

REPORT ON WATER TUBE BOILERS.

No. 19673

TUE. 10 JAN. 1921

Received at London Office

Date of writing Report Dec. 13 1920 When handed in at Local Office Dec. 15 1920 Port of New York

No. in Reg. Bk. _____ Survey held at New London Conn Date, First Survey _____ Last Survey _____ 191
 on the Water tube boilers for the S/S "Kopalcong" Number of Visits _____ Tons { Gross 6216
 Net 3805
 Master Masters Built at Groton Conn By whom built Groton Iron Works When built 1920-12
 Engines made at Greenville N.J. By whom made Vulcan Iron Works Inc When made 1920-12
 Boilers made at Phonerville Pa. By whom made Heise Safety Boiler Company When made 1920-12
 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 _____ Number and Description or Type of Boilers 3 Water tube Working Pressure 225 Tested by Hydraulic Pressure to 450 Date of Test 3/11/20

No. of Certificate _____ Can each boiler be worked separately Yes Total Heating Surface of Boilers 9510 sq ft
 Is forced draught fitted Yes Area of fire grate (coal) in each Boiler 102 sq ft Total grate area of boilers in vessel including Main and Auxiliary 603 sq ft No. and type of burners (oil) in each boiler 4 White No. and description of safety valves on each boiler 2 Spring loaded Area of each valve 9.62 sq in 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 0 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 15/16" Pitch of Rivets 3/2"
 Top of plates width of butt straps 16'-9 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 _____ Number and pitch of stays in each _____ Working pressure by rules 389 lbs.
 Steam Drum Heads or Ends:—Material Steel Thickness 5/8" Radius on 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 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 _____ Thickness _____
 Radius or how stayed _____ Size of manhole or handhole _____ Headers or Sections:—Number 2 Material Steel Thickness 7/32" Tested by Hydraulic Pressure to 450 lbs. Material of Stays Iron
 Area at smallest part 1.47 sq in Area supported by each stay 33 sq in Working Pressure by Rules 335 lbs Tubes:—Diameter 3 1/2"
 Thickness 7/16" B.W.G. Number 798 Steam Dome or Collector:—Description of Joint to Shell _____
 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 Heise Date of Approval of Plan _____ Tested by Hydraulic Pressure to 450 lbs.
 Date of Test 3/11/20 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 210 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" N° 16 gauge
 Spare Gear. Tubes _____ Gaskets or joints:—Manhole _____ Handhole _____ Handhole plates _____

The foregoing is a correct description, _____ Manufacturer.

Dates of Survey } During progress of work in shops -- } Is the approved plan of boiler forwarded herewith No.
 while building } During erection on board vessel --- } Total No. of visits _____

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These Boilers and Superheaters have been constructed under the survey of the American Bureau of Shipping and now efficiently secured in place. They were tested by hydraulic pressure to 450 lbs per sq in my presence & found tight & sound. Mounting fitted and Safety valves adjusted under steam.

Survey Fee ... £ : : } When applied for, 191
 Travelling Expenses (if any) £ : : } When received, 191
P. Hudson
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute New York JAN - 4 1921
Assigned See N.Y. Rpt. 19673.

