

REPORT ON BOILERS.

No. 7168.

14 JAN 1926

Received at London Office

2/1 1926 When handed in at Local Office

Port of Copenhagen

held at Copenhagen

Date, First Survey 16/6 1925 Last Survey 5/12 1925

Steamship or Motor vessel "Danmark"

(Number of Visits 10) Tons {Gross 8390.97 Net 5342.41

By whom built *As Binnichsen & Hain's Maskin-afskafferi* Yard No. 337 When built 1925

By whom made *As Binnichsen & Hain's Maskin-afskafferi* Engines No. {1088 1089} When made 1925

By whom made Boiler No. When made

Det Asiatiske Kompagni Port belonging to Copenhagen

DONKEY BOILER.

By whom made *As Jensen & Hraae* Boiler No. 222 When made 1925 Where fixed *Starboard side of engine room.*

Steel Plates: *Rheinische Stahlwerke*; Cross ribs: *Mum Gallenwegs*; Chimney: *Mum Phoenix*

Surface of Boiler 13.7 m² 147 # Is forced draught fitted No. Coal or Oil fired oil fired

Position of Boilers One off, vertical, cross rib Working pressure 80 lbs. per sq. in.

Working pressure to 160 lbs. per sq. in. Date of test 21st August 1925. No. of Certificate 452.

No. and Description of safety valves to each boiler 2 off, direct spring loaded

No. of valves per boiler {per rule 1515 mm² as fitted 3926} Pressure to which they are adjusted 80 lbs. per sq. in. Are they fitted with easing gear yes.

Can steam from main boilers can enter the donkey boiler Smallest distance between boiler or uptake and bunkers

Is oil fuel carried in the double bottom under boiler yes. Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated yes. Largest internal dia. of boiler 1650 mm. Height 3795 mm.

Material S. M. steel. Tensile strength 46.5 kg/mm². Thickness 9.5 mm.

Welded or flanged No. Description of riveting: circ. seams {end lap single riv. inter.} long seams lap 2 riv. riveted.

Pitch of rivets {circ. seams 19 mm. long seams 19} Percentage of strength of circ. seams {plate 54.8 rivets 54.1} of Longitudinal joint {plate 68.3 rivets 81.0 combined.}

Strength of shell by rules 7.5 kg/cm² = 106.5 lbs. per sq. in. Thickness of butt straps {outer inner}

Whether complete hemisphere, dished partial spherical, or flat dished, partial spher. Material S. M. steel.

Thickness 43.8 kg/mm² Thickness 13 mm. Radius 1650 mm. Working pressure by rules 6.93 kg. 98.5 lbs.

Furnace: Plain, spherical, or dished crown dished. Material S. M. steel. Tensile strength 43.4 kg/mm²

External diameter {top 1278 mm. bottom 1258} Length as per rule 1885 mm. Working pressure by rules 2.845 kg = 69.2 lbs.

Are stays circumferentially and vertically Are stays fitted with nuts or riveted over

Radius of spherical or dished furnace crown Working pressure by rule

Diameter as per rule {D d} Working pressure by rule

Material Tensile strength Thickness of top plate

Working pressure by rule Thickness of back plate Diameter if circular

Pitch of stays Are stays fitted with nuts or riveted over

Working pressure of back plate by rules

Material {front back} Tensile strength Thickness Mean pitch of stay tubes in nests

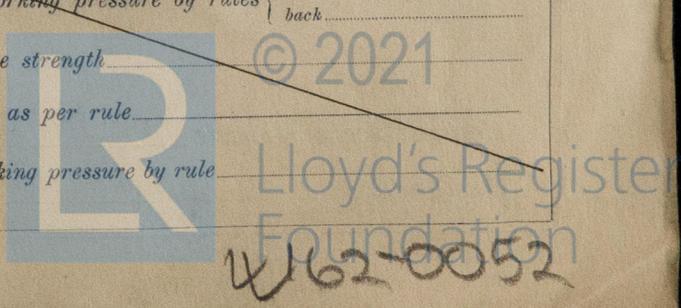
shell, Dia. as per rule {front back} Pitch in outer vertical rows {stay plain} Dia. of tube holes FRONT {stay plain} BACK {stay plain}

Working pressure by rules {front back}

Material Tensile strength

Thickness of girder at centre Length as per rule

No. and pitch of stays in each Working pressure by rule



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Crown stays: Material 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 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 edge

Tubes: Material External diameter { plain, or stay. } Thickness { }
 No. of threads per inch Pitch of tubes Working pressure by rules

Manhole Compensation: Size of opening in shell plate 305×405 mm Section of compensating ring 97.5×16 mm. No. of rivet holes 32 off 19 mm. Outer row rivet pitch at ends 95 mm. Depth of flange if manhole flanged

Uptake: External diameter 424 mm. Thickness of uptake plate 12 mm.

Cross Tubes: No. 6 . External diameters 223.8 mm. Thickness of plates 11.9 mm.

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

The foregoing is a correct description of the boiler.
Mrs PETERSEN & WRAAE
H. Kramling

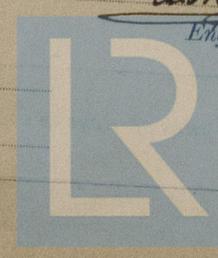
Dates of Survey while building { During progress of work in shops - - } $11/6, 17, 17/4, 21/8$ 1925.
 { During erection on board vessel - - } $12/11, 16/11, 19/11, 25/11, 3/12, 5/12$ 1925.

Is the approved plan of boiler forwarded herewith (If not state date of approval.)
 Total No. of visits 10 .

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 the requirements contained in Secretary's letters & dated 5/3 - 19/3 - 25/3 1925. The material used in construction has been tested and examined as required by the Rules and the workmanship is good.
 A donkey boiler feed pump, $90 \times 60 \times 90$ mm duplex (Horsington) feed injector have been fitted to feed the boiler.

Survey Fee $\pounds 83.54$ When applied for, $6/9$ 1925
 Travelling Expenses (if any) $\pounds -$ When received, $7/9$ 1925

Committee's Minute **FRI. 22 JAN 1926**
 Assigned

Dr. P. J. ...
 Engineer Surveyor to Lloyd's Register of Shipping
 Lloyd's Register Foundation