

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

89198
110-150

Alter by D&W Welding & Fab. Co., Inc. Keyport, N.J.
1. Manufactured for DeDietrich
2. Location of Installation Union, N.J.
3. Type vertical (Year Built) 1977
(Horiz. or vert. tank) (Mfg'r's Serial No.) (CRN) (Drawing No.) (Nat'l Brd No.)
4. 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 6/30/76 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. _____ Nom. Thk. _____ in. Allow. _____ in. Diam. _____ in. Lgth. _____ ft _____ in.
(Spec. No., Grade)
7. Seams: Long. _____ R.T. _____ Efficiency _____ % H.T. Temp. _____ F Time _____ hr
(Welded, Dbl, Sngl, Lap, Butt) (Spot or Full)
Girth _____ R.T. _____ No. of Courses _____
(Welded, Dbl, Sngl, Lap, Butt) (Spot, Partial, or Full)
8. Heads: (a) Material _____ (b) Material _____
(Spec. No., Grade) (Spec. No., Grade)
Location Min. Corr. Crown Knuckle Ellipse Conical Hemisph. Flat Side to Pressure
(Top, Bottom, Ends) Thk. Allow. Radius Radius Ratio Apex Angle Radius Diam. (Convex or Concave)
(a) _____
(b) _____
If removable, bolts used (describe other fastenings) _____
(Material, Spec. No., Gr., Size, No.)
9. Constructed for max. allowable working pressure 100 psi at max. temp. _____ F. Min. temp. (when less than -20 F) _____ F. Hydrostatic, pneumatic, or combination test pressure 150 psi.
10. Safety Valve Outlets: Number _____ Size _____ Location _____
11. Nozzles and Inspection Openings:
Purpose Diam. or Size Type Matl. Nom. Thk. Reinforcement Matl. How Attached Location
(Inlet, Outlet, Drain) No.
500 Gal Jacketed Glass Lined Tank
Add 4-3/8"th SA285-C support lugs to jacket
2-1/2 X 1 1/2 X 3/16 steel insulation angle rings to jacket
Original Mfg.: DeDietrich
Serial No.: 30126
N.B. No.: 1035
Year Built: 1976
12. Supports: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
(Yes or no) (No.) (No.) (Describe) (Where and how)
13. Remarks: _____

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 3/28/77 Signed D&W Welding & Fab. Co. by [Signature]
(Manufacturer) (Representative)
"U" Certificate of Authorization No. 5902 expires Feb. 26, 19 78

CERTIFICATE OF SHOP INSPECTION

Alter by D&W Welding & Fab. Co., Inc. at Keyport, N.J.
Vessel made by

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 N.Y. and employed by Comm. Union have inspected the pressure vessel described in this Manufacturers' Data Report on 3/29/77 19 77, 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 3/29/77 Commissions N.J. 262
(Inspector) (Nat'l Board, State, Province and No.)

89178

FORM U-1 (BACK)

7. Seams: Longitudinal Db1. W. (Welded, Db1., Sngl. Lap, Butt) R.T. Spot Efficiency 85 %
H.T. Temp. - F Time - Girth Db1. W. (Welded, Db1., Sngl. Lap, Butt) R.T. Partial No. of Courses 1 (Spot, Partial, or Full)

8. Heads: (a) Material SA-285B (Spec. No., Grade) (b) Material - (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) <u>Bottom</u>	<u>15/32"</u>	<u>-</u>	<u>53-5/32"</u>	<u>5-5/16"</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>Concave</u>
(b) <u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>

If removable, bolts used (describe other fastenings) - (Material, Spec. No., Gr., Size, No.)

9. Type of Jacket: Type 2, per Fig. UA-101 Proof Test -

10. Jacket Closure Fig. UA-104(b-1) and Fig. UA-105(e-1) If bar, give dimensions -
If bolted, describe or sketch. (Describe as ogee and weld, bar, etc.)

11. Constructed for max. allowable working pressure 100 psi at max. temp. 400 F Min. temp. (when less than -20 F) - F. Hydrostatic, ~~maximum allowable~~ test pressure 150 psi.

