

# REPORT ON BOILERS.

No. 116492.

22 OCT 1959

Received at London Office

Report 28.9. 19 59 When handed in at Local Office 10.10. 19 59. Port of NEWCASTLE-ON-TYNE.

Survey held at "NORTH SHIELDS" Date, First Survey 6/8/59 Last Survey 7.9. 19 59.

on the m.v. "PULBOROUGH" ex "GERTRUDE WIENER" (Number of Visits 9) Gross 942 Net 459

Bremen By whom built Rolandwerft G.m.b.H. Yard No. When built 1956

made at Kiel By whom made Maschinenbau Kiel Aktiengesellschaft Engine No. 15757 When made 1956

made at Hamburg By whom made Ottensener Eisenwerk Boiler No. 5861 When made 1956

Stephenson Clarke Ltd. Port belonging to London

## LOCAL BOILER.

Hamburg By whom made Ottensener Eisenwerk Boiler No. 5861 When made 1956 Where fixed Forward end of E.R.

Manufacturers of Steel Phoenix-Rheinrohr A.G. Dusseldorf. Werk-Mulheim-Ruhr

Heating Surface of Boiler 648 sq.ft. Is forced draught fitted Yes Oil fired Oil

Description of Boilers One vertical multitubular Working Pressure 127 lb./sq.in.

Hydraulic pressure to 180 lb./sq.in. Date of test 2.9.59. No. of Certificate -

Fire grate in each Boiler - No. and description of safety valves to each boiler 2 - 2" bore ordinary lift

Each set of valves per boiler { per Rule 5.75 sq.ins as fitted 6.3 sq.ins Pressure to which they are adjusted 127 lb./sq.in. are they fitted with easing gear Yes

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

2' 0" Is oil fuel carried in the double bottom under boiler Yes Smallest distance between base of boiler and tank top plating

6' 6" Is the base of the boiler insulated Brickwork Largest internal dia. of boiler 5' 6" Height 10' 0"

Material S.M. Boiler Plate H11 Tensile strength 27.8 tons/sq.in. Thickness .51"

Shell plates welded or flanged Welded If fusion welded, state name of welding firm Ottensener Eisenwerk

Have the requirements of the Rules for Class I vessels been complied with Description of riveting: circ. seams { end - inter -

Dia. of rivet holes in { circ. seams - long. seams - Pitch of rivets { - Percentage of strength of circ. seams { plate - rivets -

Shell Crown: Whether complete hemisphere, dished partial or flat Dished Material S.M. Boiler plate Tensile strength 28.8 Tons/sq.in. Thickness .51"

3.8" & 10.25" Description of Furnace: Plain, spherical, or dished crown Dished Material S.M. Boiler Plate

Length 28.7 tons/sq.in. Thickness .71" External diameter 5' 5" 4.5 Length as per Rule -

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

of stays over thread - Radius of spherical or dished furnace crown 4' 4 1/2"

of Ogee Ring - Diameter as per Rule { D. - d. -

on Chamber: Material S.M. Boiler Plate Tensile strength 28.5 tons/sq.in. Thickness of top plate .71"

dished 52" Thickness of back plate .67" Diameter if circular 53"

per Rule 5' 0" at tubeplate 4' 5 1/2" at back Pitch of stays 10.8" vertically 11.8" radially

Welded stays Diameter of stays 1.26"

Material { front S.M. Boiler Plate 28.2 tons/sq.in. Thickness .87" Vert. 5.6" Mean pitch of stay tubes in nests Horiz. 5.85"

ing shell, dia. as per Rule { front 54.2" Pitch in outer vertical rows { 5.6" Dia. of tube holes FRONT { stay 2.09" BACK { stay 2.01" plain 2.01"

ornate tube in outer vertical rows a stay tube Yes

Combustion Chamber Tops: Material S.M. Boiler Plate Tensile strength 30.5 tons/sq.in.

thickness of girder at centre 6.3" 1" thk. Length as per Rule Cent 20.9" Side 17"

13.2" No. and pitch of stays in each No stays (welded)



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

No. of threads per inch - Screw Stays: Material - Tensile strength 26.2 tons per

Diameter { at turned off part, 1.26" No. of threads per inch - Are the stays drilled at the outer ends No  
or over threads -

Tubes: Material S.M. Boiler tubes External diameter { plain 2.01" Thickness .118"  
stay 2.01" .197"

No. of threads per inch - Pitch of tubes Horiz. 2.92" x 2.8" vertical

Manhole Compensation: Size of opening in shell plate 16 $\frac{1}{2}$  x 21 $\frac{1}{4}$ " Section of compensating ring See drawing No. of rivets and diam -

of rivet holes welded Outer row rivet pitch at ends - Depth of flange if manhole flanged -

Uptake: External diameter - Thickness of uptake plate -

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,

Manufacture

Dates of Survey { During progress of work in shops - - - Is the approved plan of boiler forwarded herewith (If not state date of approval.)  
while building { During examination on Aug. 6, 7, 10, 11, 17, 27, 31  
board vessel - - - Sept. 2 Total No. of visits 9

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.)

The boiler was originally built to Germanischer Lloyd Survey.

The boiler has been examined throughout including mountings, fastenings and seatings and found or placed in accordance with the Rules, approved plans and Secretary's letters. The materials and workmanship, so far as could be seen, are good. The boiler was hydraulically tested to 180 lb./sq. in. examined under steam, tested for accumulation of pressure and the safety valves adjusted at 125 lb./sq.in.

Scantlings are as per approved plan giving due allowance for wear and tear.

As requested in the Secretary's letter of the 24th August, 1959, particular attention was given in examining the boiler to the cross stays and their internal welds and to the furnace crown and these were found satisfactory.

See Report 9 for repairs.

Survey Fee ... 14 : 0 : 0 When applied for 21 OCT 1959

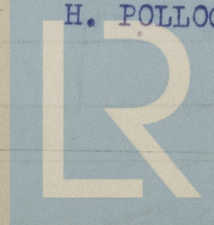
Travelling Expenses (if any) £ : : When received 19

Date FRIDAY - 4 DEC 1959

Committee's Minute

See Rpt. 1

H. Pollock R.P. Frazer  
Engineer Surveyor to Lloyd's Register of Shipping.  
H. POLLOCK. © R.P. FRAZER.



Lloyd's Register  
Foundation