

REPORT ON BOILERS.

No. 7390.

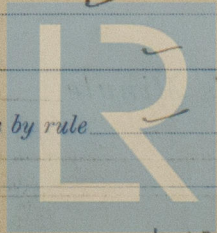
Received at London Office

10 JAN 1921

Date of writing Report 22/12 1926 When handed in at Local Office 19 Port of Copenhagen
 No. in Survey held at Copenhagen & Odense Date, First Survey 2nd July 1926 Last Survey 16th December 1926
 Reg. Book. 9681 on the Steam & Motor vessel "Knut Nelson" (Number of Visits 11) Gross 7468.20
 Tons Net 4724.44
 Built at Odense By whom built Odense Staalskibsværft ved A. P. H. Larsen No. 24 When built 1926
 Engines made at Copenhagen By whom made J. B. Mønstervang & H. H. Skibstyggeri Engine No. 1245 When made 1926
 Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓
 Owners A/S Borg & Sørensen Port belonging to Oslo

VERTICAL DONKEY BOILER.

Made at Copenhagen By whom made J. B. Mønstervang & H. H. Skibstyggeri Boiler No. 1496 When made 1926 Where fixed in the motor room
 Manufacturers of Steel Plates: Mosses Henschel & Søn, Løgstør; J. B. Mønstervang & H. H. Skibstyggeri, København; J. B. Mønstervang & H. H. Skibstyggeri, København; J. B. Mønstervang & H. H. Skibstyggeri, København
 Total Heating Surface of Boiler 100 sq. m. Is forced draught fitted No. Coal or Oil fired oil fired
 No. and Description of Boilers 1 off. vertical, cross-tube Working pressure 100 lbs./sq. in.
 Tested by hydraulic pressure to 14 kg/cm² Date of test 3/21 July 1926 No. of Certificate 461
 Area of Firegrate in each Boiler ✓ No. and Description of safety valves to each boiler 2 off. direct spring loaded
 Area of each set of valves per boiler { per rule 1.30 sq. m. as fitted 2.40 sq. m. Pressure to which they are adjusted 100 lbs./sq. in. Are they fitted with easing gear yes
 State whether steam from main boilers can enter the donkey boiler No main boiler Smallest distance between boiler or uptake and bunkers 38"
 Is oil fuel carried in the double bottom under boiler yes Smallest distance between base of boiler and tank top plating 1370 mm
 Is the base of the boiler insulated No Largest internal dia. of boiler 1370 mm Height 3200 mm
 Shell plates: Material S. M. steel Tensile strength 474 kg/mm² = 30.1 lb. Thickness 10 mm
 Are the shell plates welded or flanged No Description of riveting: circ. seams { end lap, single riv. inter. long. seams lap, 266 rivets
 Dia. of rivet holes in { circ. seams 19 mm Pitch of rivets { 45 mm Percentage of strength of circ. seams { plate 87.8 rivets 44.9 of Longitudinal joint { plate 69.3 rivets 69.5 combined ✓
 Working pressure of shell by rules 9.93 kg/cm² Thickness of butt straps { outer ✓ inner ✓
 Shell Crown: Whether complete hemisphere, dished partial spherical, or flat flat Material S. M. steel
 Tensile strength 43.2 kg/mm² Thickness 22 mm Radius ✓ Working pressure by rules 9.3 kg/cm²
 Description of Furnace: Plain, spherical, or dished crown plain Material S. M. steel Tensile strength 43.3 kg/mm²
 Thickness 14.5 mm External diameter { top 1029 mm bottom 1229 mm Length as per rule 1432 mm Working pressure by rules 6.65 kg/cm² considered ✓
 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 { D ✓ d ✓ Working pressure by rule ✓
 Combustion Chamber: Material ✓ Tensile strength ✓ Thickness of top plate ✓
 Radius if dished ✓ Working pressure by rule ✓ Thickness of back plate ✓ Diameter if circular ✓
 Length as per rule ✓ Pitch of stays ✓ Are stays fitted with nuts or riveted over ✓
 Diameter of stays over thread ✓ Working pressure of back plate by rules ✓
 Tube Plates: Material { front ✓ back ✓ Tensile strength { ✓ Thickness { ✓ Mean pitch of stay tubes in nests ✓
 comprising shell, Dia. as per rule { front ✓ back ✓ Pitch in outer vertical rows { ✓ Dia. of tube holes FRONT { stay ✓ plain ✓ BACK { stay ✓ plain ✓
 Each alternate tube in outer vertical rows a stay tube ✓ Working pressure by rules { front ✓ back ✓
 Orders to combustion chamber tops: Material ✓ 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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W1054-0099

Crown stays: Material *S. M. steel* Tensile strength *277 t/s* Diameter { at body of stay, *2"* or over threads, *✓*

No. of threads per inch *11* Area supported by each stay *255 sq"* Working pressure by rules *101.5 lbs/sq"*

Screw stays: Material *✓* 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 *✓* External diameter { plain, *✓* stay, *✓* Thickness { *✓*

No. of threads per inch *✓* Pitch of tubes *✓* Working pressure by rules *✓*

Manhole Compensation: Size of opening in shell plate *305 x 405 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 *80 mm*

Uptake: External diameter *364 mm* Thickness of uptake plate *12 mm*

Cross Tubes: No. *3* External diameters { *230 mm* Thickness of plates *10 mm*

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

The foregoing is a correct description,

AKTIESELSKABET
BURMEISTER & WAIN
HABEN-UNTERKIESEL
The. *Signature* Manufacturer

Dates of Survey { During progress of work in shops - - *2/7 13/7 26/7 31/7 26* Is the approved plan of boiler forwarded herewith *yes*
while building { During erection on board vessel - - *3/11 17/11 3/12 10/12 13/12 15/12 16/12 26* (If not state date of approval.)
Total No. of visits *11*

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

This donkey boiler has been built under Special Survey and in accordance with the Rules, the approved plan and letter & dated 1st February 1926.

The material used in the construction has been tested and examined as required by the Rules, as per producer's certificates, and has further been examined by us during the construction of the boiler and found good, and the workmanship is of good description throughout.

The boiler has been fitted on board the vessel under our supervision and to our satisfaction, and a duplex feed pump, 90 x 60 x 90 mm, and an injector have been supplied to feed the boiler.

Recommend the vessel to have notation of D.B. 100 lb. in the Reg. Book.

15-18.20
Survey Fee ... *44. 76. 44* When applied for, *21/12 1926*
Travelling Expenses (if any) £ ... : : When received, *27/12 1926*

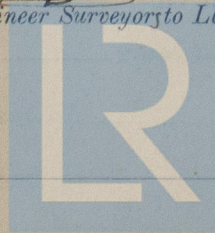
Committee's Minute

FRI. 14 JAN 1927

Assigned

See Capt. attached

Ac. Inspr. Chiffley
Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register
Foundation

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