Items 12 and 13 to be completed for tube sections

12. Tubesheets: Stationary—Material - (Spec. No. Gr.) Diam. - in. (Subject to pressure) in.
Nominal Thickness - in. Corrosion Allowance - in. Attachment - (Welded, Bolted)
Floating—Material - (Spec. No., Gr.) Diam. - in. Nominal Thickness - in. Corrosion Allowance - in.
Attachment -

13. Tubes: Material - (Spec. No. Gr.) O.D. - in. Nominal Thickness - in. or gauge Number - Type - (Straight or "U")

Items 14-17 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers

14. Shell: Material SA-285B Nominal Thickness 5/8 in. Corrosion Allowance - in.
Diam. 4 ft 1-7/32 in. Length 4 ft 9-3/4 in. (Spec. No., Gr.)

15. Seams: Longitudinal Db1. W. (Welded, Db1., Sngl. Lap, Butt) R.T. Spot Efficiency 85 %
H.T. Temp. 1680 F Time 90 Min. Girth Db1. W. (Welded, Db1., Sngl. Lap, Butt)
R.T. Partial No. of courses 1 (Spot, Partial or Full)

16. Heads: (a) Material SA-285B (Spec. No., Grade) (b) Material SA-285B (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) <u>Top</u>	<u>5/8"</u>	<u>-</u>	<u>39-3/8"</u>	<u>7-1/2"</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>Concave</u>
(b) <u>Bottom</u>	<u>5/8"</u>	<u>-</u>	<u>39-3/8"</u>	<u>7-1/2"</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>Both</u>

If removable, bolts used (describe other fastenings) - (Material, Spec. No., Gr., Size, No.)

17. Constructed for max. allowable working pressure 100 or F.V. psi at max. temp. 400 F. Min. temp. (when less than -20 F) - F. Hydrostatic, ~~maximum allowable~~ test pressure 150 psi.
Items below to be completed for all vessels where applicable

18. Safety Valve Outlets: Number - Size - Location -

19. Nozzles:

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Nominal Thickness	Reinforcement Material	How Attached
<u>Inlet</u>	<u>1</u>	<u>6"</u>	<u>Lap Joint</u>	<u>SA-181-1</u>	<u>35/64"</u>	<u>None</u>	<u>Welded</u>
<u>Inlet</u>	<u>2</u>	<u>4"</u>	<u>Lap Joint</u>	<u>SA-181-1</u>	<u>5/8"</u>	<u>None</u>	<u>Welded</u>
<u>Inlet</u>	<u>2</u>	<u>3"</u>	<u>Lap Joint</u>	<u>SA-181-1</u>	<u>5/8"</u>	<u>None</u>	<u>Welded</u>
<u>Outlet</u>	<u>1</u>	<u>3"</u>	<u>Lap Joint</u>	<u>SA-181-1</u>	<u>5/8"</u>	<u>None</u>	<u>Welded</u>
<u>Jacket</u>	<u>2</u>	<u>2"</u>	<u>Coupling</u>	<u>SA-105</u>	<u>-</u>	<u>None</u>	<u>Welded</u>
<u>Jacket</u>	<u>6</u>	<u>1-1/2"</u>	<u>Coupling</u>	<u>SA-105</u>	<u>-</u>	<u>None</u>	<u>Welded</u>
<u>Jacket</u>	<u>1</u>	<u>3/4"</u>	<u>Coupling</u>	<u>SA-105</u>	<u>-</u>	<u>None</u>	<u>Welded</u>
<u>Jacket</u>	<u>1</u>	<u>1/2"</u>	<u>Coupling</u>	<u>SA-105</u>	<u>-</u>	<u>None</u>	<u>Welded</u>

20. Inspection Openings:
Manholes No. 1 Size 12" x 16" Location On 24" inlet cover.
Handholes No. 2 Size 6" Location On jacket shell & head
Threaded No. - Size - Location -

21. Supports: Skirt No (Yes or no) Lugs 4-Lifting (No) Legs 4-3" Cplgs (No) Other - (Describe)
Attached Welded to top head and jacket shell and head.

