

MUTUAL BOILER AND MACHINERY INSURANCE COMPANY
MANUFACTURERS' DATA REPORT FOR UNFIRED PRESSURE VESSELS
 As Required by the Provisions of the A.S.M.E. Code Rules

#83083

1. Manufactured by BOYLE & ROTH MFG. CO., INC. BROOKLYN, NY FILE NO. _____
 (Name and address of Manufacturer)

2. Manufactured for THE LUMMUS CO. NEW YORK
 (Name and address of Purchaser)

3. Type VERT. Kind CONDENSER Vessel No. M-3983-3 () Nat'l Bd. No. 2115 Yr. Bld. 1958
 (Horiz. or Vert.) (Tank, Jacketed, Heat Exch.) (Mfrs' Serial) (State & State No.)

Items 4-9 incl. to be completed for single wall vessels (such as air tanks), jackets of jacketed vessels, or shells of Heat Exchangers

4. SHELL: Material STEEL A53B T.S. 60,000 Thickness .307 in. Allowance _____ in. Diam. 10.10 in. Length 10 ft. 1 in.
 (Kind and Spec. No.) (Fig. or P. B. & Lowest T. S.) Corrosion

5. SEAMS: Long SEAMLESS S.R. NO X.R. NO Sectioned NO Efficiency 100 %
 (Welded, Dbl., Single, Lap, Butt) (Yes or No) (Spot or Complete) (Yes or No) If riveted describe seams fully on reverse side of form

6. HEADS: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____
 Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex angle Hemispherical Radius Flat Diameter Side to Pressure (Convex or Concave)

(a) _____
 (b) _____
 If removable, bolts used _____ Other fastening _____
 (Material, Spec. No., T.S., Size, Number) (Describe or Attach Sketch)

7. STAYBOLTS: _____ If hollow _____ Attachment _____ Pitch _____ X _____ Diam. _____
 (Material) (Size of Hole) (Threaded, Welded) (Horiz.) (Vert.) (Nominal)

8. JACKET CLOSURE: _____
 (Describe as open & weld, bar, etc. If bar give dimensions, if bolted, describe or sketch)

9. Constructed for Int. pressure of 75 psi. Max. Temp. 150 °F. Subzero _____ °F. Hydrostatic Test 115 psi.
 (Int. or Ext.)

Items 10 and 11 to be completed for tube sections.

10. TUBE SHEETS: Stationary. Material 316 S.S. A-240M Diam. 1 5/8 Thickness 3/4 in. Attachment BOLTED
 (Kind & Spec. No.) (Subject to Pressure) (Welded, Bolted)

Floating. Material 316 S.S. A-240M Diam. 9 15/16 Thickness 3/4 in. Attachment WELDED
 (Kind & Spec. No.)

11. TUBES: Material 316 S.S. O.D. 3/4 in. Thickness .065 inches or gage. Number 55 Type STRAIGHT
 (Kind & Spec. No.) (Straight or U)

Items 12-15 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

12. SHELL: Material _____ T.S. _____ Thickness _____ in. Allowance _____ in. Diam. _____ ft. in. Length _____ ft. in.
 (Kind and Spec. No.) (Fig. or P. B. & Lowest T. S.) Corrosion

13. SEAMS: Long _____ S.R. _____ X.R. _____ Sectioned _____ Efficiency _____ %
 (Welded, Dbl., Single, Lap, Butt) (Yes or No) (Spot or Complete) (Yes or No) If riveted describe seams fully on reverse side of form

14. HEADS: (a) Material _____ T.S. _____ (b) Material _____ T.S. _____ (c) Material _____ T.S. _____
 Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex angle Hemispherical Radius Flat Diameter Side to Pressure (Convex or Concave)

(a) Top, bottom, ends 3/16 10 3/4 OD SEMI-ELLIP TO D/h-4
 (b) Channel WITH 12850 STEEL L.J. FLG. 14 1/2" O.D. x 1 1/2" TR - REAR O.P.H. CYLINDER 316 S.S.
 (c) Floating 15 1/16 O.D. x 1 1/2" LONG x 3/8" TR WELDED TO TUBE SHEET WITH SNAP RING & COVER PLATE 14 1/2" O.D. x 1 1/2" TR LINED WITH 304 S.S.
 If removable, bolts used (a) A-193 B7 5/8 12 (b) A-193 - B7 5/8 - 12
 (Material, Spec. No., T.S., Size, Number) (Describe or Attach Sketch)

(c) A-194 - 2H - HEAVY HEX NUTS fastening _____
 (Describe or Attach Sketch)

15. Constructed for Int. pressure of 75 psi. Max. Temp. 250 °F. Subzero _____ °F. Hydrostatic Test 115 psi.
 (Int. or Ext.)

Items below to be completed for all Vessels where applicable.

16. SAFETY VALVE OUTLETS: Number _____ Size _____ Location _____

17. NOZZLES:
 Purpose (Inlet, Outlet, Drain) Number Diam. or Size Type Material Thickness Reinforcement Material How Attached

S.S. IN & OUT 2 - 3" 150# ASA S.O.R.F. FLGS. A181 WITH SCH. 40 A53B PIPE WELD.
 T.S. IN & OUT 2 - (1) 2" (1) 4" 150# ASA L.J. FLGS. A181 WITH SCH. 10 316 S.S. STUB END WELD.
 S.S. VENT & DRAIN 2 - 3/4" 3000# S.S. HALF COUP.

18. INSPECTION MANHOLES, No. _____ Size _____ Location _____
 OPENINGS: Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____

19. SUPPORTS: Skirt (Yes or No) Legs (Number) _____ Legs (Number) _____ Other (Describe) _____ Attached (Where & How)

20. REMARKS: SHELL & STRAIGHT TUBE OUTSIDE PACKED HEAD CONDENSER
SHELL SIDE WATER - TUBE SIDE ORGANIC VAPOR
 (Brief description of purpose of the vessel, as air tank, after cooler, jacketed cooler, etc. state contents of each part.) (Over)

We certify that the statements made in this report are correct and that all details of material, construction, and workmanship of this fired pressure vessel conform to the ASME Code for Unfired Pressure Vessels.

Date: OCT 1958 Signed DOYLE & ROTH MFG. CO., INC. By J. A. Roe
(Manufacturer)

Certificate of Authorization Expires DEC 31, 1958

CERTIFICATE OF SHOP INSPECTION

Insurance Company's Serial No. 588171-B

VESSEL MADE BY DOYLE & ROTH MFG. CO., INC. at BROOKLYN, NY

I, the undersigned, holding a Certificate of Competency as an Inspector of Boilers and Unfired Pressure Vessels in THE STATE OF and employed by The Mutual Boiler and Machinery Insurance Company of Waltham, Mass., inspected internally and externally, the vessel described in this report on 9/15, 1958, and certify that the statements made in this report are correct corresponding with mill test reports of materials furnished by the builders, and measurements made of the vessel and that this vessel is constructed in accordance with the ASME Code for Unfired Pressure Vessels.

Date Oct 16 1958

Inspector's Signature

Commissions

State or Nat'l Bd. & Number

CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a Certificate of Competency as an Inspector of Boilers and Unfired Pressure Vessels in THE STATE OF and employed by The Mutual Boiler and Machinery Insurance Company of Waltham, Mass., have compared the statements in this manufacturer's data report with the completed vessel, and certify that parts referred to as data items were completed in the field in accordance with the requirements of the ASME Code for Unfired Pressure Vessels. The completed vessel was inspected and subjected to a hydrostatic test of psi.

Date 19

Inspector's Signature

Commissions

State or Nat'l Bd. & Number