EQUIP. CODE NO. YTC - 381

NATIONAL BOARD

U	NAT'L BD NO.	2297		
	NAME OF MFR.	DE DIETRICH - ZINSWILLER		
	INT. M.A.W.P.	30 / FV	PSIG AT	400 °F
W	JKT. M.A.W.P.		PSIG AT	°F
RT 3	JKT. M.A.W.P.		PSIG AT	°F
HT	MFR'S NO.	31361	YEAR BUILT	1979
	INSPECTED BY	RIC		
GLASS	3008	NOM. CAP.	150	U.S. GALS
ITEM NO.	B8 — T — 515			

TANK SH.THK. $15/32$" TOP HD.THK. BOT.HD.THK. $25/64$" HD.ICR. $31\ 1/2$"

JKT.SH.THK. JKT.HD.THK. JKT.HD.ICR.

MFG. BY DE DIETRICH & CIE-FRANCE
DIST. BY DE DIETRICH (U.S.A.), INC.
UNION, N.J. U.S.A.

EQUIP. CODE NO. YTC-381

NATIONAL BOARD

[U] PART	NAT'L BD NO.	2298		
	NAME OF MFR	DE DIETRICH - ZINSWILLER		
W	INT MAWP	30 / FV	RATED AT	400
	MFR'S NO	31362	YEAR BUILT	1979
HT	STAMPED BY	RIC	BS	3008

CT 150 Gallons - vessel EQUIP. CODE NO. YTC-381

FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS

As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured by De-Dietrich & Cie, 1 rue d'Offwiller, 67110 Zinswiller, France (Name and address of manufacturer)

2. Manufacturer for _____ (Name and address of purchaser)

3. Location of installation Hoffmann La Roche, Inc. Belvidere, New Jersey (Name and address)

4. Type Vertical (Horiz., or vert. tank) Vessel No. 31361 (Mfgr's Serial No.) N/A (CRN) EP-3609 A (Drawing) 2297 (Nat'l Bd No.) Year Built 1979

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 1977 (Year) and Addenda to Winter 77 (Date) and Code Case no. N/A Special service per UG-120(d) N/A

Manufacturers' 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, mfgr's name and identifying stamp)

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

6. Shell: Material SA285B (Spec. No., Grade) Nominal Thickness 25/32 in. Corrosion Allowance N/A in. Diam. 2 ft 7-1/2 OD in. Length 3 ft 7-29/32 in.

7. Seams: Longitudinal Welded, Dbl. Butt (Welded, Dbl., Sngl., Lap, Butt) R.T. Spot (Spot or Full) Efficiency 85 % H.T. Temp * F

Time * Girth Welded, Dbl. Butt (Welded Dbl., Sngl., Lap, Butt) R.T. Partial (Spot, Partial or Full) No. of Courses 1

8. Heads: (a) Material SA-285-B (Spec. No., Grade) (b) Material N/A (Spec. No., Grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio
(a)	Bottom	25/64"	N/A	31-1/2"	3-5/32"	N/A
(b)						

	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	N/A	N/A	N/A	Concave
(b)				

If removable, bolts used (describe other fastenings) 36 clamps, SA 449, Ø 3/4" attached to vessel (Material, Spec. No., Gr., Size, No.)

9. Type of Jacket N/A Proof Test _____

10. Jacket Closure N/A (Describe as ogee & weld, bar, etc.) If bar, give dimensions _____ If bolted, describe or sketch.

11. Constructed for max. allowable working pressure 30 & F.V. psi at max. temp. 400° F Min. temp. (when less than -20 F) N/A F.
Hydrostatic, [illegible]ion test pressure 33 psi

Items 12 and 13 to be completed for tube sections

12. Tubesheets: Stationary—Material N/A (Spec. No. Gr.) Diam. _____ (Subject to pressure) in. Nominal Thickness _____ in. Corrosion Allowance _____ in. Attachment _____ (Welded, Bolted) Floating—Material _____ (Spec. No., Grade) Diam. _____ in. Nominal Thickness _____ in. Corrosion Allowance _____ in. Attachment _____

13. Tubes: Material N/A (Spec. No., Gr.) O.D. _____ in. Nominal Thickness _____ 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: Material N/A (Spec. No., Gr.) Nominal Thickness _____ in. Corrosion Allowance _____ in. Diam. _____ ft _____ in. Length _____ ft _____ in.