22. Remarks: Top head of vessel has one 24" inlet. 24" inlet cover has one 12" x 16" manhole (with cover containing 4" sight glass), two 2" nozzles and one 4-3/8" nozzle.

1. Manufactured by De Dietrich & Cie Zinswiller, France
(Name and address of manufacturer)

2. Manufactured for _____
(Name and address of purchaser)

3. Location of Installation American Cyanamid Co. Manati, P.R.
(Name and address)

4. Type Vertical Vessel No. 30126 - ChUnVi-520 F
(Horiz., or vert. tank) (Mfr's. Serial No.) (CRN) (Drawing)

1035 Year Built 1976
(Nat'l. Brd. 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 1974 and Addenda to June 1975
(Year) (Date)

and Code Case no. - 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: -

(Name of part, item number, mfr's. name and identifying stamp)

Items 6-11 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers

6. Shell: Material SA-285B Nominal Thickness _____ in. Corrosion Allowance _____ in.
(Spec. No., Grade)

Diam. 4 ft 5-5/32 in. Length 3 ft 2-3/4 in.

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 July 16, 76 Signed De Dietrich & Cie by WAGNER R. Q.C.
(Manufacturer) (Representative)

"U" Certificate of Authorization No. 11718 expires April 16, 19 77

CERTIFICATE OF SHOP INSPECTION

Vessel made by De Dietrich & Cie at Zinswiller, France

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 New York and employed by The Royal Indemnity Company of New York, N. Y. have inspected the pressure vessel described in this Manufacturers' Data Report on July 16 19 76, 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.

Date July 16, 1976 Signed I. P. CLARKE Commissions N. B. 7383
(Inspector) (Nat'l. Board, State, Province and No.)

CERTIFICATE OF COMPLIANCE FOR FIELD WORK

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 _____ Signed _____ by _____
(Manufacturer) (Representative)

