

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

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1. Manufactured by B. NOLTE & SONS, INC. MULLEN RD. WHITEHOUSE, N.J.
(Name and address of manufacturer)
2. Manufactured for AMERICAN HOECHST CORP. 129 QUIDNICK ST. COVENTRY, R.I.
(Name and address of purchaser)
3. Location of Installation COVENTRY, R.I.
(Name and address)
4. Type VERTICAL Vessel No. 1796 (CRN) 6800-D3
(Horiz., or vert. tank) (Mfg's Serial No.) (Drawing)
1796 (Nat'l Brd No.) Year Built 1978
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 1 977 (Year) and Addenda to _____ (Date) and Code Case no. _____
Special service per UG-120(d) _____

Manufacturers' 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, mfg's name and identifying stamp)

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

6. Shell: Material SA240 T316L Nominal Thickness .120 in. Corrosion Allowance 0 in.
(Spec. No., Grade)
- Diam. 6 ft 3 in. Length 4 ft 4 in.

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 1/12/78 Signed B. NOLTE & SONS, INC. by [Signature]
(Manufacturer) (Representative)

"U" Certificate of Authorization No. 2865 expires MARCH 31, 19 80

CERTIFICATE OF SHOP INSPECTION

Vessel made by B. NOLTE & SONS, INC. at WHITEHOUSE, N.J.
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 JERSEY and employed by COMM. UNION INS. CO. of BOSTON, MASS. have inspected the pressure vessel described in this Manufacturers' Data Report on 1/12 19 78, 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 1/12/78
Signed [Signature] (Inspector) Commissions NB 4190
(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 _____ by _____
(Manufacturer) (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) Commissions _____
(Nat'l Board, State, Province and No.)

WEST 0505

FORM U-1 (BACK)

7. Seams: Longitudinal NONE R.T. NONE Efficiency 50 %
(Welded, Dbl., Sngl. Lap, Butt) (Spot or Full)
H.T. Temp _____ F Time _____ Girth SINGLE BUTT
(Welded, Dbl., Sngl. Lap, Butt)
R.T. NONE No. of Courses 13 TURNS OF HEMI-TUBE
(Spot, Partial, or Full)

8. Heads: (a) Material SA240 T316L (b) Material _____
(Spec. No., Grade) (Spec. No., Grade)

Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio
(a) <u>BOTTOM</u>	<u>3"OD X .120 WALL</u>	<u>HEMI-TUBE</u>	<u>WELDED</u>		
(b) _____	<u>DIRECTLY TO BOTTOM HEAD ON 4" PITCH</u>				
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.)

9. Type of Jacket HALF PIPE Proof Test _____
(Describe as ogee & weld, bar, etc.)

10. Jacket Closure SEE REMARKS If bar, give dimensions _____
(Describe as ogee & weld, bar, etc.)

If bolted, describe or sketch. _____

11. Constructed for max. allowable working pressure 90 psi at max. temp. 390 F Min. temp. (when less than -20 F) _____ F Hydrostatic, _____ test pressure 140 psi.

Items 12 and 13 to be completed for tube sections

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

13. Tubes: Material _____ O.D. _____ in. Nominal Thickness _____ in. or gauge
(Spec. No., Gr.)
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 SA240 T316 Nominal Thickness 5/16 in. Corrosion Allowance -0- in.
(Spec. No., Gr.)
Diam. 6 ft 0 in. Length 6 ft 2 in.

15. Seams: Longitudinal DBL. BUTT R.T. SPOT Efficiency 85 %
(Welded, Dbl., Sngl. Lap, Butt) (Spot or Full)
H.T. Temp _____ F Time _____ Girth DBL. BUTT
(Welded, Dbl., Sngl. Lap, Butt)
R.T. PARTIAL No. of courses _____
(Spot, Partial or Full)

16. Heads: (a) Material SA240 T316 (b) Material SA240 T316
(Spec. No., Grade) (Spec. No., Grade)

Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio
(a) <u>TOP</u>	<u>5/16"</u>	<u>-0-</u>	<u>66"</u>	<u>6%</u>	
(b) <u>BOTTOM</u>	<u>5/16"</u>	<u>-0-</u>	<u>66"</u>	<u>6%</u>	
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.)

17. Constructed for max. allowable working pressure F.V. & 90 psi at max temp. 390 F Min. temp. (when less than -20 F) _____ F Hydrostatic, _____ test pressure 140 psi.

Items below to be completed for all vessels where applicable

18. Safety Valve Outlets: Number _____ Size _____ Location IN SYSTEM

19. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Nominal Thickness	Reinforcement Material	How Attached
<u>JKT. IN & OUT</u>	<u>6</u>	<u>2"</u>	<u>COUP.</u>	<u>T316</u>	<u>3000#</u>		<u>WELDED</u>
<u>PROCESS</u>	<u>7</u>	<u>6"</u>	<u>FLG</u>	<u>T316</u>	<u>150# ANSI</u>		<u>WELDED</u>
<u>PROCESS</u>	<u>2</u>	<u>4"</u>	<u>PAD</u>	<u>T316</u>	<u>150# ANSI</u>		<u>WELDED</u>
<u>PROCESS</u>	<u>1</u>	<u>12"</u>	<u>FLG</u>	<u>SA181-1</u>	<u>150# ANSI</u>		<u>WELDED</u>

20. Inspection Openings:

Manholes No. 1 Size 20" Location TOP HEAD

Handholes No. _____ Size _____ Location _____

Threaded No. _____ Size _____ Location _____

21. Supports: Skirt _____ Lugs _____ (No.) _____ Legs _____ (No.) _____ Other RING W/ GUSSETS
(Yes or no) (No.) (No.) (Describe)

Attached SHELL & WELDED
(Where and how)

22. Remarks: 3"OD X .120 WALL HEMI-TUBE WELDED DIRECTLY TO SHELL ON 4" PITCH.

1000 GAL. REACTOR
AM. HOECHST P.O. R-158987

KGT 2505