

REPORT ON WATER TUBE BOILERS.

No. 19254

Received at London Office

ing Report 3rd JAN, 1948. When handed in at Local Office 5th JAN, 1948. Port of SOUTHAMPTON
Survey held at SOUTHAMPTON Date, First Survey 28th AUGUST, 1946 Last Survey 10th DECEMBER 1947.

on the T. S. S. "EL MALEK FORD" (Number of Visits 26.) Tons { Gross Net
Woolston, Southampton. By whom built John S. Thompson & Co. Ltd When built 1947-12
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Horse Power 1165 Owners KHE DINAL MAIL LINE S.A.E. Port belonging to ALEXANDRIA

ER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY. Manufacturers of Steel Chesterfield & Co. Ltd

Approval of plan 30-11-46. Number and Description or Type
rs Two-3 Drum Watertube Working Pressure 300 lbs Tested by Hydraulic Pressure to 500 lbs Date of Test 13-6-47
Certificate 85 Can each boiler be worked separately Yes Total Heating Surface of Boilers 9560 ft² (see below)

draught fitted YES Area of fire grate (coal) in each Boiler
type of burners (oil) in each boiler 5-3P. on pump sprayers (each 6000 lbs/hr) No. and description of safety valves on
2-3" Cockburn's Full Bore. Area of each set of valves per boiler { per rule as fitted 14.137 ft² Pressure to which they

tested 300 lbs Are they fitted with easing gear YES In case of donkey boilers state whether steam from main boilers can enter
ey boiler ✓ Smallest distance between boilers or uptakes and bunkers or woodwork 1'-6" Height of boiler 13'-9 1/2"

nd Length 15'-9" & 12'-2" Steam Drums:—Number in each boiler ONE ✓ Inside diameter 4'-2" Largest radius = 2'-4"
s of plates 5' 11 1/16" Tube 1 1/16" Range of Tensile Strength 28-32 TONS/IN² Are drum shell plates welded

d NO. If fusion welded, state name of welding firm ✓ Have all the requirements of the rules
s I vessels been complied with Description of riveting:—Cir. seams DR Lap long. seams DR DBS.

r of rivet holes in long. seams 29/32 ✓ Pitch of rivets 3.617 ✓ Thickness of straps 9/16" Percentage strength of
it:—Plate 44.9% Rivet 79.9% Diameter of tube holes in drum 1", 1 1/8", 1 3/4" Pitch of tube holes 1 1/2", 1 1/8", 2 5/8"

ge strength of shell in way of tubes 33 1/3 % ✓ Steam Drum Heads or Ends:—Range of tensile strength 26-30 T/IN²
s of plates 1 1/4", 1 1/8" Radius or how stayed 4'-2" ✓ Size of manhole or handhole 16" x 12" Water Drums:—Number
oiler 2 Inside Diameter 23" 18" Thickness of plates 1 5/8", 1 1/4" Range of tensile strength 28-32 Are drum shell plates

r flanged ✓ If fusion welded, state name of welding firm ✓ Have all the requirements of the rules
s I vessels been complied with Description of riveting:—Cir. seams SR. ✓ long. seam ✓

r of rivet holes in long. seams ✓ Pitch of rivets ✓ Thickness of straps ✓
ge strength of long. joint:—Plate ✓ Rivet ✓ Diameter of tube holes in drum ✓ Pitch of tube holes

ge strength of drum shell in way of tubes 33 1/3 Water Drum Heads or Ends:—Range of Tensile strength 28-32 9 3/16 30 T/IN²
s of plates MAIN 1" WATERWALL 1" Radius or how stayed MAIN 23" WATERWALL FLAT Size of manhole or handhole 6 1/2" x 15" x 11"

or Sections:—Number Material Thickness Tested by Hydraulic Pressure to
Diameter 1", 1 1/8", 1 3/4" Thickness 104, 116, 144 Number 12/4, 14/1, 15/1 Steam Dome or Collector:—Description of
Shell ✓ Inside diameter ✓ Thickness of shell plates ✓ Range of tensile

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

✓ rivets ✓ Thickness of straps ✓ Percentage strength of long. Joint ✓ Plate ✓ Rivet ✓
or End Plates:—Range of tensile strength Thickness Radius or how stayed

REHEATER. Headers:—Number in each boiler TWO ✓ Inside Diameter 10" ✓
ss 1 1/4" ✓ Material Solid Cast Steel Range of tensile strength 28-32 low Are drum shell plates welded

ed ✓ If fusion welded, state name of welding firm ✓ Have all the requirements of the rules
s I vessels been complied with Description of riveting:—Cir. seams Welded ends. long. seams ✓

r of rivet holes in long. seams ✓ Pitch of rivets ✓ Thickness of straps ✓ Percentage strength of
nt:—Plate ✓ Rivet ✓ Diameter of tube holes in drum 1 1/8" ✓ Pitch of tube holes 1 3/4" ✓ Percentage strength of

ell in way of tubes 35.72 Drum Heads or Ends: Thickness 2 1/4" Range of tensile strength 28-32
or how stayed ✓ Size of manhole or handhole 4.746 x 4.121 Number, diameter, and thickness of tubes 249-1 1/8" 1.116"

by Hydraulic Pressure to 500 lbs Date of Test 6/6/47 9/18/47 Is a safety valve fitted to each section of the superheater which
shut off from the boiler ✓ No. and description of Safety Valves ✓ Area of each set

s ✓ Pressure to which they are adjusted ✓ Is easing gear fitted ✓
Gear. Has the spare gear required by the rules been supplied YES ✓

5 ft 2 lbs = 8140 lb Total fuel vent = 9560 ft²
25 ft = 1420
9560
The foregoing is a correct description,
J. Dunstons, Manufacturer.

Joint Managing Director.
Is the approved plan of boiler forwarded herewith
Total No. of visits 26.

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.) These boilers have been built under
at during in accordance with the Rules & the Secretary's letters. Scantlings are in accordance
which approved plans. Materials & workmanship good and boilers are eligible in our
to be classed as ME 12.5 Y. with the machinery of this vessel.

Survey Fee ... £ : : When applied for, 19
Travelling Expenses (if any) £ : : When received, 19

Committee's Minute
ned Sec F.E. Welch, M.P.

Engineer Surveyor to Lloyd's Register of Shipping.
Lloyd's Register Foundation

T. Sc. S. "EL MALEK FORD""MAIN BOILERS CONTINUED"

A de-superheater was fitted to each boiler as per Drawing no. — approved 12/11/47 and tested as per Secretary's letter 12/11/47. On completion of installing, boilers were examined under full working conditions on trial trips and all found in order.

J. Nicholas.