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REPORT ON BOILERS.

No. 117920

Received at London Office

Date of writing Report 21 MAR 1949 When handed in at Local Office 21 MAR 1949 Port of LONDON

No. in Survey held at LONDON Date, First Survey 26 JANUARY 1949 Last Survey 14 MARCH 1949

Reg. Book. on the M.T. "Lindesnas" (Number of Visits 1) Tons Gross 155 Net 125

Built at GOTHENBURG By whom built LINDHOLMENS Yard No. 1011 When built 1949

Engines made at LONDON By whom made MESSRS TOWLER & SON, LTD. Engine No. 395 When made 1949

Boilers made at LONDON By whom made MESSRS TOWLER & SON, LTD. Boiler No. 395 When made 1949

Owners MISS B.S.S. Port belonging to MISS B.S.S.

VERTICAL BOILER.

Made at LONDON By whom made MESSRS TOWLER & SONS, LTD. Boiler No. 395 When made 1949 Where fixed ✓

Manufacturers of Steel Shell & Tube Plates - Messrs Bolnipples, Dalgell Tubes - Halbot Stead Tube Co, Walsall
Thimble " - Tubes Ltd, Aston, Birmingham.

Total Heating Surface of Boiler 300 sq. ft. Is forced draught fitted ✓ Coal or Oil fired OIL FIRED

No. and Description of Boilers ONE PATENT SPANNER "STEDDY-SWIRLYFLO" COMPOSITE BOILER Working Pressure 10.5 KGS/cm²
= 149.3 lbs/sq.in

Tested by hydraulic pressure to 275 lbs/sq.in Date of test 14th March 1949 No. of Certificate 1432

Area of fire grate in each Boiler ✓ No. and description of safety valves to each boiler ONE DOUBLE MARINE TYPE

Area of each set of valves per boiler { per Rule 1.50 sq. ins. Pressure to which they are adjusted ✓ Are they fitted with easing gear YES
as fitted 6.28 sq. ins.

State whether steam from main boilers can enter the donkey boiler ✓ Smallest distance between boiler or uptake and bunkers or woodwork ✓ Is oil fuel carried in the double bottom under boiler ✓ Smallest distance between base of boiler and tank top plating ✓

Is the base of the boiler insulated ✓ Largest internal dia. of boiler 4'-0" Height 10ft 3 5/8 ins

Shell plates: Material S.M. STEEL Tensile strength 28-32 tons/sq.in Thickness 1/16 ins

Are the shell plates welded or flanged NO If fusion welded, state name of welding firm ✓

Have all the requirements of the Rules for Class I vessels been complied with ✓ Description of riveting: circ. seams { ends DOUBLE ROW LAP
1 1/2" dia. rivets

long. seams Double Butt Strap 4 rows 13 rivets Dia. of rivet holes in { circ. seams 7/8 ins. Pitch of rivets { 3 1/8 ins. Percentage of strength of circ. seams { plate 72.0%
long. seams 7/8 ins. { 3 3/4 ins. { rivets 46.92%

of longitudinal joint { plate 76.66% Thickness of butt straps { outer 1/16 ins. Shell Crown: Whether complete hemisphere, dished partial
rivets 71.89% { inner 1/16 ins.

spherical, or flat FLANGED Material S.M. STEEL Tensile strength 26-30 tons Thickness 5/8 ins.

Radius of flange 2.5 ins. Description of Furnace: Plain, spherical, or dished crown ✓ Material ✓

Tensile strength ✓ Thickness ✓ External diameter { top ✓ Length as per Rule ✓
bottom ✓

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 ✓

Thickness of Ogee Ring ✓ Diameter as per Rule { D ✓
d ✓

Combustion Chamber: Material ✓ Tensile strength ✓ Thickness of top plate ✓

Radius if dished ✓ 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 ✓

Tube Plates: Material { front S.M. STEEL Tensile strength { 26-30 tons Thickness { Top 5/8 ins. Mean pitch of stay tubes in nests 4 1/2 ins.
back ✓ Bottom 3/4 ins.

If comprising shell, dia. as per Rule { front as per Pitch in outer vertical rows { 2 1/4 ins. Dia. of tube holes { Top 1 9/16 ins. stay 1 9/16 ins.
back approved plan. { 1 9/16 Bottom 1 1/2 ins.

Is each alternate tube in outer vertical rows a stay tube YES - in fire tube nest Thimble tubes in exhaust gas nest

Girders 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 ✓

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Crown Stays: Material ☒ Tensile strength ☒ Diameter { at body of stay, ☒ or over threads ☒

No. of threads per inch ☒ Screw Stays: Material ☒ Tensile strength ☒

Diameter { at turned off part, ☒ or over threads ☒ No. of threads per inch ☒ Are the stays drilled at the outer ends ☒

Tubes: Material S.M. STEEL External diameter SWIRLY FLO 1 1/2 ins Thickness { .128 ins .25 ins

No. of threads per inch Welded in Pitch of tubes SWIRLY FLO 2.25 ins Stays as per approved plan.

Manhole Compensation: Size of opening in shell plate 16 ins. x 12 ins. Section of compensating ring 6.5 ins x .875 ins No. of rivets and diameter

of rivet holes Welded on Outer row rivet pitch at ends ☒ Depth of flange if manhole flanged ☒

Uptake: External diameter 2 ft 1.25 ins Thickness of uptake plate .625 ins

Cross Tubes: No. ☒ External diameters { ☒ Thickness of plates ☒

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with YES

The foregoing is a correct description,
P.P. TOWLER & SON LTD.
Manufacturer.
TECHNICAL MANAGER

Dates of Survey while building { During progress of work in shops - - { 1949: Jan 26 Feb 3. 8. 17 Mar 3. 14 Is the approved plan of boiler forwarded herewith YES

{ During erection on board vessel - - { Total No. of visits 6 (in shops)

Is this Boiler a duplicate of a previous case YES If so, state Vessel's name and Report No. LINDHOLMEN'S YARD No's 1010 and 1011

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built of tested material and surveyed during construction in compliance with the Rules of the Society and according to the approved plans. The workmanship is of good average standard and the Boiler is eligible in my opinion to be installed and used in a classed vessel.

Survey Fee ... £ 10 : 0 : 0 When applied for 22 MAR 1949

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

Date FRI. 10 MAR 1950

Committee's Minute In minute see 85. 11