

FORM U-1A MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS (Alternate Form for Single Chamber, Completely Shop-Fabricated Vessels Only) as required by the provisions of the ASME Code rules, Section VIII, Division 1

1. Manufactured and certified by Modern Welding Co., Inc. 72 Waldo St., Newark OH 43055
2. Manufactured for Dow Chemical USA, Michigan Div. PO Box 2560, Midland MI 48641
3. Location of installation Dow Chemical USA, Michigan Div. Bldg. 1136, Midland MI 48667
4. Type: horizontal 11149 n/a 11149 7710 1991
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 Code, Section VIII, Division 1: 1989
6. Shell: SA516-70 1" .0625 10' ID 29'-10" T/T
7. Seams: welded dbl. full 100 1150 2 1/2 welded dbl. full 3
8. Heads: (a) SA 516-70 (b) SA 516-70

Table with 11 columns: 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). Rows (a) and (b) show end locations with thickness .937 and allowance .0625, and concave sides.

If removable, bolts used (describe other fastenings): n/a
9. MAWP: 250 at max. temp. 500 Min design metal temp. -28 at 250 Hydro., pneu. or comb. test pressure 402

10. Nozzles, inspection and safety valve openings: Table with 10 columns: Purpose (inlet, outlet, drain, etc.), No., Dia. or Size, Type, Mat'l., Nom. Thickness, Reinforcement Mat'l., How Attached, Location. Includes entries for 4, 1, 1, and 1 openings.

11. Supports: Skirt no Lugs no Legs 0 Othe(2) saddle Attached welded to shell bands (where & how)

12. Remarks: Manufacturers' Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: n/a

*User to determine use. User to install safety valve. This vessel also operates at 15 psi vacuum at 500°F. Exempt from impact testing per UG 20 (f). SA516-70 material was normalized. Tank was built for Anhydrous Ammonia.

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. 10602 Expires 8-5, 1991 Date 3-14-91 Name Modern Welding Co., Inc. Signed [Signature] (representative)

CERTIFICATE OF SHOP INSPECTION Vessel constructed by Modern Welding Co., Inc. at 72 Waldo St., Newark OH 43055 I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the state or province of Ohio and employed by H.S.B.I. & I. Co. of Hartford CT have inspected the component described in this Manufacturers' Data Report on 3-7, 1991 and state that, to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the 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 3-14, 1991 Signed [Signature] Commissions NO 6639 (Authorized Inspector) (Nat'l. Bd. (incl. endorsements) state, prov. and no.)