

PO# 510781

#114258

JOB NO: 13349
8"-62 Sq. Ft. Heat Exchanger

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

- Manufactured and certified by Perry Products Corporation, Mt. Laurel Road, Hainesport, NJ 08036
(Name and address of manufacturer)
- Manufactured for American Hoechst Corporation, 129 Quindnick Street, Coventry, RI 02816
(Name and address of purchaser)
- Location of installation SAME
(Name and address)
- Type Horizontal B-4138 D-87002 3564 1987
(Horiz. or vert. tank) (Mfg. serial No.) (ICRNI) (Drawing) (Rmt. Bd. No.) (Year built)
- 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 1986
Year

Address (State)

Code Case No.

Special services per UG 120(a)

Items 6-11 incl. to be completed for single shell vessels, jacketed vessels, or sheets of heat exchangers

- Shell: SA312-T316 .148 0 0'-8-5/8" 8'-9"
(Matl. (Spec. No., Grade)) (Nom. Thk. (in.)) (Corr. Allow. (in.)) (Diam. I.D. (ft. & in.)) (Length (Overall) (ft. & in.))
- Seams: Welded 70 1
(Long (Dbl. Sngl.)) (R.T. (Spot or Full)) (EH (%)) (H.T. Temp. (F.))
Time (Dbl. Sngl.) (R.T. (Spot, Partial, or Full)) (No. of Courses)

8. Heads: (a) Matl. (Spec. No., Grade)		(b) Matl. (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) (Matl. Spec. No. Gr. Size No.)

- Type of Jacket Proof Test
- Jacket Closure If bar, give dimensions If bolted, describe or sketch.
(Describe as ogee & weld, bar, etc.)
- MAWP 90 psi at max. temp. 390 °F. Min. temp. (when less than -20° F.) 140 °F.
Hydro., pressure vessel test press.

Items 12 and 13 to be completed for tube sections

- Tube sheets: SA240-T316 8-5/8" 1 1/2" 0 Welded
(Stationary Matl. (Spec. No., Gr.)) (Diam. (in.)) (Subject to pressure) (Nom. Thk. (in.)) (Corr. Allow. (in.)) (Attach (Welder) Bolted)
- Body Flanges: SA182-F-316 8" 150# Std. 0 Retained by Tubesheets
(Floating Matl. (Spec. No., Gr.)) (Diam. (in.)) (Nom. Thk. (in.)) (Corr. Allow. (in.)) (Attach)
- Tubes: SA249-T316 3/4" 18 Ga. 40 straight
(Matl. (Spec. No., Gr.)) (OD (in.)) (Nom. Thk. (in. or Gauge)) (Number) (Type (Straight or U))

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

- Shell: SA312-T316 .148" 0 8-5/8" 9"
(Matl. (Spec. No., Grade)) (Nom. Thk. (in.)) (Corr. Allow. (in.)) (Diam. I.D. (ft. & in.)) (Length (Overall) (ft. & in.))
- Seams: Double Butt Welded 70 1
(Long (Dbl. Sngl.)) (R.T. (Spot or Full)) (EH (%)) (H.T. Temp. (F.))
Time (Dbl. Sngl.) (R.T. (Spot, Partial, or Full)) (No. of Courses)
- Heads: (a) Matl. SA240-T316 (Spec. No., Grade) (b) Matl. SA240-T316 (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>R. End</u>	<u>.080"</u>	<u>0</u>			<u>2:1</u>				<u>Concave</u>
(b)	<u>L. End</u>	<u>.080"</u>	<u>0</u>			<u>2:1</u>				<u>Concave</u>

If removable, bolts used (describe other fastenings) (16) 3/4" dia x 5" long Type 316 S/S studs SA 193 B8
(Matl. Spec. No. Gr. Size No.)

- MAWP 90 psi at max. temp. 390 °F. Min. temp. (when less than -20° F.) 140 °F.
Hydro., pressure vessel test press.

(12/82)

This form (E00108) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

Form U-1 (Back)

18. Flanges, Inspection and Safety Valve Openings

Flange Name, Size, Class, etc.	No.	Dim. or Size	Type	Matl.	Thick- ness	Reinforcement Matl.	How Attached	Location
Inlet and Outlet	2	14"	CL-150	SA312-T316	Sch. 10	Inherent	Welded	Bonnet
Inlet and Outlet	2	2"	CL-150	SA312-T316	Sch. 10	Inherent	Welded	Shell

19. Supports: Bolt ☐ Lug ☒ Leg ☐ Other ☐ Attached Welded to main shell
(Yes or 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, etc.; name and identifying stamp)

Unit not designed for lethal service. Unit designed for non-corrosive service. Unit hydro-tested in horizontal position.

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. 4328 expires Dec. 31, 1988
Date 2-27-87 Co. name Perry Products Corporation Signed J. A. J. H. K.
(Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by Perry Products Corporation at Hainesport, NJ

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 Lumbermens Mutual Casualty Co.

of Long Grove, IL have inspected the pressure vessel described in this Manufacturer's Data Report on FEB 27, 1987, 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 2-27-87 Signed [Signature] Commissions 18938110360 to 3072 OHIO
(Authorized Inspector) (No. 1 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 _____
(Manufacturer that certified and constructed field assembly) (By Representatives)

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) (No. 1 Board, State, Province and No.)