15. Seams: Longitudinal N/A (Welded, Dbl., Sngl. Lap, Butt) R.T. _____ (Spot or Full) Efficiency _____ % H.T. Temp _____ F Time _____

Girth _____ (Welded, Dbl., Sngl., Lap, Butt) R.T. _____ (Spot, Partial, or Full) No. of courses _____

16. Heads: (a) Material N/A (Spec. No., Grade) (b) Material _____ (Spec. No., Gr.)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio
(a)						
(b)						

	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)				
(b)				

If removable, bolts used (describe other fastenings) _____ (Material, Spec. No., Gr., Size, No.)

FORM U-1 (BACK) CODE CODE NO. YTC-381J

17. Constructed for max. allowable working pressure N/A psi at max temp. _____ F. Min. temp. (when less than -20 F) _____ F.
Hydrostatic, pneumatic, or combination test pressure _____ psi.

Items below to be completed for all vessels where applicable

18. Safety Valve Outlets: Number N/A Size _____ Location _____

19. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Nominal Thickness	Reinforcement Material	How Attached
Inlet	1	6" Dbl	ButtGirth	SA 181-1	35/64"	None	Welded
Outlet	1	2" Dbl	ButtGirth	SA 181-1	11/32"	None	Welded

20. Inspection Openings:
Manholes No. 0 Size _____ Location _____
Handholes No. 0 Size _____ Location _____
Threaded No. 0 Size _____ Location _____

21. Supports: Skirt No (Yes or no) Lugs 2 Lirting (No.) Legs 0 (No.) Other 4 Welde support lugs + 2 insulation rings (Bracket, etc.) Attached Welded on shell & head (Where and how)

22. Remarks: *Vessel H.I. at high temperature for extended period of time due to glass lining process. Vessel hydrotested with cover NB.2298.
Glass lined steel vessel for chemical use.

CERTIFICATE OF 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.

Date Nov.20,79 Signed De Dietrich & Cie (Manufacturer) by WAGNER R.V Q.C. MGR. (Representative)

"U" Certificate of Authorization No. 1171B expires April 16 19 80

CERTIFICATE OF SHOP INSPECTION

Vessel made 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 Ohio and employed by The Royal Indemnity Company of New York, N.Y. have inspected the pressure vessel described in this Manufacturers' Data Report on Nov.20 19 79, 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 Manufacturers' 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 28 Nov. 1979
Signed _____ (Inspector) S.G. AKERMAN Commissions N.B. 8074 (Nat'l Board, State, Province and No.)

CERTIFICATE OF COMPLIANCE FOR FIELD WORK

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.

Date _____ Signed _____ (Manufacturer) by _____ (Representative)

"U" Certificate of Authorization No. _____ expires _____, 19 _____.

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 Manufacturers' 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 Manufacturers' 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 _____ (Authorized Inspector) Commisisons _____ (Nat'l Board, State, Province and No.)

CT 150 Gallons - cover

EQUIP. CODE NO. YTC-381 EQUIP. CODE NO. YTC-381

FORM U-2 MANUFACTURERS' PARTIAL DATA REPORT

A part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1(a) Manufactured by De Dietrich & Cie, 1 rue d'Offwiller, 67110 Zinswiller, France
(Name and address of manufacturer of part)

(b) Manufactured for Hoffmann La Roche, Inc. Belvidere, New Jersey
(Name and address of manufacturer of vessel)

2. Manufacturer's Serial No. of Part 31362RN N/A Drawing No. FF-3609 A Nat'l Bd. No. 2298 Year Built 1979

3. (a) Drawing Prepared by De Dietrich & Cie
(b) Description of Part Inspected Glass lined steel cover

4. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME Boiler and Pressure Vessel Code. The construction, and workmanship conform to ASME Rules, Section VIII, Division 1 1977 (Year)
and Addenda through Winter 77 (Date) and Code Case No. N/A

5. Special Service per UG-120(d) N/A

6. Postweld Heat Treatment: Temperature _____ F. Time _____

Items 7-12 incl. to be completed for single walled vessels, jackets of jacketed vessels, or shells of heat exchangers

7. Shell: Material N/A (Spec. No., Grade) Nominal Thickness _____ in. Corrosion allowance _____ in.
Diam. _____ ft _____ in. Length _____ ft _____ in.

