

X1B# 50742

#101131

FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

R002893-2

1. Manufactured and certified by PFAUDLER, INC., 1000 WEST AVENUE, ROCHESTER, NEW YORK 14611
(Name and address of Manufacturer)
2. Manufactured for Procter & Gamble, PO Box 5584, Cincinnati, OH 45201
(Name and address of Purchaser)
3. Location of Installation Procter & Gamble, Rd #2 Km 45.7, Manab, PR 00674
(Name and address)
4. Type: Vertical Jacketed Vessel, RA48-300 J049752 NA R021033-1 Rv.D 50742 2002
(Horiz., vert., or sphere) (Tank, separator, etc.) (Mfg's serial No.) (CRN) (Drawing No.) (Natl. Bd. No.) (Year built)
5. ASME Code, Section VIII, Div. 1 Edition 1998, Addenda 2000 NA NA
(Edition and Addenda (date)) (Code Case No.) (Special Service per UG-120(d))

Items 6 - 11 Incl. to be completed for single wall vessels, jackets of jacketed vessels, shell of heat exchangers, or chamber of multi-chamber vessels.

6. Shell (a) No. of course(s)		1		(b) Overall length (ft & in.):						2' 10-1/4"							
Course(s)			Material		Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B & C)			Heat Treatment				
No.	Diameter, in.	Length (ft & in.)	Spec. Grade or Type	Nom.	Corr.	Type	Full	Spot	None	Eff.	Type	Full	Spot	None	Eff.	Temp.	Time
1	54" OD	2' 10-1/4"	SA-516 Gr 70	3/8"	0"	1	None			70%	12	None			65%	NA	NA

7. Heads: (a) None													(b) SA-516 Gr 70				
(Mat'l Spec. No., Grade or Type) H.T. - Time & Temp													(Mat'l Spec. No., Grade or Type) H.T. - Time & Temp				
	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A					
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.			
(a)	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None	NA			
(b)	Bottom	3/8"	0"	54"	3-1/4"	NA	NA	NA	NA	NA	Yes	S	None	85%			

If removable, bolts used (describe other fastening) NA

(Mat'l Spec. No., Grade, size, No.)

8. Type of jacket Fig 9-2, Type 5 Jacket closure Fig 9-5(b-2) Mat'l SA-516 Gr 70 3/8" Min. Thickness
(Describe as ogee & weld, bar, etc.)

If bar, give dimensions NA

If bolted, describe or sketch.

9. MAWP 100/100 w/EF NA psi at max. temp. 450 NA °F Min. design metal temp. -20 °F at 100 psi.
(internal) (external) (internal) (external)

10. Impact test No. exempt from impact testing per UG-20(f).

(Indicate yes or no and the component(s) impact tested)

11. Hydro. proof, 150 psi Proof test NA

Items 12 and 13 to be completed for tube sections.

12. Tubesheet: Items 12-13 NA
Stationary (Mat'l Spec. No.) Dia., in. (subject to press.) Nom. thk., in. Corr. Allow., in. Attachment (welded or bolted)

13. Tubes: Mat'l Spec. No., Grade or Type O.D., in. Nom. thk., in. or gauge Number Type (Straight or U)

Items 14 - 18 Incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

14. Shell (a) No. of course(s)		1		(b) Overall length (ft & in.):						2' 5"							
Course(s)			Material		Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B & C)			Heat Treatment				
No.	Diameter, In.	Length (ft & in.)	Spec./Grade or Type	Nom.	Corr.	Type	Full	Spot	None	Eff.	Type	Full	Spot	None	Eff.	Temp.	Time
1	48" ID	2' 5"	SA-516 Gr 65	5/8"	0"	1			None	70%	1			None	70%	27-6	27-6

15. Heads: (a) SA-516 Gr 65 Per 27-6 (b) SA-516 Gr 65 Per 27-6
(Mat'l Spec. No., Grade or Type) H.T. - Time & Temp (Mat'l Spec. No., Grade or Type) H.T. - Time & Temp

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A			
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.	
(a)	Top	625"	0"	NA	NA	2:1	NA	NA	NA	Yes	Yes	S	None	85%	
(b)	Bottom	625"	0"	NA	NA	2:1	NA	NA	NA	Yes	Yes	S	None	85%	

If removable, bolts used (describe other fastening) NA

(Mat'l Spec. No., Grade, Size, No.)

