

**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 **The Pfaudler Company, Rochester, New York, U.S.A.**  
(Name and address of manufacturer)  
2. Manufacturer for **American Hoechst Corp., Coventry, RI**  
(Name and address of purchaser)  
3. Location of installation **American Hoechst Corp., Coventry, RI**  
(Name and address)  
4. Type **Vertical** Vessel No. **R180-0235** NA **R180-0235** **40374** Year Built **1980**  
(Horiz. or vert. tank) (Mfr's Serial No.) (ICRN) (Drawing) (Nat'l Bld No.)  
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 **1980** and Addenda to (Year)  
NA and Code Case no. **Case 1251** Special service per UG-120(d) NA \*

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

**NA**

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

6. Shell: Material **SA 315 GR. 65** Nominal Thickness **3/8** in. Corrosion Allowance **0** in. Diam. **5** ft **6** in. Length **6** ft **4** in.  
(Spec. No., Grade)  
7. Seams: Longitudinal Type **#1, Table UW-12** R.T. No Efficiency **70** % H.T. Temp **No** F  
(Welded, Dbl., Sngl., Lap, Butt) (Spot or Full)  
Time **NA** Girth Type **#1, Table UW-12** R.T. No No. of Courses **1**  
(Welded, Dbl., Sngl., Lap, Butt) (Spot, Partial or Full)  
8. Heads: (a) Material **SA 315 GR. 65** (b) Material **NA**  
(Spec. No., Grade) (Spec. No., Grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio
(a)	<b>Bottom</b>	<b>7/16"</b>	<b>None</b>	<b>66"</b>	<b>4"</b>	<b>None</b>
(b)	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)		
(a)	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>Concave</b>		
(b)	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>		

If removable, bolts used (describe other fastenings) **NA**

(Material, Spec. No., Gr., Size, No.)

9. Type of Jacket **UA-101 Type 5** Proof Test **NA**  
10. Jacket Closure **UA-104 (b-2)** If bar, give dimensions **NA** If bolted, describe or sketch.  
(Describe as ogee & weld, bsr, etc.)  
11. Constructed for max. allowable working pressure **90/90 W/FV** psi at max. temp. **450** F Min temp. (when less than -20 F) **NA** F  
Hydrostatic, pneumatic, or combination test pressure **135** psi

Items 12 and 13 to be completed for tube sections **Items 12 and 13 not applicable.**

12. Tubesheets: Stationary—Material (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 (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 **SA 285 GR. C** Nominal Thickness **11/16** in. Corrosion Allowance **0** in. Diam. **5** ft **0** in. Length **5** ft **8** in.  
(Spec. No., Grade)  
15. Seams: Longitudinal Type **#1, Table UW-12** R.T. No Efficiency **70** % H.T. Temp **No** F Time **NA**  
(Welded, Dbl., Sngl., Lap, Butt) (Spot or Full)  
Girth Type **#1, Table UW-12** R.T. No No. of courses **1**  
(Welded, Dbl., Sngl., Lap, Butt) (Spot, Partial, or Full)  
16. Heads: (a) Material **SA 285 GR. C** (b) Material **SA 285 GR. C**  
(Spec. No., Grade) (Spec. No., Grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio
(a)	<b>Top</b>	<b>11/16"</b>	<b>None</b>	<b>None</b>	<b>None</b>	<b>2:1</b>
(b)	<b>Bottom</b>	<b>5/8"</b>	<b>None</b>	<b>None</b>	<b>None</b>	<b>2:1</b>
	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)		
(a)	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>Concave</b>		
(b)	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>Both</b>		

If removable, bolts used (describe other fastenings) **NA**

(Material, Spec. No., Gr., Size, No.)

Pfaudler Order No. R180-0235

FORM U-1 (BACK)

Customer Order No. R140084

17. Constructed for max. allowable working pressure 100/FV psi at max temp 650 F. Min. temp (when less than 20 F) NA F

Hydrostatic, pneumatic, or combination test pressure 100 psi.

Items below to be completed for all vessels where applicable

18. Safety Valve Outlets: Number Over pressure prot. to be installed in connecting piping.

19. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Nominal Thickness	Reinforcement Material	How Attached
Inlet	7	2" 4" 8"	L.J.Flq.	Case1251	150#	Integral	W
Outlet	1	4"	L.J.Flq.	Case1251	150#	Integral	W
Drive	1	4-3/8"	L.J.Flq.	Case1251	150#	Integral	W

20. Inspection Openings:

Manholes No. 1 Size 30" Location Top Head  
 Handholes No. 0 Size NA Location NA  
 Threaded No. 12 Size 1/2" 1-1/2" 2" 3" Location Jacket shell and head.

21. Supports: Skirt No Lugs 4 Legs 0 Other None Attached Welded to jkt. shell  
 (Yes or no) (No) (No) (Describe) (Where and how)

22. Remarks: 1000 gal. jacketed glassed steel vessel for chemical service.

## 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 9-24-80 Signed The Pfaudler Company

by

Rena Paduca

(Representative)

"U" Certificate of Authorization No.

408

expires

12-31

19 82

## CERTIFICATE OF SHOP INSPECTION

Vessel made by The Pfaudler Company at Rochester, New York

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 H. S. B. I. & I. Co.

of Hartford, Conn. have inspected the pressure vessel described in this Manufacturers' Data Report on 9-27-80 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 9-29-80

Signed Russell B. Miller

(Inspector)

Commissions

N.B.#6658, Ohio, PA #WC1849

(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

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## 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)

Commissions

(Nat'l Board, State, Province and No.)