

REPORT ON BOILERS.

No. 3928
SAT. 12 AUG. 1921

Received at London Office

Place of writing Report 191 When handed in at Local Office 191 Port of Philadelphia Pa

No. in Survey held at Wilmington Del Date, First Survey March 23. 1920 Last Survey Aug 12 1920
 Reg. Book. on the New Steel S.S.T. Hatches Yarnell (Number of Visits 13) Tons } Gross }
 } Net }
 Master Built at Fox River Mass. By whom built When built
 Engines made at By whom made When made
 Boilers made at Wilmington Del By whom made Bethlehem Ship Bldg Corp. When made 1920
 Registered Horse Power Owners Port belonging to

MULTITUBULAR BOILERS—MAIN, ~~AUXILIARY OR DONKEY~~—Manufacturers of Steel Lukens S & J. Co

Letter for record S Total Heating Surface of Boilers 8829 sq ft Is forced draft fitted No. and Description of Boilers 3 SE Scotch Marine Working Pressure 200 Tested by hydraulic pressure to 300 Date of test 12-8-20

No. of Certificate 480 Can each boiler be worked separately Area of fire grate in each boiler No. and Description of safety valves to each boiler No direct spring Area of each valve 9.62 sq ft 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 Internal Mean dia. of boilers 15'-0" Length 11'-9"

Material of shell plates Steel Thickness 1 9/16" Range of tensile strength 60,000 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams DRL long. seams TRPBS Diameter of rivet holes in long. seams 1 7/16" Pitch of rivets 8"

Width of butt straps 21" Per centages of strength of longitudinal joint rivets 96.5 plate 82.0 Working pressure of shell by rules 220 Size of manhole in shell 12" x 16" Size of compensating ring 35 1/2, 31 1/2, 1 9/16 No. and Description of Furnaces in each boiler 3 Monson Material Steel Outside diameter 4'-0" Length of plain part top bottom Thickness of plates crown 7/8" bottom 7/8"

Description of longitudinal joint Weld No. of strengthening rings Working pressure of furnace by the rules 209 Combustion chamber plates: Material Steel Thickness: Sides 2 1/2" Back 1 1/2" Top 3/2" Bottom 1 1/2" Pitch of stays to ditto: Sides 4 x 7 1/2" Back 4 3/8 x 7 3/8"

Top 4 x 7 1/2" If stays are fitted with nuts or riveted heads Riveted heads Working pressure by rules 209 Material of stays Steel Area at smallest part 1.4 sq ft Area supported by each stay 54.39 Working pressure by rules 220 End plates in steam space: Material Steel Thickness 1 1/8"

Pitch of stays 6 3/4 x 1 1/4 How are stays secured D.N.W.S Working pressure by rules 202 Material of stays Steel Area at smallest part 6.49

Area supported by each stay 280 Working pressure by rules 240 Material of Front plates at bottom Steel Thickness 3/4" Material of Lower back plate Steel Thickness 3/4" Greatest pitch of stays 13" Working pressure of plate by rules 209 Diameter of tubes 2 1/2"

Pitch of tubes 3 7/8" x 3 7/8" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 9.56" Pitch across wide water spaces 13" Working pressures by rules 212 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 10" x 1 1/2" Length as per rule 34" Distance apart 7 1/2" Number and pitch of Stays in each 4-7"

Working pressure by rules 247 Steam dome: description of joint to shell % 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

The foregoing is a correct description,
 C.B. J... Manufacturer.

Dates of Survey } During progress of } March 23 April 6-14 May 7-23 June 1-14-23-24 Aug 12 Aug 5-12 Is the approved plan of boiler forwarded herewith Copy.
 } work in shops - - }
 while } During erection on }
 building } board vessel - - - }
 Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been constructed under special survey, and in accordance with the approved plans. The workmanship and materials are good. Complete the survey, mountings to be fitted, boilers to be installed on the vessel, and safety valves adjusted under steam.

Creed Fee Phila with 1/3 Mac fee. : } When applied for, 191
 Travelling Expenses (if any) \$ 10 : 00 : } When received, 31.10.21

Committee's Minute New York JUL 26 1921
 Assigned See Bo. 1495

W. X...
 Engineer Surveyor to Lloyd's Register of Shipping.

