

REPORT ON BOILERS.

BOX CASE

No. 4519.

Received at London Office 18 APR 1935

Date of writing Report 12/4, 1935 When handed in at Local Office 12/4, 1935 Port of Oslo

opening No. in Survey held at Sandefjord Date, First Survey 1911 Last Survey 29/1 1935

638 on the Twin Sc. 4444. "H.T. NIELSEN ALONSO" (Number of Visits 3) Gross Tons 989 Net Tons 558

Master [Signature] Built at Oslo By whom built C. Carstedt & Co. Yard No. When built 1900

diameter engines made at Oslo By whom made Dunham & Jackson Engine No. When made 1900

boilers made at Berlin By whom made Rud. Hartman Boiler No. When made 1926

es and p Owners Koalfaynsrud, Felan Port belonging to Cornish

Whale oil

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel (Letter for Record)

Total Heating Surface of Boilers Is forced draught fitted Coal or Oil fired Working Pressure 20 kg

Description of Boilers 6 horizontal whale oil boilers Can each boiler be worked separately Yes

Tested by hydraulic pressure to 90 lb. Date of test 28/1.35 No. of Certificate Can each boiler be worked separately Yes

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler 1 single spring loaded

Area of each set of valves per boiler as fitted 11.7 cm² Pressure to which they are adjusted Are they fitted with easing gear

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

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

Largest internal dia. of boilers 1600 mm Length 5000 mm Shell plates: Material S.M. steel Tensile strength 42-50 kg

Thickness 10 mm Are the shell plates welded or flanged and if flanged Description of riveting: circ. seams end single riv. lap inter. single riv. through shell

g. seams D.r. lap Diameter of rivet holes in circ. seams 23 mm, 20 mm long. seams 20 mm Pitch of rivets 56.5 mm

Percentage of strength of circ. end seams plate 62.3 rivets 53.4 Percentage of strength of circ. intermediate seam plate 62.9 rivets 48.2

Percentage of strength of longitudinal joint plate 64.6 rivets 86.1 Working pressure of shell by Rules 7.1 kg. cm²

Thickness of butt straps outer 13 mm inner No. and Description of Furnaces in each Boiler

Material Tensile strength Smallest outside diameter

Length of plain part top Thickness of plates crown Description of longitudinal joint bottom

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

Stays in steam space: Material S.M. steel Tensile strength 42-50 kg. cm² Thickness 10 mm Pitch of stays

How are stays secured Spliced ends, radius 2000 mm Working pressure by Rules 4.14 kg. cm²

End plates: Material front Tensile strength Thickness back

Minimum pitch of stay tubes in nests Pitch across wide water spaces Working pressure front back

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

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

Working pressure by Rules Combustion chamber plates: Material

Tensile strength Thickness: Sides Back Top Bottom

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

Working pressure by Rules Front plate at bottom: Material Tensile strength

Thickness Lower back plate: Material Tensile strength Thickness

Pitch of stays at wide water space Are stays fitted with nuts or riveted over

Working Pressure Main stays: Material Tensile strength

Diameter At body of stay, No. of threads per inch Area supported by each stay

Over threads

Working pressure by Rules Screw stays: Material Tensile strength

Diameter At turned off part, No. of threads per inch Area supported by each stay

Over threads



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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,

Dates of Survey { During progress of work in shops - - } _____ Are the approved plans of boiler and superheater forwarded herewith _____ (If not state date of approval.)

while building { During erection on board vessel - - - } _____ Total No. of visits _____

Is this Boiler a duplicate of a previous case Yes If so, state Vessel's name and Report No. "Vandford", 111 4420

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

These boilers were constructed at Berlin by Rud. Harkman, and the owner states that the material used has been tested by Germanische Lloyd Surveyors. The boilers were now examined and the scantlings noted. The workmanship appears to be good. Minor repairs have now been effected and the boilers tested by hydraulic pressure.

Survey Fee £ : : } When applied for, 19

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

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

Committee's Minute WED. 8 MAY 1935 TUE. 8 OCT 1935

Assigned _____

