

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

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

Order #67846
S/N L-3629
6-29982-83

CC TO C.V. 8-31-83

1. Manufactured and certified by Superior-Illinois Corporation, 2100 N. Jasper St., Decatur, IL 62526
(name and address of manufacturer)

2. Manufactured for Fire Systems, Div. of Chemetron Corporation, Chicago, IL.
(name and address of purchaser)

3. Location of installation Not Known Built for stock
(name and address)

4. Type: Horiz. 1800 400-001-605-T 800 1983
(horiz. or vert., tank) (mfr's. serial no.) (CRN) (drawing no.) (Mat'l. Bd. no.) (year built)

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: 1980

Sm. '83
(addenda (date)) (Code Case no.) (special service per UG-120(d)) (year)

6. Shell: SA-612 735 0 84 29'10"
(mat'l. (spec. no., grade)) (nom. thickness (in.)) (corr. allow. (in.)) (dia. ID (ft. & in.)) (length (overall) (ft. & in.))

7. ~~Spot weld~~ Full 100 N/A N/A Butt weld Full 3
(cong. welded, dbl., angl. lap, butt) (RT (spot or full)) (eff. (%)) (HT temp. (°F)) (time (hr.)) (cong. welded, dbl., angl. lap, butt) (RT (spot, partial, or full)) (no. of courses)

8. Heads: (a) SA-612 (b) SA-612
(mat'l. (spec. no., grade)) (mat'l. (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)	End	.729	0			2:1				Concave
(b)	End	.729	0			2:1				Concave

If removable, bolts used (describe other fastenings): _____
(mat'l., spec. no., gr., size, no.)

9. MAWP: 350 at max. temp. 200 Min. temp. _____ Hydro., pneu. or comb. test pressure 525
(psi) (°F) (when less than -20°F) (psi)

10. Nozzles, inspection and safety valve openings:

	Purpose (inlet, outlet, drain, etc.)	No.	Dia. or Size	Type	Mat'l.	Nom. Thickness	Reinforcement Mat'l.	How Attached	Location
Vapor	Liquid, Fill	5	2"	Pipe	SA-106-B	Sch 80	No	Weld	1-Shell 4-Head
Vapor	Equalizing	2	1½"	Pipe	SA-106-B	Sch 80	No	Weld	Head
Vapor	Liquid, Safety	5	1½"	Pipe	SA-106-B	Sch 80	No	Weld	2-Shell 3-Head
	Gage	1	1"	Pipe	SA-106-B	Sch 80	No	Weld	Shell

11. Supports: Skirt No Lugs 2 Legs No Other 2 Saddle Attached Shell Welded
(yes or no) (no.) (no.) (describe) (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: _____
(name of part, item number, mfr's. name and identifying stamp)

* Cont'd from #10 Insp. Opening (1) 15 Forged Ring SA-266-2 1½" No Weld Head
37½ Ton CO₂ storage vessel with coil and 2 saddle supports

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. 831 expires 1-31-1985
Date 7-14-83 Name Superior-Illinois Corporation Signed _____
(manufacturer) (representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by Superior-Illinois Corporation at 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 the state or province of Illinois and employed by H.S.B.I. & I. Co. of Hartford, CT. have inspected the component described in this Manufacturers' Data Report on 7-14, 1983 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 7-14, 1983 Signed Donald S. Down Commissions NR 9953 OH PA WC 3247
(Authorized Inspector) (Mat'l. Bd. (incl. endorsements) state, prov. and no.)