

# REPORT ON BOILERS

No. 1021

MON. 13 JUN. 1921

Received at London Office

pt. 5.

Date of writing Report January 25<sup>th</sup> 1921 When handed in at Local Office January 28<sup>th</sup> 1921 Port of Seattle Wash. U.S.A.  
 No. in Survey held at Seattle Date, First Survey December 22 - 1920 Last Survey January 24 - 1921  
 Reg. Book. on the One Donkey Boiler for E. M. Standifer Construction Corp. Hull No. 19 Tons } Gross  
 } Net  
 Master Built at \_\_\_\_\_ By whom built \_\_\_\_\_ When built \_\_\_\_\_  
 Engines made at \_\_\_\_\_ By whom made \_\_\_\_\_ When made \_\_\_\_\_  
 Boilers made at Seattle By whom made Commercial Boiler Works When made 1921  
 Registered Horse Power \_\_\_\_\_ Owners \_\_\_\_\_ Port belonging to \_\_\_\_\_

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Midvale Steel Co.

Letter for record New York Sep. 15 - 1920 Total Heating Surface of Boilers 1303 sq ft Is forced draft fitted  No. and Description of Boilers One (1) Scotch Marine Working Pressure 180 lbs Tested by hydraulic pressure to 270 lbs Date of test 24-1-21  
 No. of Certificate 48 Can each boiler be worked separately  Area of fire grate in each boiler \_\_\_\_\_ No. and Description of safety valves to each boiler \_\_\_\_\_ Area of each valve \_\_\_\_\_ Pressure to which they are adjusted \_\_\_\_\_  
 Are they fitted with easing gear \_\_\_\_\_ 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 \_\_\_\_\_ Mean dia. of boilers 11'-1 1/4" Length 11'-0"  
 Material of shell plates Steel Thickness 1 1/4" Range of tensile strength 62200 to 63800 Are the shell plates welded or flanged No  
 Descrip. of riveting: cir. seams Double Lap long. seams Triple Butt Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 7 1/2"  
 Lap of plates or width of butt straps 16" Per centages of strength of longitudinal joint rivets 86.5 Working pressure of shell by plate 85.8  
 Rules 200 Size of manhole in shell 11" x 15" Size of compensating ring 1 1/4" x 27" x 30" No. and Description of Furnaces in each boiler Two (2) Marine Material Steel Outside diameter 45" Length of plain part \_\_\_\_\_ Thickness of plates crown 17/32 bottom \_\_\_\_\_  
 Description of longitudinal joint Welded No. of strengthening rings \_\_\_\_\_ Working pressure of furnace by the rules 185 Combustion chamber plates: Material Steel Thickness: Sides 1/2" Back 1/2" Top 1/2" Bottom 1 1/8" Pitch of stays to ditto: Sides 8" x 8" Back 7 1/2" x 8"  
 Top 8" x 8" If stays are fitted with nuts or riveted heads Top - Nuts Other - Riveted Working pressure by rules 189 Material of stays Hot Iron Area at smallest part 1-84 sq ft Area supported by each stay 64 sq ft Working pressure by rules 215 End plates in steam space: Material Steel Thickness 1 1/2"  
 Pitch of stays 15" x 16" How are stays secured Double Nuts Working pressure by rules 198 Material of stays Steel Area at smallest part 6.49  
 Area supported by each stay 240 Working pressure by rules 281 Material of Front plates at bottom Steel Thickness 3/4" Material of Lower back plate Steel Thickness 3/4" + 5/8" double Greatest pitch of stays 14" Working pressure of plate by rules 258 Diameter of tubes 3"  
 Pitch of tubes 4" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 10" Pitch across wide water spaces 13 Working pressures by rules 239 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 9 1/2" x (3/4" + 3/4") Length as per rule 32" Distance apart 8" Number and pitch of Stays in each 3 - 8"  
 Working pressure by rules 222 Steam dome: description of joint to shell None % of strength of joint \_\_\_\_\_  
 Diameter \_\_\_\_\_ Thickness of shell plates \_\_\_\_\_ Material \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ Diam. of rivet holes \_\_\_\_\_  
 Pitch of rivets \_\_\_\_\_ Working pressure of shell by rules \_\_\_\_\_ Crown plates \_\_\_\_\_ 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 \_\_\_\_\_