"U" Certificate of Authorization No. _____ expires _____, 19 _____

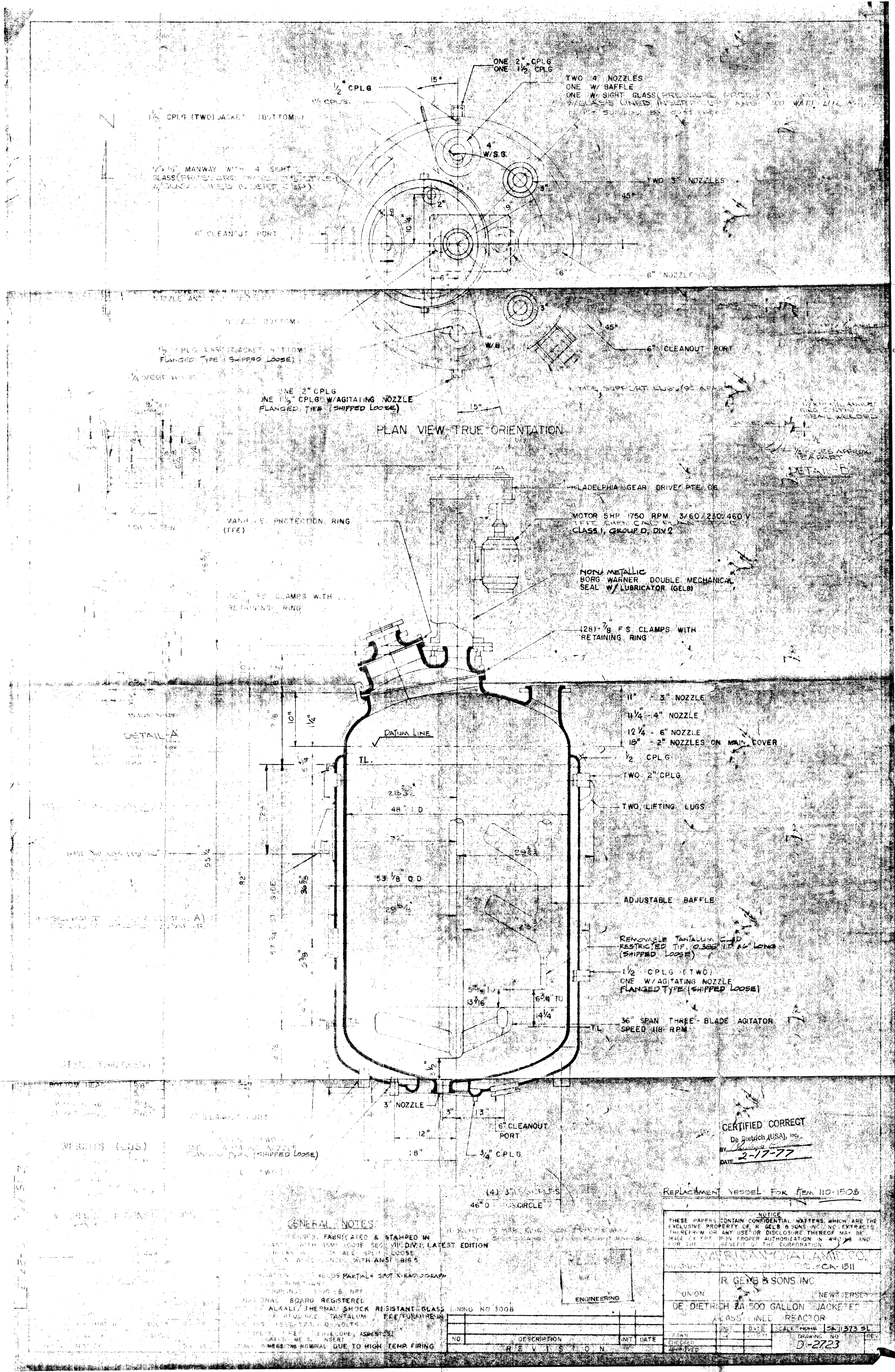
CERTIFICATE OF FIELD ASSEMBLY INSPECTION

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 _____ and employed by _____ of _____ have compared the statements in this Manufacturers' Data Report with the described pressure vessel and state that parts referred to as data items _____, not included in the certificate of shop inspection, have been inspected by me and that, to the best of my knowledge and belief, the Manufacturer has constructed and assembled this pressure vessel in accordance with ASME Code, Section VIII, Division 1.

The described vessel was inspected and subjected to a hydrostatic test of _____ psi.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this 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 _____ Signed _____ Commissions _____
(Authorized Inspector) (Nat'l. Board, State, Province and No.)



CERTIFIED CORRECT
By Dietrich (USA), Inc.
DATE 2-17-77

REPLACEMENT VESSEL FOR ITEM 110-1508

NOTICE THESE PAPERS CONTAIN CONFIDENTIAL MATTERS, WHICH ARE THE EXCLUSIVE PROPERTY OF R. GELB & SONS, INC. NO EXTRACTS THEREFROM OR ANY USE OR DISCLOSURE THEREOF MAY BE MADE EXCEPT BY PROPER AUTHORIZATION IN WRITING AND FOR THE BENEFIT OF THE CORPORATION.			
AMERICAN TANTALUM CO. NEWARK, N.J. 07102			
R. GELB & SONS, INC. NEW JERSEY			
DE DIETRICH 2A 500 GALLON JACKETED CLASS LINED REACTOR			
NO.	DATE	SCALE	THICKNESS
1	2-17-77	1/2"	1/8"
D-2723			

GENERAL NOTES:

1. VESSEL FABRICATED & STAMPED IN ACCORDANCE WITH ASME CODE SECTION VIII, DIV. 1, LATEST EDITION.

2. ALL WELDS TO BE FULL PENETRATION BUTT JOINTS WITH ANST-8185.

3. MATERIALS TO BE FIELD PARTIAL & SPOT X-RAYED.

4. VESSEL TO BE INSULATED WITH 2" MIN. INSULATION.

5. NATIONAL BOARD REGISTERED.

6. ALL ALKALI, THERMAL SHOCK RESISTANT GLASS LINING NO. 3008.

7. ALL AGITATING NOZZLES TO BE TANTALUM OR TITANIUM.

8. ALL AGITATING NOZZLES TO BE 1/2" MIN. THICKNESS.

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