

# B.C. REPORT ON BOILERS.

No. 9337

Received at London Office 25 OCT 1952

Writing Report 7/10/1952 When handed in at Local Office 7/10/1952 Port of SINGAPORE

Survey held at SINGAPORE Date, First Survey 15/9/52 Last Survey 20/9/1952

on the Steel Twin Screw Motor Vessel "ORESTES" (Number of Visits 3) Tons { Gross 7765 Net 4737

BELFAST By whom built WORKMAN, CLARK & CO. LTD. Yard No. - When built 1926

made at COPENHAGEN By whom made AKT BURMEISTR & WAIN Engine No. - When made 1926

made at ANNAN By whom made COCHRAN & CO. LTD. Boiler No. 9769 When made 1926

ALFRED HOLT & COMPANY (OCEAN S.S. CO. LTD) Port belonging to LIVERPOOL

## VERTICAL DONKEY BOILER.

made at ANNAN By whom made COCHRAN & CO. LTD. Boiler No. 9769 When made 1926 Where fixed E.R. Platform Aft. Star. Side

Manufacturers of Steel SIEMENS MARTIN

Heating Surface of Boiler 500 sq.ft. Is forced draught fitted Yes Coal or Oil fired Oil

Description of Boilers One:- Cochran Patent Vertical Multitubular Boiler Working pressure 100 lbs

Tested by hydraulic pressure to B.O.T. Requirements Date of test 1926 No. of Certificate -

Area of Firegrate in each Boiler 26.75 sq.ft. No. and Description of safety valves to each boiler 2:- Spring Loaded, Ordinary Lift

Area of each set of valves per boiler { per rule - as fitted 9.8 sq. ins. Pressure to which they are adjusted 100 lbs Are they fitted with easing gear Yes

Whether steam from main boilers can enter the donkey boiler No Main Boilers Smallest distance between boiler or uptake and bunkers

Clearance Well Clear Is oil fuel carried in the double bottom under boiler Yes Smallest distance between base of boiler and tank top plating 30 ins.

Is the base of the boiler insulated No Largest internal dia. of boiler 7'-0" Height 16'-0"

Shell plates: Material S.M. Mild Steel Plates Tensile strength 28-32 tons Thickness 1/2" & 5/8"

Are the shell plates welded or flanged No If fusion welded, state name of welding firm -

Do all the requirements of the Rules for Class I vessels been complied with - Description of riveting: circ. seams (end Single and inter. D.R. Lap.)

Seams Single & D.R. Lap Dia. of rivet holes in { circ. seams 27/32" Pitch of rivets 2.125 & 2.88 (BOT) plate 67.5 rivets 67.2

Percentage of strength of circ. seams { long. seams 27/32" 2.75 & 2.68

Longitudinal joint { rivets - Thickness of butt straps { outer 1/2" inner - Shell Crown: Whether complete hemisphere, dished partial

Material, or flat Complete Hemisphere Material M.S. Tensile strength 28-32 tons Thickness 7/16 & 7/8 ins.

Height 3'-6" Description of Furnace: Plain, spherical, or dished crown Spherical Material M.S.

Tensile strength 26-30 tons Thickness 17/32 ins. External diameter { top - bottom - Length as per rule -

Are stays fitted with nuts or riveted over -

Radius of spherical or dished furnace crown 3'-0"

Thickness of Ogee Ring 7/8 ins. (D:7'-0") (d:5'-10.15/16") Diameter as per rule { D - d -

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

Thickness of back plate - Diameter if circular -

Pitch of stays -

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

Plates: Material { front M.S. Tensile strength 26-30 Thickness 7/8 ins. Mean pitch of stay tubes in nests Hortl: 10.5 ins. Vert: 7.2 ins.

Thickness { back M.S. 26-30 3/4 ins.

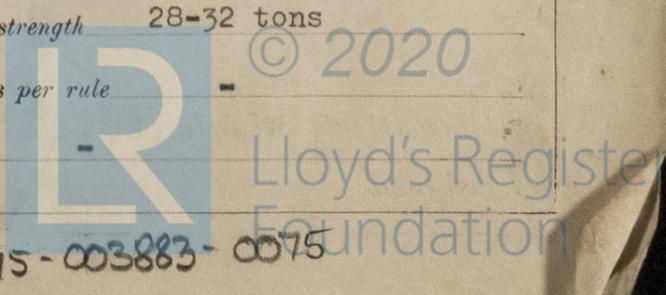
Surrounding shell, Dia. as per rule { front - Pitch in outer vertical rows { 8 ins. Dia. of tube holes FRONT { stay 2.11/16" plain 2.9/16" BACK { stay 2 1/2 ins. plain 2 1/2 ins.

Do alternate tube in outer vertical rows a stay tube Yes

Stays to combustion chamber tops: Material Steel Tensile strength 28-32 tons

Material and thickness of girder at centre (5" Gusset Plate with Double 3x3 1/2 Angles to Shell & Flanges Tube Plate Length as per rule -

Distance apart One only No. and pitch of stays in each -



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**Crown stays:** Material - Tensile strength - Diameter { at body of stay, -  
 { over threads, -  
**Screw stays:** Material - Tensile strength -  
 No. of threads per inch -  
 Diameter { at turned off part, -  
 { over threads, - No. of threads per inch - Are the stays drilled at the outer ends -  
**Tubes:** Material Steel External diameter { plain 2 1/2 ins. ✓  
 { stay 2 1/2 ins. Thickness { 11 I.S.G.  
 { 11/32 ins. ✓  
 No. of threads per inch 9 ✓ Pitch of tubes Vertical 4 ins. ✓ Horizontal 3 3/4 ins. ✓  
**Manhole Compensation:** Size of opening in shell plate 12" x 15" ✓ Section of compensating ring { Hor. 6 1/2" x 11/16" each side  
 { Vert. 8" x 11/16" each side No. of rivets and dia -  
 of rivet holes 36 @ 27/32 ins. Outer row rivet pitch at ends 3.92". 25" P.C.D. Depth of flange if manhole flanged ✓ Not Flanged  
**Uptake:** External diameter 2'-4 3/4" 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 Yes

The foregoing is a correct description,

Manufac

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 erection on board vessel - - } Total No. of visits -

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

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) This donkey boiler, originally built B.O.T. Requirements, has been examined internally and externally, together with its safety valve mountings, manholes, doors and their fastenings, and all found in good and efficient condition. The materials used and the workmanship throughout, so far as can be seen, are good. The donkey boiler, in my opinion, is in a good and efficient condition and eligible to be classed with the Society and to have the record of D.Blr.S. 9,52.

Survey Fee ... £ Please see Report 9: } When applied for, 19  
 Travelling Expenses (if any) £ } When received, 19

Committee's Minute TUES. 18 NOV 1952

Assigned

See Reg 9334



Lloyd's Register Foundation

W.P. Watson  
 Engineer Surveyor to Lloyd's Register of Shipping