

# REPORT ON WATER TUBE BOILERS.

No. 16443<sup>D</sup>

Received at London Office

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Date of writing Report 3<sup>rd</sup> Nov. 1947 When handed in at Local Office \_\_\_\_\_ 19\_\_\_\_ Port of Amsterdam

No. in Survey held at Amsterdam Date, First Survey 24<sup>th</sup> Oct. Last Survey 30<sup>th</sup> Oct. 1947

Reg. Bk. 31986 on the S/S "AMSTELDIEP" (ex "Robert Fruin") (Number of Visits 3) Tons { Gross 7229.49  
Net 4429.65

Master \_\_\_\_\_ Built at Portland, Or. By whom built Oregon Shipbuilding Corp. When built 1943

Engines made at Portland, Or. By whom made The Iron Fireman Manuf. Co. When made 1943

Boilers made at Saginaw Mich. By whom made The Wickes Boiler Co. When made 1943

Registered Horse Power 2500 I.H.P. Owners Royal Netherlands Government Port belonging to the Hague

## WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel The Lukens Steel Co.

(Letter for Record ) Date of Approval of plan 250 Number and Description or Type of Boilers 2 - Babcock & Wilcox Type Working Pressure (240) lbs. Tested by Hydraulic Pressure to \_\_\_\_\_ Date of Test

No. of Certificate  Can each boiler be worked separately  yes Total Heating Surface of Boilers 10,233 sq. ft.

Is forced draught fitted  yes Area of fire grate (coal) in each Boiler \_\_\_\_\_ Total grate area of boilers in vessel including Main and Auxiliary \_\_\_\_\_

No. and type of burners (oil) in each boiler 4 Peabody No. and description of safety valves on each boiler 2 - spring loaded (φ4") Area of each valve 12.6 sq. in. Pressure to which they are adjusted (240) lbs.

Are they fitted with easing gear  yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler

Smallest distance between boilers or uptakes and bunkers or woodwork 2' 10" Height of Boiler 16' 5 1/2" Width and Length 14' 7 1/4" - 18'

Steam Drums:—Number in each boiler one Inside diameter 47 3/8" Material of plates SM steel Thickness 15/16"

Range of Tensile Strength \_\_\_\_\_ Are drum shell plates welded or flanged  welded Description of riveting:—

Cir. seams  long. seams  Diameter of rivet holes in long. seams \_\_\_\_\_ Pitch of Rivets

Lap of plate or width of butt straps \_\_\_\_\_ Thickness of straps \_\_\_\_\_ Percentage strength of long. joint:—Plate  Rivet

Diameter of tube holes in drum 4 1/32" Pitch of tube holes 7" Percentage strength of shell in way of tubes 42.8%

If Drum has a flat side state method of staying \_\_\_\_\_ Depth and thickness of girders at centre (if fitted) \_\_\_\_\_

Distance apart \_\_\_\_\_ Number and pitch of stays in each \_\_\_\_\_ Working pressure by rules \_\_\_\_\_

Steam Drum Heads or Ends:—Material SM steel Thickness 15/16" Radius or how stayed \_\_\_\_\_

Size of Manhole or Handhole 12" x 16" Water Drums:—Number in each boiler \_\_\_\_\_ Inside Diameter \_\_\_\_\_

Material of plates \_\_\_\_\_ Thickness \_\_\_\_\_ Range of tensile strength \_\_\_\_\_ Are drum shell plates welded or flanged

Description of riveting:—Cir. seams  long. seams  Diameter of Rivet Holes in long. seams \_\_\_\_\_ Pitch of rivets \_\_\_\_\_

Lap of plates or width of butt straps \_\_\_\_\_ 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 \_\_\_\_\_ Water Drum Heads or Ends:—Material \_\_\_\_\_ Thickness \_\_\_\_\_

Radius or how stayed \_\_\_\_\_ Size of manhole or handhole \_\_\_\_\_ Headers or Sections:—Number 22 uptake & 22 down take

Material steel Thickness 19/32" Tested by Hydraulic Pressure to \_\_\_\_\_ Material of Stays 22 x 4"

Area at smallest part \_\_\_\_\_ Area supported by each stay \_\_\_\_\_ Working Pressure by Rules \_\_\_\_\_ Tubes:—Diameter 602 x 2"

Thickness \_\_\_\_\_ Number \_\_\_\_\_ Steam Dome or Collector:—Description of Joint to Shell \_\_\_\_\_

Percentage strength of Joint \_\_\_\_\_ Diameter \_\_\_\_\_ Thickness of shell plates \_\_\_\_\_ Material \_\_\_\_\_

Description of longitudinal joint \_\_\_\_\_ Diameter of Rivet Holes \_\_\_\_\_ Pitch of Rivets \_\_\_\_\_ Working Pressure of shell by Rules \_\_\_\_\_

Crown or End Plates:—Material \_\_\_\_\_ Thickness \_\_\_\_\_ How stayed \_\_\_\_\_

UPERHEATER. Type ordinary Date of Approval of Plan \_\_\_\_\_ Tested by Hydraulic Pressure to \_\_\_\_\_

Date of Test \_\_\_\_\_ Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler

Diameter of Safety Valve 1 1/2" Pressure to which each is adjusted (240) lbs. Is easing gear fitted

Is a drain cock or valve fitted at lowest point of superheater  yes Number, diameter, and thickness of tubes 22 x 2"

Spare Gear. Tubes  yes Gaskets or joints:—Manhole  yes Handhole  yes Handhole plates  yes

The foregoing is a correct description,

Manufacturer.

Dates of Survey { During progress of work in shops - - -  
while building { During erection on board vessel - - -

Is the <sup>a</sup> approved plan of boiler forwarded herewith yes

Total No. of visits \_\_\_\_\_

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The boilers have been built under A.B.S. supervision. They have been examined internally and externally and found in a satisfactory state of upkeep. The particulars have been verified and found in accordance with the Standard Plans. With regard to circular N° 1871 an automatic feedwater regulator remains to be fitted to each boiler to comply with the Rules. The mountings and safety valves have been opened, examined and found or made in order. Both boilers tried under steam with satisfactory results and safety valves adjusted. I am of opinion that these boilers merit the approval of the Committee, and may be assigned in the Register book with record of BS. 10,47

Survey Fee ..on Survey Rpt. 9 When applied for, \_\_\_\_\_ 19\_\_\_\_  
Travelling Expenses (if any) £ \_\_\_\_\_ : : \_\_\_\_\_ When received, \_\_\_\_\_ 19\_\_\_\_

[Signature]  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 19 DEC 1947

Assigned \_\_\_\_\_

