

REPORT ON WATER TUBE BOILERS.

No. 37660.
(See Ph. Rpt. No. 7418)

FEB -9 1938

Received at London Office

Date of writing Report 27th May 1937 When handed in at Local Office 27th May, 1937 Port of New York

No. in Survey held at Cartaret, N.J. Date, First Survey 2 April Last Survey 18 May 1937
 Reg. Bk. on the M.V. (Sun S.B. Co. Hull 165) RHODE-ISLAND. (Number of Visits 14) Tons { Gross 8862 Net 5070
 Master - Built at Chester, Pa. By whom built Sun S.B. Co. When built 1937
 Engines made at Chester, Pa. By whom made Sun S.B. Co. When made 1937
 Boilers made at Cartaret, N.J. By whom made Sun S.B. Co. (WHB90) When made 1937
 Danville, N.Y. By whom made Foster Wheeler Corpn. (WHB90) When made 1937
 Nominal Registered Horse Power 1197 Owners The Texas Company. Port belonging to

WATER TUBE BOILERS ~~MANUFACTURED FOR~~ **DONKEY**.—Manufacturers of Steel Lukens Steel Co. ✓
 Letter for Record S ✓ Date of Approval of plan 12/3/37 Number and Description or Type of Boilers One Water Tube (Exhaust Gas Fired) Working Pressure 227 lbs. Tested by Hydraulic Pressure to 454 lbs. Date of Test 18/5/37
 No. of Certificate Can each boiler be worked separately Yes ✓ Total Heating Surface of Boilers 1872 sq. ft. ✓
 Is forced draught fitted No. Area of fire grate (coal) in each Boiler Motor Vessel ✓ Total grate area of boilers in vessel including Main and Auxiliary - No. and type of burners (oil) in each boiler Exhaust Gas Fired Only No. and description of safety valves on each boiler Two ✓ Area of each valve 1.77 sq. ft. ✓ Pressure to which they are adjusted 227 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 - Height of Boiler 10'-11-3/4" Width and Length 5'-11-3/4" x 10'-11" ✓
 Steam Drums:—Number in each boiler One ✓ Inside diameter 30" ✓ Material of plates Steel ✓ Thickness 7/16" ✓
 Range of Tensile Strength 65000 - 75000 lbs. ✓ Are drum shell plates welded or flanged Fusion Welded ✓ Description of riveting:—
 Cir. seams Fusion Welded ✓ g. seams Fusion Welded ✓ Diameter of rivet holes in long. seams - Pitch of Rivets -
 Lap of plate or width of butt straps Butt Joint thickness of straps - Percentage strength of long. joint:—Plate 90% Allowed ✓ Rivet -
 Diameter of tube holes in drum 2-1/32" ✓ Pitch of tube holes 4-7/8" ✓ Percentage strength of shell in way of tubes 58.4% ✓
 If Drum has a flat side state method of staying No Flat Side ✓ 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 Steel ✓ Thickness Plain 9/16" Radius or how stayed 30" R. ✓
 Size of Manhole or Handhole 12" x 16" ✓ Water Drums:—Number in each boiler None ✓ 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 None ✓ Thickness -
 Radius or how stayed - Size of manhole or handhole - Headers or Sections:—Number None ✓
 Material - Thickness - Tested by Hydraulic Pressure to - Material of Stays -
 Area at smallest part - Area supported by each stay - Working Pressure by Rules - Tubes:—Diameter 2" ✓
 Thickness 120 ✓ Number 80 ✓ Steam Dome or Collector:—Description of Joint to Shell None ✓
 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 None ✓ 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 -

THIS DRUM IS NUMBERED WHB 90

The foregoing is a correct description,

J. J. Melis Manufacturer.
Foster Wheeler Corp

Dates of Survey { During progress of work in shops - - } 1937 Apr. 2, 5, 8, 12, 16, 19, 22, 26, 29) at New York Is the approved plan of boiler forwarded herewith yes ✓
 while { During erection on board vessel - - - } May 3, 6, 10, 14, 18) Total No. of visits 14 at New York ✓

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The Fusion welded drum for the Exhaust Gas Fired Water Tube Donkey Boiler of this vessel has been built in accordance with the Rules and approved plans and the workmanship and material are good. For particulars of tests please see Special Report on Fusion Welded drum attached. The Drum has been forwarded to Danville, N.Y. to be fitted to the boiler and when this has been done in accordance with the Rules and to the satisfaction of the Surveyor, the boiler will be eligible, in my opinion, to receive the notation 1 W. T D B 227 lbs. Exhaust Gas Fired Only. ✓

Survey Fee *N.Y. 75-7* \$150.00 When applied for, Aug 18 1937 at Cleveland
 Travelling Expenses (if any) £ \$5.00 When received, Jan 27 1938

John S. Heck
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute NEW YORK JAN 26 1938
 Assigned See Clv. Rpt. 856 & Phl. Rpt. 7418