16. MAWP 100 FV 115 psi at max. temp. 450 450 °F Min. design metal temp. -20 °F at 100 psi.
(internal) (external) (internal) (external)

17. Impact test No, exempt from impact testing per UG-20(f).

(Indicate yes or no and the component(s) impact tested)

18. Hydro., per ASME test press. 100 psi

Proof test NA

19. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Flange Type	Material		Nozzle Thickness		Reinforcement Material	How Attached		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Cover	1	24"	CLAMP	SA-836	SA-836	1/2"	0"	None	Note 1	Internal	NA
Inlet	1	6"	LAPJT	SA-836	SA-181 Cl 60	29/64"	0"	None	Note 1	Loose	NA
Inlet	2	4"	LAPJT	SA-836	SA-181 Cl 60	3/8"	0"	None	Note 1	Loose	NA
Inlet	2	3"	LAPJT	SA-836	SA-181 Cl 60	11/32"	0"	None	Note 1	Loose	NA
Outlet	1	3"	LAPJT	SA-836	SA-516 Gr 70	11/32"	0"	None	Note 1	Loose	NA
Jkt Conn.	2	2"	SCDCPLG	SA-216 WCA	None	3000#	0"	None	UW-16 1(c)	NA	NA
Jkt Conn.	6	1-1/2"	SCDCPLG	SA-216 WCA	None	3000#	0"	None	UW-16 1(c)	NA	NA

20. Supports: Skirt No Legs 0 Legs 4 Others NA Attached Welded to jacket head
(Yes or No) (No.) (No.) (Describe) (Where and How)

21. Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report:

(List the name of part, item number, mfg.'s. name and identifying number)

24" Diameter Clamped Cover, J49328 Pfaudler, Inc. U

12" x 16" Cover, J49752A Pfaudler, Inc. U

22. Remarks: Constructed in accordance with Appendix 27, Alternative Requirements for Glass-Lined Vessels. Inner vessel hydrotested in the vertical position.

Pressure relief per UG-125 to be provided by user. Jacket for non-corrosive service. Note 1: Category B weld to swaged opening (e=70%). See Form U-4.

Diaphragm Collar, Matl SA-516 Gr 70 1/4" Nom. Thickness. Diaphragm Ring, Matl SA-516 Gr 70 1/8" Min. Thickness.

Mfg's serial No. J49752 Customer Order No. GBP-4500042712

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. 403

Expires

December 31, 2003

Date May 08/2002

Name PFADLER, INC.

Signed

(Representative)

CERTIFICATE OF SHOP INSPECTION

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 HSB CT of Connecticut have inspected the pressure vessel described in this Manufacturer's Data Report on 5/3, 02, 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 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 5/9/02

Signed

(Authorized Inspector)

Commissions NB# 10496 A

(Natl Board incl. endorsement, State, Province and No.)

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the statements on this report are correct and that the field assembly construction of all parts of this vessel conforms with the requirements of ASME Code, Section VIII, Division 1.

U Certificate of Authorization No. _____

Expires _____

Date _____

Name _____

Signed _____

(Representative)

CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the State or Province of _____ and employed by _____ of _____ have compared the statements in this Manufacturer's 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 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 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 _____

Signed _____

(Authorized Inspector)

Commissions _____

(Natl Board incl. endorsement, State, Province and No.)

R002989-2

Nozzles, inspection, and safety valve openings:

**Data Report
Item Number**

Remarks

Certificate of Authorization: Type U No. 408 Expires December 31 2003
 Date May 08 2002 Name PEARLER INC. Signed [Signature]
 (Manufacturer) (representative)
 Date 5/9/02 Name [Signature] Commission HB# 10496 A
 (Authorized Inspector) (Nat'l. Board Incl. endorsement, state, province and no.)

