NB

FORM U-1A MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS S-14R-2

Alternate Form For Single Chamber Completely Shop Fabricated Vessels Only
As required by the Provisions of the ASME Code Section VIII Division 1 and the National Board

1. Manufactured by Whiting Metals, Inc., Camden, S. C. 29020
(Name and address of Manufacturer)

2. Manufactured for Hardwicke Chemical Co., Elgin, S. C.
(Name and address of Purchaser)

3. Type Vert. (Horiz. or Vert.) Vessel No. (F-2412-4) (Mfrs. Serial) ( ) (State & Std. No.) Nat'l Bd. No. 343 Yr. Built 1978

4. SHELL: Mat'l SA-240 304 (Kind and Spec. No.) T.S. 75M Nom. Thk. 5/16 in. Corr. Allow. 0 in. Diam. 5 ft. 0 in. Length 8 ft. 0 in.

5. SEAMS: Long Wld,Dbl,Butt (Welded, Dbl., Single, Lap, Butt) H.T. No (Yes or No) R.T. No (Spot or Complete) Sectioned No (Yes or No) Efficiency 70 %
Girth Wld,Sgl,Butt H.T. No R.T. No Sectional No No. of Courses 1
If riveted or brazed describe seams fully under remarks.

6. HEADS: (a) Material SA-240-304 T.S. 75M (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)	Tp & Btm	5/16"N	48	6 1/2					Concave
(b)									

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

7. Constructed for max. allowable working press. F.Vac. 100 psi. at max. temp. 250 °F Min. temp. (when less than -20°) °F. Hydrostatic Pneumatic or Combination } Test Press. 150 psi.

8. SAFETY OR RELIEF VALVE OUTLETS: Number Size Location

9. NOZZLES:

Purpose, (Inlet Outlet, Drain)	Number	Diam. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
Inlet	2	2"	Flg	181-1	150		Wld
Outlet	2	2"	Flg	181-1	150		Wld
Temp	1	1 1/4"	Scr	304	3000		Wld

10. INSPECTION OPENINGS Manholes, No. Size Location
Handholes, No. 1 Size 8" Location Shell
Threaded, No. Size Location

11. SUPPORTS: Skirt (Yes or No) Lugs (Number) Legs (4) (Number) Other (Describe) Attached Wld,Shell (Where & How)

12. REMARKS: 1230 gallon vacuum receiver for non-corrosive service, contents unknown, non-removable backing bar on top head - sehll seam.

(Brief description of purpose of the vessel, as Air Tank, After Cooler, Jacketed Cooker, etc. State contents.)
1 If Postweld Heat Treated 2 list other internal or external pressures with coincident temperature when applicable.

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 Unfired Pressure Vessels, Section VIII, Division 1.

Date 10/25 19 78 Signed Whiting Metals, Inc. (Manufacturer) By J. R. Cobb

Certificate of Authorization Expires 1-31-79 #10330

CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY Whiting Metals, Inc. at Camden, S. C.

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of New York and employed by Royal Indemnity of New York, New York have inspected the pressure vessel described in this manufacturer's data report on 10/25/ 19 78 and state that to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code.

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 10/25/ 19 78

Edward H. Hettle
Inspectors Signature

Commissions NB 7407
Nat'l Board, State, Province and No.