

REPORT ON WATER TUBE BOILERS.

No. 1794.

Received at London Office

26 JAN 1942

Date of writing Report 28 APRIL 1941 When handed in at Local Office 28 APRIL 1941 Port of MOBILE, ALA.

No. in Survey held at CHATTANOOGA, TENN. & MOBILE, ALA. Date, First Survey SEPT 3/40 Last Survey APRIL 5TH 1941
 Reg. Bk. on the M. S. "PHILAE" Number of Visits 9 Tons Gross 4403 Net 3245
 Master Built at PASCA GOULA By whom built INTERNATIONAL S. B. CO. When built 1920
 Engines made at NEW LONDON, CONN. By whom made ELECTRIC BOAT COY. When made 1932.
 Boilers made at CHATTANOOGA, TENN. By whom made COMBUSTION ENGINEERING CO. When made 1941
 Registered Horse Power 1200 KACHENGE Owners FRANGO CORPORATION. Port belonging to PANAMA CITY, P.R.

WATER TUBE BOILERS ~~MANUFACTURED BY~~ DONKEY. — Manufacturers of Steel LUKENS STEEL CO.
 (Letter for Record) Date of Approval of plan 5.8.40 - 2.10.40 Number and Description or Type
 of Boilers 1 - WATER TUBE Working Pressure 150 LBS. Tested by Hydraulic Pressure to 275 LBS. Date of Test 4.11.40
 No. of Certificate 806 Can each boiler be worked separately — Total Heating Surface of Boilers 3400 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 3 - TODD UNIDRAFT No. and description of safety valves on
 each boiler 2 - 4" CROSBY. Area of each valve 12.56 sq. in. Pressure to which they are adjusted 150 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 5'-0" Height of Boiler 12'-7 1/2" Width and Length 7'-7" x 10'-10 1/2"
Steam Drums: — Number in each boiler ONE. Inside diameter 36" Material of plates STEEL. Thickness 31
 Range of Tensile Strength 65,000 to 84,000 LBS. Are drum shell plates welded or flanged WELDED. Description of riveting: —
 Cir. seams WELDED. long. seams WELDED. 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 90% Rivet —
 Diameter of tube holes in drum 4" Pitch of tube holes 7" Percentage strength of shell in way of tubes 42.84
 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 150 LBS. ~~SEMI-CIRCULAR~~
 by rules 180 LBS. **Steam Drum Heads or Ends:** — Material STEEL. Thickness 5/8" Radius or how stayed HEADS.
 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 16
 Material — Thickness — Tested by Hydraulic Pressure to — Material of Stays 2" 1 1/4" 4"
 Area at smallest part — Area supported by each stay — Working Pressure by Rules — **Tubes:** — Diameter —
 Thickness .095, .095, .134 Number 64, 1104, 16 **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 —
SUPERHEATER. Type — 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 — Pressure to which each is adjusted — Is easing gear fitted —
 Is a drain cock or valve fitted at lowest point of superheater — Number, diameter, and thickness of tubes —
 Spare Gear. Tubes — Gaskets or joints: — Manhole — Handhole — Handhole plates —

The foregoing is a correct description,
 Combustion Engineering Co., Inc. Manufacturer.
 Marshall

Dates of Survey During progress of work in shops — SEPT. 3. 4 NOV. 4. 5 1940. Is the approved plan of boiler forwarded herewith YES.
 while building During erection on board vessel — JAN. 2. 4. 8. 10 APRIL 5 1941. Total No. of visits 9.

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

This donkey boiler has been built in an special arrangement in accordance with the approved plans and the rules of this Society. The materials and workmanship are good and it is our opinion that it is eligible to be classed with record of T.D.B. 4.41 in the Register Book.

Survey Fee ... \$150.00 When applied for, Dec. 2, 1941

Travelling Expenses (if any) \$99.85 When received, 191

TELEGRAMS & PHONE 5.00

Committee's Minute

Assigned 1 WTDB STEAM PRESSURE 150 LBS. A"

T. H. 2 Goodd.
 Engineer, Surveyor, to Lloyd's Register of Shipping.
 for W. H. Stewart, Self.

Lloyd's Register
 Foundation