8. Seams: Longitudinal N/A (Welded, Dbl., Sngl., Lap. Butt) R.T. _____ (Spot or Full) Efficiency _____ %
H.T. Temp. _____ F Time _____ Girth _____ (Welded Dbl., Sngl., Lap. Butt)
R.T. _____ (Spot, Partial, or Full) No. of Courses _____

9. Heads (a) Material SA 285 C (Spec. No., Grade) (b) Material N/A

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio
(a)	Top	35/64"	N/A	31-1/2"	N/A	N/A
(b)						

	Conical Apex Angle	Hemispherical Radius	Flat Diamster	Side to Pressure (Convex or Concave)
(a)	N/A	N/A	N/A	Concave
(b)				

If removable, bolts used (describe other fastenings) 36 clamps, GA449, Ø 3/4" attached to vessel
(Material, Spec. No., Gr., Size, No.)

10. Type of Jacket N/A Proof Test _____

11. Jacket Closure N/A (Describe as ogee & weld, bar, etc.) If bar, give dimensions _____
If bolted, describe or sketch.

12. Constructed for max. allowable working pressure 30 & F.V. psi at max. temp. 400° F Min. temp. (when less than -20 F) N/A F. Hydrostatic, pneumatic or combination test pressure 33 psi.

Items 13 and 14 to be completed for tube sections

13. Tubesheets: Stationary — Material N/A (Spec. No. Gr.) Diam. _____ (Subject to pressure) in.
Nominal Thickness _____ Corrosion Allowance _____ in. Attachment _____ (Welded, Bolted)
Floating — Material _____ (Spec. No., Gr.) Diam. _____ in.
Nominal Thickness _____ in. Corrosion Allowance _____ in.
Attachment _____

14. Tubes: Material N/A (Spec. No., Gr.) O.D. _____ in. Nominal Thickness _____ in. or gauge
Number _____ Type _____ (Straight or "U")

Items 15-18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers

15. Shell: Material N/A (Spec. No., Grade) Nominal Thickness _____ in. Corrosion Allowance _____ in.
Diam. _____ ft _____ in. Length _____ ft _____ in.

16. Seams: Longitudinal N/A (Welded, Dbl., Sngl., Lap. Butt) R.T. _____ (Spot or Full) Efficiency _____ %
H.T. Temp. _____ F Time _____ Girth _____ (Welded, Dbl. Sngl. Lap. Butt) R.T. _____ (Spot, Partial or Full) No. of courses _____

(12/31/77) This form (E00110) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

421376/1 P.O. E664477B - (88T515)

FORM U-2 (BACK) EQUIP. CODE NO. YTC-381

17. Heads: (a) Material N/A (Spec. No. Grade) (b) Material _____ (Spec. No., Grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio
(a)						
(b)						

	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)				
(b)				

If removable, bolts used (describe other fastenings) _____ (Material, Spec. No., Gr., Size, No.)

18. Constructed for max. allowable working pressure N/A psi at max. temp. _____ F. Min. temp. (when less than −20 F) _____ F. Hydrostatic, pneumatic, or combination test pressure _____ psi.

Items below to be completed for all vessels where applicable

19. Safety Valve Outlets: Number N/A Size _____ Location _____

20. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Nominal Thickness	Reinforcement Material	How Attached
Inlet	1	6" Dbl	Butt Strap	SA 181-1	15/32"	None	Welded
Inlet	2	2" Dbl	Butt Strap	SA 181-1	15/32"	None	Welded

21. Inspection Openings:
Manholes No. 0 Size _____ Location _____
Handholes No. 0 Size _____ Location _____
Threaded No. 0 Size _____ Location _____

22. Supports: Skirt No (Yes or no) Lifting 2 (No.) Legs 0 (No.) Other N/A (Describe)
Attached Welded on cover (Where and how)

23. Remarks: *Cover H.T. at high temperature for extended period of time due to glass lining process. Cover hydrotested with vessel N.B. 2297. Glass lined steel cover for chemical use.

CERTIFICATE OF COMPLIANCE

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

Date Nov. 20, 79 Signed De Dietrich & Cie (Manufacturer) by WAGNER R. Q.C. MGR. (Representative)

"U" Certificate of Authorization No. 11718 expires April 16, 19 80.

CERTIFICATE OF SHOP 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 Ohio and employed by Royal Indemnity Company of New York, N.Y. have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on Nov. 20 19 79, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Boiler and Pressure Vessel Code, Section VIII, Division 1.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturers' Partial 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 28 Nov, 1979

Signed _____ (Authorized Inspector) G.G. AKERMAN Commissions N.B. 6074 (Nat'l Board, State, Province and No.)