

9-37 0-2
125 ton

FORM U-1A MANUFACTURERS' DATA REPORT FOR UNFIRED PRESSURE VESSELS
Alternate Form for Single Chamber Completely Shop-Fabricated Vessels Only

1. Manufactured by Leader Iron Works, Inc. Decatur, Illinois
(Name and address of Manufacturer)

2. Manufactured for Cardox Corporation Chicago, Illinois
(Name and address of Purchaser)

3. Type Horiz. Vessel No. (32027) (Mfrs. Serial) (State & State No.) Natl. Bd. No. 32268 Yr. Built 1959

4. SHELL: Matl. A-212-B T.S. FL 70000 Nom. Thk. 1 1/2 In. Allow. 0 In. Diam 10 Ft 6 In. Lgth. 50 Ft 0 In. 0 In.

5. SEAMS: Long Weld-D-Butt S.R. Yes X.R. Complete Sectioned No Efficiency 95 %
(Welded, Dbl., Single, Lap, Butt) (Yes or No) (Spot or Complete) (Yes or No)
Girth Weld-D-Butt S.R. Yes X.R. Complete Sectioned No No. of Courses 7

6. HEADS: (a) Material A-212-B FL T.S. 70000 (b) Material _____ T.S. _____

Location (Top, bottom, ends)	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a) <u>Ends</u>	<u>1 1/2 Min.</u>			<u>2:1</u>				<u>Concave</u>
(b)								

If removable, bolts used _____ (Material, Spec. No., T.S., Size, Number) Other fastening _____ (Describe or Attach Sketch)

7. Constructed for Int. pressure of 325 psi Max Temp 450 °F Subzero _____ °F Hydrostatic Test 490 psi

8. SAFETY OR RELIEF VALVE OUTLETS: Number 2 Size 2" Location Shell

9. NOZZLES:

Purpose (Inlet Outlet, Drain)	Number	Diam or Size	Type	Material	Thickness	Reinforcement Material	How Attached
	<u>1</u>	<u>2 1/2</u>	<u>Nipple</u>	<u>Stl.</u>	<u>Sch. 80</u>		<u>Weld</u>
	<u>3</u>	<u>2</u>	<u>Nipple</u>	<u>Stl.</u>	<u>Sch. 80</u>		<u>Weld</u>

10. INSPECTION Manholes, No. 1 Size 15 Location Shell
OPENINGS Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

11. SUPPORTS: Skirt No Lugs _____ (Number) _____ (Number) Other None Attached _____ (Where & How)

12. REMARKS: This is a 125 ton Storage Tank.

If riveted or brazed describe seams fully under remarks.

(Brief description of purpose of the vessel, as Air Tank, Water Tank, L.P.G., Etc.—State Contents.)

We certify that the statements made in this report are correct and that all details of material, construction, and workmanship of this vessel conform to the ASME Code for Unfired Pressure Vessels.

Date 9/11 19 59 Signed Leader Iron Works, Inc. By [Signature]
(Manufacturer)

Certificate of Authorization Expires Dec. 31, 1961

CERTIFICATE OF SHOP INSPECTION

Inspection Agency's Serial No. E.S.A. 32207

VESSEL MADE BY Leader Iron Works, Inc. at Decatur, Illinois

I, the undersigned, holding a Certificate of Competency as an Inspector of Boilers and Unfired Pressure Vessels in THE STATE OF _____ and employed by Hartford Steam Boiler Insp. & Ins. Co. of Hartford, Conn. inspected internally and externally, the vessel described in this report on _____ 19____, and certify that the statements made in this report are correct corresponding with mill test reports of materials furnished by the builders, and measurements made of the vessel and that this vessel is constructed in accordance with the ASME Code for Unfired Pressure Vessels.

Date 9-11 1959
[Signature] Inspector's Signature Commissions 2134189 State or Natl. Bd. & Number

PAID
TREASURER

BUILT BY
LEADER IRON WORKS INC.

DECATUR, ILLINOIS



NFB. ORDER NO.

NFB. SERIAL NO.

YEAR BUILT

MAXIMUM DESIGN PRESS.

INT. LEGARD NO.

U. S. P. NO.

CUST. SERIAL NO.

PAID
TREASURER

9-37-92

**REPORT OF PHYSICAL AND CHEMICAL
PROPERTIES OF STEEL USED**

CUSTOMER CARDOX CORP.
ADDRESS CHICAGO, ILLINOIS

OUR ORDER NO. 9-37-G 2
CUST. ORDER NO. 2346 (125 TON STORAGE TANK)

ITEM	SUPPLIER	HEAT NO.	Steel Specs.	Ten Str. lbs./sq. in.	Elast. Lt. lbs./sq. in.	Elong. %	CHEMICAL ANALYSIS						
							C.	Mn.	P.	Sul.	Sil.	Cr.	Ni.
HEAD } 2 Pcs. }	WICKWIRE	4-6314 K (27)	A-212-8 FLG. SIL.	75,600	42,500	28.2	.27	.80	.012	.020	.20		
	"	4-6314 K (23)	"	75,700	42,600	30.0	"	"	"	"	"		
HEAD } 2 Pcs. }	"	4-6314 K (24)	"	75,400	42,600	29.0	"	"	"	"	"		
	"	4-6308 K (1)	"	74,500	42,300	28.5	.28	.68	.012	.025	.19		
SHELL COURSE #1	"	5-1570 K (11)	"	77,200	43,400	25.5	.26	.74	.014	.032	.27		
" #2	"	5-1570 K (14)	"	78,500	43,900	25.0	"	"	"	"	"		
" #3	"	5-1570 K (13)	"	76,100	42,200	26.0	"	"	"	"	"		
" #4	"	4-6308 K (8)	"	78,400	44,000	25.0	.28	.68	.012	.025	.19		
" #5	"	4-6308 K (9)	"	76,600	43,000	26.2	"	"	"	"	"		
" #6	"	3-2807 K (14)	"	78,300	44,800	31.2	.28	.74	.013	.019	.22		
" #7	"	4-6308 K (7)	"	78,500	44,900	28.2	.28	.68	.012	.025	.19		

LEADER IRON WORKS, INC.
INSURER

I HEREBY CERTIFY THAT THE ABOVE IS AN EXACT COPY OF SUCH DATA LISTED ON THE MILL TEST REPORTS RETAINED IN OUR FILES.

LEADER IRON WORKS, INC.

BY Norman B. Anderson

DATE 8-11-59