

45 Ton CO2 Vessel  
w/coil  
w/o dip tube

Order #67583-2  
Serial #L-3035-W3

**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 by Custom Pump Div., Allis-Chalmers Corp. 2100 N. Jasper, Decatur, IL 62526  
 2. Manufactured for Fire Systems, Divn. of Chemetron, Chicago, IL  
 3. Location of installation Not Known Built for stock  
 4. Type Horiz. 1433 ----- 67-400-076-000 433 (Year Built) 1979  
(Horiz. or vert. tank) (Mfg's Serial No.) (CRN) (Drawing No.) (Net'l Bnd 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 1977 and Addenda to 12-31-77 and Code Case Nos. -----  
(Year) (Date)  
 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: -----

6. Shell: Matl. SA-612-74-B Nom. Thk. .708 in. Corr. Allow. 0 in. Diam. 78 in. Lgth. 46 ft 0 in.  
(Spec. No., Grade)  
 7. Seams: Long. Buttweld R.T. Full Efficiency 100 % H.T. Temp. N/A F Time N/A hr  
(Welded, Dbl. Sngl. Lap, Butt) (Spot or Full)  
 Girth Buttweld R.T. Full No. of Courses 6  
(Welded, Dbl. Sngl. Lap, Butt) (Spot, Partial, or Full)  
 8. Heads: (a) Material SA-612-74-B (b) Material SA-612-74-B  
(Spec. No., Grade) (Spec. No., Grade)

Location (Top, Bottom, Ends)	Min. Thk.	Corr. Allow.	Crown Radius	Knuckle Radius	Ellipse Ratio	Conical Apex Angle	Hemiph. Radius	Flat Diam.	Side to Pressure (Convex or Concave)
(a) End	.702	0			2:1				Concave
(b) End	.702	0			2:1				Concave

If removable, bolts used (describe other fastenings) -----  
(Material, Spec. No., Gr., Size, No.)  
 9. Constructed for max. allowable working pressure 363 psi at max. temp. 200 F. Min. temp. (when less than -20 F) ----- F. Hydrostatic, pneumatic, or combination test pressure 550 psi.  
 10. Safety Valve Outlets: Number ----- Size ----- Location By Others

11. Nozzles and Inspection Openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Matl.	Nom. Thk.	Reinforcement Matl.	How Attached	Location
Coil Outlets	2	1.5	Pipe	SA-106-B	Sch 80	No	Weld	Head
Inlets & Drains	4	1.5	Pipe	SA-106-B	Sch 80	No	Weld	Shell
	2	2.0	Pipe	SA-106-B	Sch 80	No	Weld	Shell
	2	1.0	Pipe	SA-106-B	Sch 80	No	Weld	Shell
	1	3.0	Pipe	SA-106-B	Sch 80	No	Weld	Shell

12. Supports: Skirt No Lugs 2 Legs No Other ----- Attached Shell Welded  
(Yes or no) (No.) (No.) (Describe) (Where and how)

13. Remarks: -----

45 Ton CO2 storage vessel with 3 H.P. coil - without dip tube.

**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 2-22-79 Signed Custom Pump Div., Allis-Chalmers Corp. [Signature]  
(Manufacturer) (Representative)  
 "U" Certificate of Authorization No. 831 expires January 31, 19 82

**CERTIFICATE OF SHOP INSPECTION**

Vessel made by Custom Pump Div., Allis-Chalmers Corp. 2100 N. Jasper, Decatur, IL 62526  
 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 Illinois and employed by H.S.B.I. & I. CO. have inspected the pressure vessel described in this Manufacturers' Data Report on 2-27 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.  
 Signed [Signature] Date 2-27-79 Commissions NB 8756, OH, PA, WC 2666  
(Inspector) (Net'l Board, State, Province and No.)