15#50742 314

FORM U-2 MANUFACTURER'S PARTIAL DATA REPORT
A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

R002959-2

1. Manufactured and certified by PEAUDLER, INC., 1000 WEST AVENUE, ROCHESTER, NEW YORK, 14611
 (Name and address of Manufacturer)

2. Manufactured for Procter & Gamble, P/P Manati, PO Box 5584, Cincinnati, OH 45201
 (Name and address of Purchaser)

3. Location of installation Procter & Gamble, Rd #2 Km 45.7, Manati, PR 00674
 (Name and address)

4. Type: 24" Diameter Cover 3043328 NA
 (Description of vessel part (shell, two-piece head, tube bundle)) (Mfg's serial No.) (CRN)
N/A 3182410, sht 1 Playdier, Inc. 2002
 (Nat'l. Bd. No.) (Drawing No.) (Drawing prepared by) (Year built)

5. ASME Code, Section VIII, Div. 1 Edition 1993, Addenda 2000 NA NA
 Edition and Addenda (date) Code Case No. Special Service per UG-120(d)

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

(a) No. of course(s):		(b) Overall length ft & in:									
Course(s)		Material		Thickness		Long. Joint (Cat. A)		Circum. Joint (Cat. A, B, & C)		Heat Treatment	
No.	Diameter, in.	Length ft & in.	Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.

(a) Heads: (a)										(b)									
SA-516 Gr 65 Per 27-6										(Mat'l Spec. No., Grade or Type) H.T. - Time & Temp									
(Mat'l Spec. No., Grade or Type) H.T. - Time & Temp										(Mat'l Spec. No., Grade or Type) H.T. - Time & Temp									
Location (Top, Bottom, Ends)		Thickness		Radius		Elliptical Ratio		Conical Apex Angle		Hemispherical Radius		Flat Diameter		Side to Pressure		Category A		Heat Treatment	
		Min.	Corr.	Crown	Knuckle									Concave	Convex	Type	Full, Spot, None	Eff.	Time
(a)	Top	583	0"	24"	NA	NA	NA	NA	NA	NA	NA	NA	NA	Yes	Yes	S	None	85%	
(b)																			

If removable, bolts used (describe other fastening) SA-449, 7/8" 20
 (Mat'l Spec. No., Grade, Size, No.)

8. Type of jacket Item #8 Not Applicable Jacket closure (Describe as ogee & weld, bar, etc.)

If bar, give dimensions (If bolted, describe or sketch.)

9. MAWP 100 PSY 15 psi at max. temp. 450 NA °F Min. design metal temp. NA °F at NA psi
 (internal) (external) (internal) (external)

10. Impact test No. exempt from impact testing per UCS-68(a)
 (Indicate yes or no and the component(s) impact tested)

11. Hydro., proof, ex-manu test press. 100 psig Proof test NA

Items 12 and 13 to be completed for tube sections.

12. Tubesheet:		Stationary (Mat'l Spec. No.)		Dia., in. (subject to press.)		Nom. thk., in.		Corr. Allow., in.		Attachment (welded or bolted)	
Floating (Mat'l Spec. No.)				Dia., in.		Nom. thk., in.		Corr. Allow., in.		Attachment	

13. Tubes:		Mat'l Spec. No., Grade or Type		O.D., in.		Nom. thk., in. or gauge		Number		Type (Straight or U)	
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Items 14 - 18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

14. Shell (a) No. of course(s):		(b) Overall length ft & in:									
Course(s)		Material		Thickness		Long. Joint (Cat. A)		Circum. Joint (Cat. A, B, & C)		Heat Treatment	
No.	Diameter, in.	Length ft & in.	Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.

FORM U-2 MANUFACTURER'S PARTIAL DATA REPORT
A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

R002889-2

1. Manufactured and certified by PFAUDLER, INC., 1000 WEST AVENUE, ROCHESTER, NEW YORK 14611
 (Name and address of Manufacturer)

2. Manufactured for Procter & Gamble, A/P Manila, PO Box 5584, Cincinnati, OH 45201
 (Name and address of Purchaser)

3. Location of installation Procter & Gamble, Rd #2 Km 45.7, Manila, PR 00674
 (Name and address)

4. Type: 12" x 16" MH Cover 049752A NA
 (Description of vessel part (shell, two-piece head, tube bundle)) (Mfg's serial No.) (CRN)

