

REPORT ON WATER TUBE BOILERS.

No. 19252

Date of writing Report *Oct 1st 1920* When handed in at Local Office *Oct 2nd 1920* Port of *New York*

Received at London Office

TUE NOV. 2 1920

No. in Reg. Bk. *1* Survey held at *New London, Conn.* Date, First Survey *1919* Last Survey *1919*
 on the *Water tube boilers for the S/S "Provincetown"* Number of Visits *1* Gross Tons *1920-9*
 Master *Stifford* Built at *Groton, Conn.* By whom built *Groton Iron Works* When built *1920-9*
 Engines made at *Proctor, N. J.* By whom made *W. A. Fletcher Company* When made *1920-9*
 Boilers made at *Phoenixville, Pa.* By whom made *Heine Saffli Boiler Company* When made *1920-9*
 Registered Horse Power *654.7* Owners *U. S. Shipping Board* Port belonging to *Groton, Conn.*

WATER TUBE BOILERS—MAIN, ~~AUXILIARY~~, OR ~~DONKEY~~—Manufacturers of Steel *Midvale Steel & Ordnance Co.*(Letter for Record *2*) Date of Approval of plan *2/7/20* Number and Description of Type *3, Water tube*of Boilers *3, Water tube* Working Pressure *225* Tested by Hydraulic Pressure to *450* Date of Test *2/7/20*No. of Certificate *Induced* Can each boiler be worked separately *Yes* Total Heating Surface of Boilers *9510*Is forced draught fitted *Induced* Area of fire grate (coal) in each boiler *102* Total grate area of boilers in vessel includingMain and Auxiliary *306* No. and type of burners (oil) in each boiler *4, White* No. and description of safety valves oneach boiler *2, Spring loaded* Area of each valve *9.62* Pressure to which they are adjusted *195 lbs.*Are they fitted with easing gear *Yes* In case of donkey boilers state whether steam from main boilers can enter the donkey boiler *Yes*Smallest distance between boilers or uptakes and bunkers or woodwork *3-0* Height of Boiler *11-4 3/4* Width and Length *10-0 1/2 x 13-7 1/2*Steam Drums:—Number in each boiler *One* Inside diameter *42* Material of plates *Steel* Thickness *7/32*Range of Tensile Strength *58000 lbs.* Are drum shell plates welded or flanged *No* Description of riveting:—Cir. seams *S. R. L. A. P.* long. seams *D. R. D. B. S.* Diameter of rivet holes in long. seams *5/16* Pitch of Rivets *3 1/2*Joint of plates width of butt straps *16 9/16 1/2* Thickness of straps *7/32* Percentage strength of long. joint:—Plate *73.2* Rivet *110*Diameter of tube holes in drum *3 1/2* Pitch of tube holes *7* Percentage strength of shell in way of tubes *49.5*If Drum has a flat side state method of staying *Yes* Depth and thickness of girders at centre(if fitted) Distance apart *Yes* Number and pitch of stays in each *Yes* Working pressureby rules *389 lbs.* Steam Drum Heads or Ends:—Material *Steel* Thickness *5/8* Radius *on how stayed* *42*Size of Manhole *Handhole* *15" x 11"* Water Drums:—Number in each boiler *Yes* Inside Diameter *Yes*Material of plates *Yes* Thickness *Yes* Range of tensile strength *Yes* Are drum shell plates weldedor flanged *Yes* Description of riveting:—Cir. seams *Yes* long. seams *Yes* Diameter of Rivet Holes inlong. seams *Yes* Pitch of rivets *Yes* Lap of plates or width of butt straps *Yes* Thickness of straps *Yes*Percentage strength of long. joint:—Plate *Yes* Rivet *Yes* Diameter of tube holes in drum *Yes* Pitch of tube holes *Yes*Percentage strength of drum shell in way of tubes *Yes* Water Drum Heads or Ends:—Material *Yes* Thickness *Yes*Radius or how stayed *Yes* Size of manhole or handhole *Yes* Headers or Sections:—Number *2* IronMaterial *Steel* Thickness *7/32* Tested by Hydraulic Pressure to *450 lbs.* Material of Stays *Yes*Area at smallest part *1.47* Area supported by each stay *33* Working Pressure by Rules *335 lbs.* Tubes:—Diameter *3 1/2*Thickness *1 3/4 9 10 B. W. G.* Number *798 in all* Steam Dome or Collector:—Description of Joint to Shell *Yes*Percentage strength of Joint *Yes* Diameter *Yes* Thickness of shell plates *Yes* Material *Yes*Description of longitudinal joint *Yes* Diameter of Rivet Holes *Yes* Pitch of Rivets *Yes* Working Pressure of shellby Rules *Yes* Crown or End Plates:—Material *Yes* Thickness *Yes* How stayed *Yes*SUPERHEATER Type *Heine* Date of Approval of Plan *2/7/20* Tested by Hydraulic Pressure to *450 lbs.*Date of Test *2/7/20* Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler *Yes*Diameter of Safety Valve *1 1/2* Pressure to which each is adjusted *205 lbs.* Is easing gear fitted *Yes*Is a drain cock or valve fitted at lowest point of superheater *Yes* Number, diameter, and thickness of tubes *52, 1 1/2, No gauge.*Spare Gear. Tubes *20* Gaskets or joints:—Manhole *Yes* Handhole *Yes* Handhole plates *Yes*

The foregoing is a correct description,

Manufacturer.

Dates of Survey *During progress of work in shops - -*
 while *During erection on board vessel - -*

Is the approved plan of boiler forwarded herewith *No.*

Total No. of visits

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

These Boilers and Superheater have been constructed under the Survey of the American Bureau of Shipping and are now efficiently secured in place. They were tested by hydraulic pressure in my presence and found tight & sound. Mounting plates & safety valves adjusted under steam.

Survey Fee ... £ : : When applied for, 191

Travelling Expenses (if any) £ : : When received, 191

J. Hudson.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *New York* OCT 19 1920

Assigned

See N.Y. Rpt No 19252

Lloyd's Register
 Foundation

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