

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

1/2

1. Manufactured and certified by De Dietrich & Cie, 1 rue d'Offwiller, 67110 Zinswiller, France
(Name and address of manufacturer)
2. Manufactured for _____
(Name and address of purchaser)
3. Location of installation _____
(Name and address)
4. Type Vertical 33273 N/A EP-2926 M 3947 1986
(Horizontal or vertical tank) (Mfr's serial No.) (CRN) (Drawing) (Nat'l Bd No.) (Year built)
5. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME Boiler and Pressure Vessel Code. The design, construction, and workmanship conform to ASME Rules, Section VIII, Division 1 1983
Year
- Winter 84 N/A N/A
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 sheets of heat exchangers

6. Shell: SA 285 B 25/64" N/A 4 ft. 5-5/32" O.D. 2 ft. 5-1/4"
(Mat'l (Spec. No., Grade)) (Nom. Thk. (in.)) (Corr. Allow. (in.)) (Diam. I.D. (ft. & in.)) (Length (Overall) (ft. & in.))
7. Seams: Welded, Dbl. Butt Spot 85 N/A
(Long. (Dbl., Sngl.)) (R.T. (Spot or Full)) (Eff. (%)) (H.T. Temp. (F.))
- N/A Welded, Dbl. Butt Partial 1
(Time) (Girth (Dbl., Sngl.)) (R.T. (Spot, Partial, or Full)) (No. of Courses)
8. Heads: (a) Mat'l. SA 285 B (Spec. No., Grade) (b) Mat'l. N/A (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)	<u>Bottom</u>	<u>15/32"</u>	<u>N/A</u>	<u>53-5/32"</u>	<u>5-5/16"</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>Concave</u>
(b)										

If removable, bolts used (describe other fastenings) N/A
(Mat'l, Spec. No., Gr., Size, No.)

9. Type of Jacket Type 2, per Fig. 9.2 Proof Test N/A
10. Jacket Closure Fig. 9.5(b-2) & Fig. 9.6(a-1) If bar, give dimensions N/A If bolted, describe or sketch.
11. MAWP 105 or 90 & F.V. psi at max. temp. 500 °F. Min. temp. (when less than -20°F) N/A °F.
Hydro., pneu., or comb. test press. 157.5 psi.

Items 12 and 13 to be completed for tube sections

12. Tubesheets: N/A
(Stationary Mat'l (Spec. No., Gr.)) (Diam. (in.) (Subject to pressure)) (Nom. Thk. (in.)) (Corr. Allow. (in.)) (Attach. (Welded, Bolted))
- N/A
(Floating Mat'l (Spec. No., Gr.)) (Diam. (in.)) (Nom. Thk. (in.)) (Corr. Allow. (in.)) (Attach.)
13. Tubes: N/A
(Mat'l (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: SA 285 B 5/8" N/A 4 ft. I.D. 2 ft. 11-1/16"
(Mat'l (Spec. No., Grade)) (Nom. Thk. (in.)) (Corr. Allow. (in.)) (Diam. I.D. (ft. & in.)) (Length (Overall) (ft. & in.))
15. Seams: Welded, Dbl. Butt Spot 85 *
(Long. (Dbl., Sngl.)) (R.T. (Spot or Full)) (Eff. (%)) (H.T. Temp. (F.))
- * Welded, Dbl. Butt Partial 1
(Time) (Girth (Dbl., Sngl.)) (R.T. (Spot, Partial, or Full)) (No. of Courses)
16. Heads: (a) Mat'l. SA 285 B (Spec. No., Grade) (b) Mat'l. N/A (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)	<u>Bottom</u>	<u>5/8"</u>	<u>N/A</u>	<u>48"</u>	<u>3"</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>Both</u>
(b)										

If removable, bolts used (describe other fastenings) N/A
(Mat'l, Spec. No., Gr., Size, No.)

17. MAWP 90 & F.V. psi at max. temp. 500 °F. Min. temp. (when less than -20°F) N/A °F.
Hydro., pneu., or comb. test press. 135 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
Outlet	1	3"	Dbl. Butt	Girth SA 181-60	35/64"	None	Welded	N/A
Jacket	3	5-3/4"	Sit through	SA 516-60	2-1/8"	None	Welded	shell & head
Jacket	8	1-1/2"	Sit through	SA 105	Standard	None	Welded	N/A
Jacket	1	3/4"	Sit on	SA 105	Standard	None	Welded	N/A
Jacket	2	1/2"	Sit through	SA 105	Standard	None	Welded	N/A

19. Supports: Skirt no Lugs 4 side support 4-3" cplg. Legs N/A Other N/A Attached Welded on jacket shell and head
 (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: N/A
 (Name of part, item number, mfr's. name and identifying stamp)

*Vessel H.T. at high temperature for extended period of time due to glass lining process.

Vessel hydrotested with vessel N.B. 3946

Safety relief valve to be supplied by customer.

Glass lined steel vessel for chemical use.

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. 11718 expires April 16, 19 86
 Date April 16, 1986 Co. name De Dietrich & Cie Signed WAGNER R. O.C. Manager
 (Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by De Dietrich & Cie at Zinswiller, France
 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 New York and employed by The Royal Indemnity Company
 of New York, N.Y. have inspected the pressure vessel described in this Manufacturer's Data

Report on April 10, 19 86, 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 Apr. 16, 1986 Signed Martin KOENIG Commissions N.B. 9354
 (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.)

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Ave., Columbus, OH 43229

DESIGN CERTIFICATION

The undersigned certifies that the statements made in this report are correct and that the design changes described in this report conform to the requirements of the National Board Inspection Code.

ASME Certificate of Authorization no. _____ to use the _____ symbol expires _____, 19____

Date _____, 19____ Signed _____
(name of organization) (authorized representative)

CERTIFICATE OF REVIEW OF DESIGN CHANGE

The undersigned, holding a valid Commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the state or province of _____ and employed by _____

of _____ has examined the design change as described in this report and verifies that to the best of his knowledge and belief such change complies with the applicable requirements of the National Board Inspection Code. By signing this certificate, neither the undersigned nor his employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection, except such liability as may be provided in a policy of insurance which the undersigned's insurance company may issue upon said object and then only in accordance with the terms of said policy.

Date _____, 19____ Signed _____ Commissions _____
(Authorized Inspector) (National Board (incl. endorsements), state, prov., and no.)

CONSTRUCTION CERTIFICATION

The undersigned certifies that the statements made in this report are correct and that all construction and workmanship on this repair conform to the National Board Inspection Code.
(repair or alteration)

Certificate of Authorization no. 14722 to use the U symbol expires July 25, 1990

Date 10-20, 1989 De Dietrich (USA), Inc. Signed Daniel Brotea
(repair or alteration organization) (authorized representative)
Daniel Brotea

CERTIFICATE OF INSPECTION

The undersigned, holding a valid Commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the state or province of New Jersey and employed by Royal Ins. Co.

of Charlotte, N.C. has inspected the work described in this report on 10-20, 1989 and state that to the best of my knowledge and belief this work has been done in accordance with the National Board Inspection Code. By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection, except such liability as may be provided in a policy of insurance which the undersigned's insurance company may issue upon said object and then only in accordance with the terms of said policy.

Date 10-20, 1989 Signed _____ Commissions NB 8158
(Authorized Inspector) (National Board (incl. endorsements), state, prov., and no.)