N/A 4204387, sht 1 Pfaudler, Inc. 2002
 (Natl. Bd. No.) (Drawing No.) (Drawing prepared by) (Year built)

5. ASME Code, Section VIII, Div. 1 1999 2000 NA
 Edition and Addenda (date) Code Case No. Special Service per UG-120(d)

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

Course(s)		Material		Thickness		Long. Joint (Cat. A)		Circum. Joint (Cat. A, B, & C)		Heat Treatment	
No.	Diameter, in.	Length ft & in.	Spec. Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Type	Full, Spot, None	Temp.	Time

7. Heads: (a)		SA-240 TP316						(b)		(Mat'l Spec. No., Grade or Type) H.T. - Time & Temp							
Location (Top, Bottom, Ends)		Thickness		Radius		Elliptical I Ratio	Conical Apex Angle	Hemispherical I Radius	Flat Dia. miter	Side to Pressure		Category A					
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.			
(a)	Top	1/2"	0	NA	NA	NA	NA	NA	21"	Yes	Yes	S	None	100			
(b)																	

If removable, bolts used (describe other fastening) SA-449, 7/8", 15
 (Mat'l Spec. No., Grade, Size, No.)

6. Type of jacket Item #8 Not Applicable Jacket closure (Describe as ogee & weld, bar, etc.)

If bar, give dimensions (internal) (external) If bolted, describe or sketch.

9. MAWP 100 FV 15 psi at max. temp. 450 NA °F Min. design metal temp. -20 °F at 100 psi.
 (internal) (external) (internal) (external)

10. Impact test No. exempt from impact testing per UFA-51(d)(1) & code case 2209
 (Indicate yes or no and the component(s) impact tested)

11. Hydro. proof, essential test press. 100 psig Proof test NA

Items 12 and 13 to be completed for tube sections.

12. Tubesheet: Items 12 - 16 NA
 Stationary (Mat'l Spec. No.) Dia., in. (subject to press.) Nom. thk., in. Corr. Allow., in. Attachment (welded or bolted)

Floating (Mat'l Spec. No.) Dia., in. Nom. thk., in. Corr. Allow., in. Attachment

13. Tubes: Mat'l Spec. No., Grade or Type O.D., in. Nom. thk., in. or gauge Number Type (Straight or U)

Items 14 - 18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

Course(s)		Material		Thickness		Long. Joint (Cat. A)		Circum. Joint (Cat. A, B, & C)		Heat Treatment	
No.	Diameter, in.	Length ft & in.	Spec. Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Type	Full, Spot, None	Temp.	Time

FORM U-2 (BACK)

15. Heads: (a)

(c)

[illegible]

If removable, bolts used (describe other fastening)

Mail Spec. No., Grade, Size, No.)

16. MAWP _____ psi at max. temp. _____ °F Min. design metal temp. _____ °F at _____ psi.

(internal) (external) (internal) (external)

17. Impact test

(Indicate yes or no and the component(s) impact tested)

18. Hydro. p₁neol. 6th comb. tes! press.

Proof test

19. Nozzles, inspection, and safety valve openings:

[illegible]

20. Supports: Skirt No Lugs 0 Legs 0 Others NA Attached NA
(Yes or No) (No.) (No.) (Describe) (Where and How)

21. Remarks: Pfauher, Inc. has performed all design functions.

Pressure relief per UG-125 to be provided by others

Mfg's S/N J049752A Cust P.O. G8P-450042712

CERTIFICATE OF SHOP/FIELD COMPLIANCE

We certify that the statements made in this report are correct and that all details of material, construction, and workmanship of this pressure vessel part conform to the ASME Code for Pressure Vessels, Section VIII, Division 1.

U Certificate of Authorization No.

408

Expires

December/3

2000

Date May 08/2002

Name PEALDIER INC

Signed

(Manufacturer)

(Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

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 HSB GT of Connecticut have inspected the pressure vessel part described in this Manufacturer's Data Report on 5/3, 02, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel part 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 part 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 5/9/02

Signed

Henry Adams

Commissions

NY 4077

(Natl Board incl. endorsement, State, Province and No.)