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REPORT ON BOILERS.

No. 129.

RECEIVED
23 JUL 1946
IN D.O.

Received at London Office 22 JUL 1946

Date of writing Report 19... When handed in at Local Office 19... Port of NOTTINGHAM.

No. in Survey held at Lincoln. Date, First Survey 19.11.45. Last Survey 12.4.46.

Reg. Book. on the M.T. "THORINA" (Number of Visits 6) Tons Gross Net.

Built at Beverley By whom built Cook, Welton & Gemmell. Yard No. 766 When built 1946

Engines made at Lincoln By whom made Ruston & Hornsby Ltd. Engine No. 241078 When made 1946

Boilers made at Lincoln By whom made Ruston & Hornsby Ltd. Boiler No. 52573 When made 1946

Owners... Port belonging to...

VERTICAL BOILER.

Made at Lincoln By whom made Ruston & Hornsby Ltd. Boiler No. 52573 When made 1946 Where fixed -

Manufacturers of Steel Appleby Frodingham Steel Co. Ltd., Scunthorpe, Lincs.

Total Heating Surface of Boiler 67 sq.ft. Is forced draught fitted No. Coal or Oil fired Oil.

No. and Description of Boilers 1 - No. 7. Vertical "Thermax" water tube boiler. Working Pressure 100 lb./sq. in.

Tested by hydraulic pressure to 230 lb./sq. in. Date of test 12.4.46. No. of Certificate 99.

Area of fire grate in each Boiler 5.95 sq. ft. No. and description of safety valves to each boiler 1 - 2" Enclosed single Spring.

Area of each set of valves per boiler { per Rule... as fitted... 3.14 Pressure to which they are adjusted 103 lbs/sq. in. Are they fitted with easing gear Yes

State whether steam from main boilers can enter the donkey boiler No. Smallest distance between boiler or uptake and bunkers or woodwork 1' Is oil fuel carried in the double bottom under boiler No. Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated... Largest internal dia. of boiler 3' 3" Height 7' 3"

Shell plates: Material S.M. Steel. Tensile strength 28/32 Thickness 11/32"

Are the shell plates welded or flanged Flanged. 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 { end Single Riv. Lap. inter... }

long. seams Double Riv. Lap. Dia. of rivet holes in { circ. seams 3/4" Pitch of rivets { 2" Percentage of strength of circ. seams { plate... rivets... }

of longitudinal joint { plate... rivets... combined... Thickness of butt straps { outer... inner... Shell Crown: Whether complete hemisphere, dished partial

spherical, or flat Dished Material S.M. Steel. Tensile strength 26/30 Thickness 13/32

Radius 3' 3" Description of Furnace: Plain, spherical, or dished crown... Material...

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

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 S.M. Steel. Tensile strength 26/30 Thickness of top plate 15/32"

Radius if dished 2' - 6" Thickness of back plate 1/2 Diameter if circular 2' - 9"

Length as per Rule... Pitch of stays...

Are stays fitted with nuts or riveted over... Diameter of stays over thread...

Tube Plates: Material { front... back... Tensile strength { Thickness { Mean pitch of stay tubes in nests...

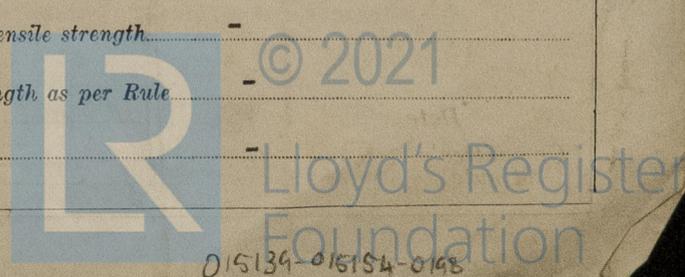
If comprising shell, dia. as per Rule { front... back... Pitch in outer vertical rows { Dia. of tube holes FRONT { stay... plain... BACK { stay... plain... }

Is each alternate tube in outer vertical rows a stay tube...

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 24 Hot finished seamless steel ✓ External diameter { plain. 2" ✓ stay. - Thickness { 10 G. ✓ 1/8

No. of threads per inch - Pitch of tubes 2.15/16" ✓

Manhole Compensation: Size of opening in shell plate 14" x 10" ✓ Section of compensating ring 4.3/4" x 1/2" No. of rivets and diameter

of rivet holes 32 x 25/32 Outer row rivet pitch at ends - Depth of flange if manhole flanged -

Uptake: External diameter 10.7/8" ✓ Thickness of uptake plate 7/16" ✓

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

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

The foregoing is a correct description,

J. M. Chief Draughtsman
Ruston & Hornsby, Limited Manufacturer

Dates of Survey while building { During progress of work in shops - - 19.11.45 to 12.4.46, 6 Visits. Is the approved plan of boiler forwarded herewith 12.11.45. 22-B.295.
{ During erection on board vessel - - - - - Total No. of visits - - - - - (If not state date of approval.)

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

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

This boiler has been built under Special Survey in accordance with the Society's Rules, the Secretary's letters and the Approved plans. Workmanship and materials are good. The boiler has been despatched for installation in the vessel. The above boiler installed in Motor Trawler "THORINA" by Messrs. Charles D. Holmes & Co. Ltd., Hull, examined under steam and safety valves adjusted to 103 lbs/per.sq.in. (Ring Sizes:- 5/8"), and found satisfactory, on completion of all tests. *W.S. Shields*

Survey Fee ... £ 6 : 0 : 0 } When applied for Monthly A/C.
Travelling Expenses (if any) £ : : } When received 10

Date FRI. 3 JAN 1947

Committee's Minute See F.E. mch. rpt.