**VERTICAL DONKEY BOILER**— No. \_\_\_\_\_ Description \_\_\_\_\_ Manufacturers of steel \_\_\_\_\_  
 Made at \_\_\_\_\_ By whom made \_\_\_\_\_ When made \_\_\_\_\_ Where fixed \_\_\_\_\_ Working pressure \_\_\_\_\_  
 Tested by hydraulic pressure to \_\_\_\_\_ Date of test \_\_\_\_\_ No. of Certificate \_\_\_\_\_ Fire grate area \_\_\_\_\_ Description of safety valves \_\_\_\_\_  
 No. of safety valves \_\_\_\_\_ Area of each \_\_\_\_\_ Pressure to which they are adjusted \_\_\_\_\_ If fitted with easing gear \_\_\_\_\_ If steam from main boilers can enter the donkey boiler \_\_\_\_\_  
 Dia. of donkey boiler \_\_\_\_\_ Length \_\_\_\_\_ Material of shell plates \_\_\_\_\_ Thickness \_\_\_\_\_ Range of tensile strength \_\_\_\_\_  
 Descrip. of riveting long. seams \_\_\_\_\_ Dia. of rivet holes \_\_\_\_\_ Whether punched or drilled \_\_\_\_\_ Pitch of rivets \_\_\_\_\_  
 Pitch of plating \_\_\_\_\_ Per centage of strength of joint Rivets \_\_\_\_\_ Working pressure of shell by rules \_\_\_\_\_ Thickness of shell crown plates \_\_\_\_\_  
 Radius of do. \_\_\_\_\_ No. of Stays to do. \_\_\_\_\_ Dia. of stays \_\_\_\_\_ Diameter of furnace Top \_\_\_\_\_ Bottom \_\_\_\_\_ Length of furnace \_\_\_\_\_  
 Thickness of furnace plates \_\_\_\_\_ Description of joint \_\_\_\_\_ Working pressure of furnace by rules \_\_\_\_\_ Thickness of furnace crown plates \_\_\_\_\_  
 Radius of do. \_\_\_\_\_ Stayed by \_\_\_\_\_ Diameter of uptake \_\_\_\_\_ Thickness of uptake plates \_\_\_\_\_  
 Thickness of water tubes \_\_\_\_\_

The foregoing is a correct description,  
Commercial Boiler Works Manufacturer.  
J. H. A. J.

Dates { During progress of work in shops - - } Dec 22. Jan 3-9-14-15-19-24  
 Survey while building { During erection on board vessel - - - }  
 Total No. of visits Shop 7

Is the approved plan of main boiler forwarded herewith \_\_\_\_\_  
 " " " donkey " " \_\_\_\_\_ Yes



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

This Donkey Boiler has been built under special survey and in accordance with the approved plan, the material tested as required by the rules of the Society and the workmanship of good quality, tested by hydraulic pressure and found tight and sound. When installed in a vessel classed in Lloyd's Register Shipping will be eligible, in my opinion, to be noted in the Register Book.

Marks and Numbers

No 262  
 LLOYD'S TEST  
 TP 270 7/8  
 WP 150 "  
 JP 24-1-21

Certificate (if required) to be sent to

The amount of Entry Fee .. £ : : When applied for,  
 Special Survey .. .. \$ 43 :  $\frac{45}{100}$  : January 28 1921  
 Donkey Boiler Fee .. .. £ : : When received,  
 Travelling Expenses (if any) £ : : Socy of need  
 1921

Committee's Minute New York MAY 31 1921  
 Assigned See C. Cr. Rpt 633

James Fowler  
 Engineer Surveyor to Lloyd's Register of Shipping.  
 © 2021  
 Lloyd's Register Foundation