain 3"

Is each alternate tube in outer vertical rows a stay tube yes Working pressure by rules front 5.69 kg/cm² back 5.69

Girders to combustion chamber tops: Material None 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 rule



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Crown stays: Material *Nm.* Tensile strength Diameter { at body of stay, or over threads,

No. of threads per inch Area supported by each stay Working pressure by rules

Screw stays: Material *Nm.* Tensile strength Diameter { 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

Tubes: Material *Stw.* External diameter { plain *3"* stay *3"* Thickness { *4 mm* *8 mm*

No. of threads per inch *9* Pitch of ^{stay}tubes *102 mm* Working pressure by rules *18.9 kg/cm²*

Manhole Compensation: Size of opening in shell plate *305 x 405 mm* Section of compensating ring *97.5 x 15.9 mm* No. of rivets and dia of rivet holes *32 off 19 mm* Outer row rivet pitch at ends *100 mm* Depth of flange if manhole flanged

Uptake: External diameter Thickness of uptake plate

Cross Tubes: No. External diameters { Thickness of plates

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with *Yes.*

PETERSEN & WRAAE

Winkler

Vald. Jørgensen

The foregoing is a correct description,

Manufa

Dates of Survey { During progress of work in shops - - } *6/5. 28/5. 7/7. 16/7. 24.* Is the approved plan of boiler forwarded herewith (If not state date of approval.) *Yes.*

while building { During erection on board vessel - - } *25/9. 3/10. 6/10. 8/10. 24/10. 4/11. 24.* Total No. of visits *10.*

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

This boiler has been constructed under special survey and in accordance with the Rules, the approved plan and the requirements contained in letter 3 dated 19/4 24. The material used in the construction has been tested as required by the Rules as per Certificate provided, and the workmanship is good.

A duplex Worthington pump, size 75 x 40 x 45 mm, and a feed injector have been fitted to feed the boiler.

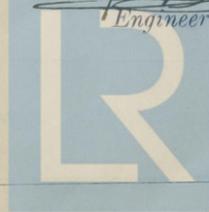
Survey Fee ... £ *114.50* : : When applied for, *29/7* 19 *24*

Travelling Expenses (if any) £ : : When received, *10/9* 19 *24*

de. Jørgensen *Winkler*
Engineer Surveyors to Lloyd's Register of Shipping

Committee's Minute **JVES. 25 NOV 1924**

Assigned



Lloyd's Register
Foundation