

FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured and certified by MISSOURI BOILER AND TANK CO. 2300 PAPIN ST. ST. LOUIS, MO 63103
(Name and address of manufacturer)
2. Manufactured for E. I. DUPONT DE NEMOURS & CO., INC. CLEVELAND, OHIO
(Name and address of purchaser)
3. Location of installation E. I. DUPONT DE NEMOURS & CO., INC. BEAUMONT, TEXAS
(Name and address)
4. Type VERT H-5839 JND-70336 5317 1989
(Horse or vert., tank) (Mfg'r's serial No.) (CRN) (Drawing) (Nat'l. Bd. No.) (Year built)
5. The chemical and physical properties of all parts meet the requirements of the ASME Boiler and Pressure Vessel Code. The design, construction, and workmanship conform to ASME Rules, Section VIII, Division 1 1986
Year
- 1987 - -
Addenda (date) Code Case No. Special service per UG-120(d)

Items 6-11 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers

6. Shell: SA-240-316L 7/16" .125 4' - 11-1/8" 11' - 7"
Matl. (Spec. No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I.D. (ft & in.) Length (Overall) (ft & in.)
7. Seams: DBL. BUTT SPOT 1
Long. (Dbl., Sngl.) R.T. (Spot or Full) Eff. (%) H.T. Temp. (°F)
- DBL BUTT SPOT 1
Time Girth (Dbl., Sngl.) R.T. (Spot, Partial, or Full) No. of Courses
8. Heads: (a) Matl. SA-240-316L (b) Matl. SPOT
(Spec. No., Grade) (Spec. No., Grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	ENDS	.34	.125	5' - 0"	3-5/8"					CONCAVE
(b)										

If removable, bolts used (describe other fastenings) WELDED
(Matl., Spec. No., Gr., Size, No.)

9. Type of Jacket Proof Test
10. Jacket Closure If bar, give dimensions If bolted, describe or sketch.
(Describe as ogee & weld, bar, etc.)
11. MAWP 50 psi at max. temp. 400 °F. Min. design metal temp. +15 °F at 50 psi.
Hydro., pneu., or comb. test press. 80 psi.

Items 12 and 13 to be completed for tube sections

12. Tubesheets: Stationary Matl. (Spec. No., Gr.) Diam. (in.) (Subject to pressure) Nom. Thk. (in.) Corr. Allow. (in.) Attach. (Welded, Bolted)
Floating Matl. (Spec. No., Gr.) Diam. (in.) Nom. Thk. (in.) Corr. Allow. (in.) Attach.
13. Tubes: Matl. (Spec. No., Gr.) O.D. (in.) Nom. Thk. (in. or Gauge) Number Type (Straight or "U")

Items 14-17 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers

14. Shell: Matl. (Spec. No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I.D. (ft & in.) Length (Overall) (ft & in.)
15. Seams: Long. (Dbl., Sngl.) R.T. (Spot or Full) Eff. (%) H.T. Temp. (°F)
Time Girth (Dbl., Sngl.) R.T. (Spot, Partial, or Full) No. of Courses
16. Heads: (a) Matl. SPOT (b) Matl. SPOT
(Spec. No., Grade) (Spec. No., Grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	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 (describe other fastenings) WELDED
(Matl., Spec. No., Gr., Size, No.)

17. MAWP 50 psi at max. temp. 400 °F. Min. design metal temp. +15 °F at 50 psi.
Hydro., pneu., or comb. test press. 80 psi.

Form U-1 (Back)

18. Nozzles, Inspection and Safety Valve Openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diam. or Size	Type	Matl.	Nom. Thk.	Reinforcement Matl.	How Attached	Location
MANWAY	1	24"	L.J.	SA-240-316L	3/8"	SA-240-316L	WELDED	SHELL
IN & OUT	3	6"	W.N.	SA-312-316L	SCH80		WELDED	HEAD & SHELL
IN & OUT	1	10"	W.N.	SA-240-316L	3/8"		WELDED	SHELL
IN & OUT	3	3"	W.N.	SA-312-316L	SCH160		WELDED	HEAD & SHELL
IN & OUT	2	2	W.N.	SA-312-316L	SCH160		WELDED	HEAD & SHELL
IN & OUT	1	8"	W.N.	SA-240-316L	3/8"		WELDED	HEAD
IN & OUT	1	1-1/2"	W.N.	SA-312-316L	SCH160		BOLTED	HEAD

19. Supports: Skirt NO Lugs Legs 4 Other Attached WELDED TO SHELL
 (Yes or no) (No.) (No.) (Describe) (Where and how)

20. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report:
 (Name of part, item number, mfr's name and identifying stamp)

1 - 5'-0" O.D. x 11' - 7" LG. VENT SEPARATOR
EN. NO. 5116-7118-1

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME Code for Pressure Vessels, Section VIII, Division 1.

"U" Certificate of Authorization No. 247 expires MAY 28, 1992
 Date 1/4/90 Co. name MISSOURI BOILER & TANK COMPANY Signed Richard D. Dymek
 (Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by MISSOURI BOILER AND TANK COMPANY at ST. LOUIS, MISSOURI

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of NATIONAL BOARD and employed by COMMERCIAL UNION INSURANCE COMPANY

of BOSTON, MASSACHUSETTS have inspected the pressure vessel described in this Manufacturer's Data Report on 1.4, 1990, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this

pressure vessel in accordance with ASME Code, Section VIII, Division 1. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in the Manufacturer's Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 1.4.90 Signed Richard D. Dymek Commissions NB 7967 140.0186
 (Authorized Inspector) (Nat'l Board, State, Province and No.)

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the field assembly construction of all parts of this vessel conforms with the requirements of Section VIII, Division 1 of the ASME Boiler and Pressure Vessel Code.

"U" Certificate of Authorization No. expires , 19
 Date Co. name Signed
 (Assembler that certified and constructed field assembly) (By Representative)

CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of and employed by

of have compared the statements in this Manufacturer's Data Report with the described pressure vessel and state that parts referred to as data items , not included in the

certificate of shop inspection, have been inspected by me and that, to the best of my knowledge and belief, the Manufacturer has constructed and assembled this pressure vessel in accordance with ASME Code, Section VIII, Division 1. The described vessel was inspected and subjected to a hydrostatic test of psi. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date Signed Commissions
 (Authorized Inspector) (Nat'l Board (incl. endorsements), State, Prov., and No.)