

## REPORT ON WATER TUBE BOILERS.

No. 15215

Received at London Office

Date of writing Report 23.6. 19 60 When handed in at Local Office 19 Port of TRIESTE

No. in Survey held at Trieste Date, First Survey 19 Last Survey 19

Reg. Book. 41932 on the ESSO DUBLIN (Number of Visits 1) Gross 23720 Tons Net 12752

Built at Monfalcone By whom built C.R.D. Adriatico Yard No. 1849 When built 1960 - 7

Engines made at Trieste By whom made do Engine No. 330/331 When made 1959

Boilers made at Glasgow & Trieste By whom made Babcock & Wilcox - & C.R.D.A. Boiler No. 2066 & 2067 When made 1958/9

HS for Register Book 19,836 sq.ft. Owners Esso Petroleum Co., London Port belonging to London

**WATER TUBE BOILERS—MAIN, ADDITIONAL, AND AUXILIARY**—Manufacturers of Steel Babcock & Wilcox & Dalmine

Date of Approval of plan 3.9.56 17.10.56 and 16.4.59 by Glasgow Office No. and Description or Type of Boilers Two, Two drum Babcock & Wilcox Design Pressure 965 PSI Tested by Hydraulic Pressure to 1498 PSI Date of Test 16 & 22.12.59

No. of Certificate 451/452 Can each boiler be worked separately yes Total Heating Surface of Boilers 2 x 8750 Superheaters 2 x 1168 sq.ft

Half Economisers none Is forced draught fitted yes Area of Fire Grate (coal) in each Boiler —

No. and type of burners (oil) in each boiler 5 Dewrance type No. and description of safety valves on each boiler Two 1.5/8" dia. full bore Dewrance spring loaded per rule as app. Pressure to which they are adjusted 950 PSI as fitted 4.148 sq.ins.

Are they fitted with easing gear yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler none Smallest distance between boilers or uptakes and bunkers or woodwork ample Height of boiler about 20'-0"

Width and length about 17'-0" x 20'-0" Steam Drums:—Number in each boiler one Inside diameter 4'-0 1/4" R 227

Thickness of plates 4.13/16" & 1.9/16" Range of tensile strength See GLS.Cert.C.59154 Are drum shell plates welded or flanged welded If fusion welded, state name of welding firm B. & W. See GLS.Cert. C.59154 Have all the requirements of the Rules for Class I vessels been complied with yes

Description of riveting:—Circ. seams — long. seams —

Diameter of rivet holes in long. seams — Pitch of rivets — Thickness of straps 4 1/2" x 1/2" Percentage strength of long. joint:—Plate — Rivet — Diameter of tube holes in drum 1.26" Pitch of tube holes 1.7/8" x 1.1/2"

Percentage strength of shell in way of tubes as appd. Steam Drum Heads or Ends:—Range of tensile strength —

Thickness of plates 1 7/8" Radius or how stayed ellipsoidal Size of manhole or handhole 12 x 16" Water Drums:—Number in each boiler one Inside diameter 2'-6" Thickness of plates 2.15/16" Range of tensile strength GLS.Cert.C.59154 Are drum shell plates welded or flanged welded If fusion welded, state name of welding firm B & W. GLS.Cert.C.59154 Have all the requirements of the Rules for Class I vessels been complied with yes

Description of riveting:—Circ. seams — long. seams —

Diameter of rivet holes in long. seams — Pitch of rivets — Thickness of straps —

Percentage strength of long. joint:—Plate — Rivet — Diameter of tube holes in drum — Pitch of tube holes —

Percentage strength of drum shell in way of tubes as appd. Water Drum Heads or Ends:—Range of tensile strength —

Thickness of plates 1 7/8" Radius or how stayed ellipsoidal Size of manhole or handhole 12 x 16"

Headers or Sections:—Number 3 Material steel Thickness 1 1/4" 1 1/8" & 1" Tested by hydraulic pressure to 1498 PSI

Tubes:—Diameter 1 1/4" 2" & 3 1/4" Thickness 10, 7 & 0 SWG Number 1725 - 161 - 6 Steam Dome or Collector:—Description of joint to shell — Inside diameter — Thickness of shell plates — Range of tensile strength —

Description of longitudinal joint — If fusion welded, state name of welding firm — Have all the requirements for the Rules for Class I vessels been complied with — Diameter of rivet holes —

Pitch of rivets — Thickness of straps — Percentage strength of long. joint — plate — rivet —

Crown or End Plates:—Range of tensile strength — Thickness — Radius or how stayed —

**SUPERHEATER, Drums or Headers:—**Number in each boiler Two outside diameter 10 1/4"

Thickness 1 7/16" Material 1/2 % Moly steel Range of tensile strength GLS.Cert.C.62337 Are drum shell plates welded or flanged forged If fusion welded, state name of welding firm B. & W. GLS.Cert.C.62337 Have all the requirements of the Rules for Class I vessels been complied with —

Description of riveting:—Circ. seams — long. seams —

Diameter of rivet holes in long. seams — Pitch of rivets — Thickness of straps — Percentage strength of long. joint:—Plate — Rivet — Diameter of tube holes in drum 1.26" Pitch of tube holes 1.13/16" x 26" Percentage strength of drum shell in way of tubes as appd. Drum Heads or Ends:—Thickness 1.7/16" Range of tensile strength 28 T/sq.ins

Radius or how stayed forged Size of manhole or handhole 4" x 3.3/8" Number, diameter, and thickness of tubes 150x1.1/4"-10 & 8 SWG

Tested by hydraulic pressure to 1498 PSI Date of test Port: 2.3.60 Stbd: 9.3.60 Is a safety valve fitted to each section of the superheater which can be shut off from the boiler yes No. and description of safety valves One 1.5/8" dia. full bore dewrance Area of each set of valves 2.739 sq.ins. Pressure to which they are adjusted 935 PSI Is easing gear fitted yes

Spare Gear. Has the spare gear required by the Rules been supplied yes

CANTIERI RIUNITI DELL'ADRIATICO  
Fabbrica Macchine S. Andrea

The foregoing is a correct description,

Manufacturer.

Dates of Survey During progress of work in shops - - Is the approved plan of boiler forwarded herewith yes

while building During erection on board vessel - - See report 4a Total No. of visits —

Is this boiler a duplicate of a previous case yes If so, state vessel's name and report No. "ESSO WINDSOR" Tri. Rpt. N°. 14826

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c. The steam and water drums, water wall headers, superheater headers and stud water wall tubes were manufactured by Babcock & Wilcox (See Glasgow Cert; N's. C.59154, 62337, 45766, 56666, 57562, 45765, 47966, 62336). The steam and water drums were drilled and the boilers and superheaters assembled by Cantieri Riuniti dell'Adriatico Trieste, the remaining tubes being supplied by Dalmine (Italy). The boiler and superheaters were tested on completion to the pressures stated above and efficiently installed in the above vessel, all in accordance

Survey Fee ... £ 285 9. 0 When applied for through London

Travelling Expenses (if any) £ - : : When received 21 JUL 1960 19

FRIDAY 26 AUG 1960

From LONDON

Date

Committee's Minute

See Rpt. 1

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

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