

REPORT ON WATER TUBE BOILERS.

No. 87.

Date of writing Report 17 July 1919 When handed in at Local Office 16 July 1919 Port of Cleveland Ohio
 No. in Survey held at Eric Pa. Date, First Survey April 30th Last Survey 11 July 1919
 Reg. Bk. 66874 on the 3 W.T. BOILERS N^o 1498 5th N^o 1708 "MOFFITT" 1500 Number of Visits 10 Gross 6144
 Master Jacksonville Fla. Built at Jacksonville Fla. By whom built A. Family & Sons, Conglo. When built 1911-3
 Engines made at Hamel/In, Ohio By whom made Homer Owens & Rentschler Co When made 1919
 Boilers made at Eric Pa By whom made Union Iron Works When made 1919
 Registered Horse Power Emergency Fleet Corporation Owners CONTRACT NO. 3917 Port belonging to Jacksonville, Fla.

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY—Manufacturers of Steel Midvale Steel & Ordnance Co(Letter for Record 7) Date of Approval of plan 30 November 1918 Number and Description or Typeof Boilers Three Foster Type Working Pressure 225# Tested by Hydraulic Pressure to 450# Date of Test 11/7/19No. of Certificate 10 Can each boiler be worked separately Yes Total Heating Surface of Boilers 9150 Sqft.Is INDUCED draught fitted Yes Area of fire grate (coal) in each Boiler 75 Sqft Total grate area of boilers in vessel includingMain and Auxiliary Yes No. and type of burners (oil) in each boiler 4 Corn pressure burners No. and description of safety valves oneach boiler one duplex 4 1/2" dia Area of each valve 31.8 sq in Pressure to which they are adjusted 225 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 18" Height of Boiler 10' 2 7/8" Width and Length 12' 10 7/8" x 12' 6"Steam Drums:—Number in each boiler one Inside diameter 42" Material of plates Steel Thickness 3/4"Range of Tensile Strength 54000# Are drum shell plates welded or flanged Yes Description of riveting:—Cir. seams Lap S. R. long seams 2BS/TR Diameter of rivet holes in long. seams 15/16" Pitch of Rivets 7 3/4"Lap of plate or width of butt straps 3 1/8" Thickness of straps 9/16" Percentage strength of long. joint:—Plate 87.9% Rivet 66.9%Diameter of tube holes in drum 3 1/8" Pitch of tube holes 7 3/4" x 3 3/8" headers Percentage strength of shell in way of tubes 48.4%If Drum has a flat side state method of staying none Depth and thickness of girders at centre(if fitted) ✓ Distance apart ✓ Number and pitch of stays in each ✓ Working pressureby rules ✓ Steam Drum Heads or Ends:—Material Steel Thickness 3/4" Radius or how stayed 42"Size of Manhole or Handhole 15" x 11" Water Drums:—Number in each boiler ✓ Inside Diameter ✓Material of plates ✓ Thickness ✓ Range of tensile strength ✓ Are drum shell plates weldedor flanged ✓ Description of riveting:—Cir. seams ✓ long. seams ✓ Diameter of Rivet Holes inlong. 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 Two each boilerMaterial Steel Thickness 3/4" x 1/2" Tested by Hydraulic Pressure to 450# Material of Stays Iron (Hollow)Area at smallest part 1.63 sq in Area supported by each stay 52.3 sq in Working Pressure by Rules 234# Tubes:—Diameter 3"Thickness 10 Gauge Number 489 each Steam Dome or Collector:—Description of Joint to Shell as stated abovePercentage strength of Joint ✓ Diameter ✓ Thickness of shell plates ✓ Material ✓Description of longitudinal joint ✓ Diameter of Rivet Holes ✓ Pitch of Rivets ✓ Working Pressure of shellby Rules 240# Crown or End Plates:—Material ✓ Thickness ✓ How stayed ✓SUPERHEATER. Type Lozin Date of Approval of Plan 1919 Tested by Hydraulic Pressure to 460 lbs.Date of Test 2nd March 1919 Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler YesDiameter of Safety Valve 1 1/2" Pressure to which each is adjusted 225 lbs. Is easing gear fitted YesIs a drain cock or valve fitted at lowest point of superheater Yes Number, diameter, and thickness of tubes 18 - 2" x 12 B.W.G.Spare Gear. Tubes ✓ Gaskets or joints:—Manhole ✓ Handhole ✓ Handhole plates ✓

The foregoing is a correct description,

Union Iron Works Manufacturer.per Chas. S. Hoyer SecyDates of Survey 1919 During progress of Apr 30, May 9, 23, 27, June 12, 17, 24, 27, July 9, 11 Is the approved plan of boiler forwarded herewith Yeswhile building During erection on Oct. 18, 25, 28, 31, Nov. 3, 8, 10, 12, 15, 23, 29, Dec. 7, 15, 20, 29, Jan. 3, 19, 26, Feb. 2 Total No. of visits 30board vessel Mar. 28

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

The above boiler have been constructed under Special Survey. The materials & workmanship are sound & good. The drums & headers with tubes fitted have been tested separately by hydraulic pressure to 450 lbs per sq in & found satisfactory. They have been shipped in sections to Jacksonville Fla. to be fitted in a vessel building by the Jacksonville Ship Outfitting Co. The Boilers will be eligible for record of F.N.B. (with date) when satisfactorily installed in vessel & tested by hydraulic pressure to 450 lbs per sq in & the safety valves adjusted under steam. The above boilers have been satisfactorily installed & tested to 450 lbs hydraulic pressure & showed no sign of weakness or defect at that pressure. Safety valves have been adjusted under steam to 225 lbs.

Survey Fee \$200.00 When applied for July 16th 1919Travelling Expenses (if any) 12.00 When received 17.12. 1919

Engineer Surveyors to Lloyd's Register of Shipping.

Committee's Minute New York APR 12 1921

FRI. 16 SEP. 1921

Assigned See Jan. Rpt No 353Lloyd's Register
Foundation

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