

REPORT ON WATER TUBE BOILERS.

No. 2662
JUL 21 1937

Received at London Office

of writing Report 19-7-1937 When handed in at Local Office 20-7-1937 Port of Barrans

No. in Survey held at Barrans Date, First Survey 20-4-36 Last Survey 12-7-1937

g. Bk. on the Inc Co "ORCADES" Number of Visits 49 Tons } Gross 23436
Net 14040

ster Built at Barrans By whom built Vickers Armstrongs Ltd When built 1937

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lers made at - do - By whom made - do - When made 1937

Horse Power 490 Owners Orient Steam Navigation Co Ltd Port belonging to London

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel

atter for Record 5 Date of Approval of plan 11-7-36 17-4-36 16-3-36 24-6-36 Number and Description or Type
Boilers 2 Babcock & Wilcox Type (Small) Working Pressure 450 lb Tested by Hydraulic Pressure to 725 lb Date of Test 14-5-37

of Certificate 466 Can each boiler be worked separately yes Total Heating Surface of Boilers 7170 sq ft

forced draught fitted yes Area of fire grate (coal) in each Boiler 11.5 sq ft Total grate area of boilers in vessel including
in and Auxiliary 11.5 No. and type of burners (oil) in each boiler 4 Vickers Type No and description of safety valves on
boiler 1 COMPLETE DL DONKEY SPRING Area of each valve 2.3 sq ft Pressure to which they are adjusted 250 lb

they fitted with easing gear yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler no

allest distance between boilers or uptakes and bunkers on woodwork 11-6" Height of Boiler 18-3" Width and Length 14-6" x 18-0"

am Drums:—Number in each boiler ONE Inside diameter 3-6" Material of plates STEEL Thickness 1/2"

age of Tensile Strength 38/82 ENDS 26/50 TONS Are drum shell plates welded or flanged SOLD FORGED Description of riveting:—

seams long seams Diameter of rivet holes in long seams 3/4" Pitch of Rivets 1-1/2"

of plate or width of butt straps 3/4" Thickness of straps 1/2" Percentage strength of long joint:—Plate 44-1 Rivet 44-1

diameter of tube holes in drum 1-1/2" Pitch of tube holes 7-1/4" Percentage strength of shell in way of tubes 44-1

Drum has a flat side state method of staying no Depth and thickness of girders at centre no

fitted) no Distance apart no Number and pitch of stays in each no Working pressure no

rules no Steam Drum Heads or Ends:—Material STEEL Thickness 1 1/2" Radius as how stayed 3-0"

Material of plates See also Glasgow Report Water Drums:—Number in each boiler ONE Inside Diameter 6-6"

flanged no Description of riveting:— long seams Are drum shell plates welded no

7. seams no Pitch of rivets no Lap of plates or width of butt straps no Diameter of Rivet Holes in no

percentage strength of long joint:—Plate no Rivet no Thickness of straps no

percentage strength of drum shell in way of tubes no Water Drum Heads or Ends:—Material no Thickness no

Radius or how stayed no Size of manhole or handhole no Headers or Sections:—Number 120

Material no Thickness no Tested by Hydraulic Pressure to 725 lb Material of Stays no

Area at smallest part no Area supported by each stay no Working Pressure by Rules no Tubes:—Diameter 1 1/2" GENERATOR

Thickness no Number 20 Steam Dome or Collector:—Description of Joint to Shell no 4" RETURN

percentage strength of Joint no Diameter no Thickness of shell plates no Material no

Description of longitudinal joint no Diameter of Rivet Holes no Pitch of Rivets no Working Pressure of shell no

Rules no Crown or End Plates:—Material no Thickness no How stayed no

ERHEATER. Type Babcock & Wilcox Date of Approval of Plan 17-4-36 Tested by Hydraulic Pressure to 725 lb

Date of Test 9-10-36 Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler yes

diameter of Safety Valve 2" SINGLE SPRING Pressure to which each is adjusted 440 lb Is easing gear fitted yes

Is drain cock or valve fitted at lowest point of superheater yes Number, diameter, and thickness of tubes 75 x 1 1/2" OD x 5/16"

are Gear. Tubes 6 SUPERHEATER EACH LENGTH Gaskets or joints:—Manhole 2 Handhole 65 Handhole plates 4 COMPLETE WITH BRIDGE

The foregoing is a correct description, FOR VICKERS-ARMSTRONGS LIMITED. Manufacturer. W. Mitchell

Is the approved plan of boiler forwarded herewith yes

Total No. of visits 49

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

boilers have been constructed under Special Survey & in accordance with Rule
requirements, and the materials & workmanship are sound & good. They have been
recently installed on board & their safety valves adjusted under steam as above
(also machinery rept. attached)

Survey Fee £ See other report When applied for, 20-7-1937

Travelling Expenses (if any) £ no When received, 19

Engineer Surveyor to Lloyd's Register of Shipping. Incumbent

Committee's Minute TUE. 27 JUL 1937

Signed See other F. E. report

