CPO# B88-RF-1627-01 SO# F80095

FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS

as required by the provisions of the ASME Code rules, Section VIII, Division 1

78 7/8" FILTER VESSEL

1. Manufactured and certified by GASTON COUNTY DYEING MACHINE CO. - HWY 27 WEST - MT. HOLLY, NC 28120
(name and address of manufacturer)

2. Manufactured for ROSENMUND, INC. - P.O. BOX 668625 - CHARLOTTE, NC 28266-8625
(name and address of purchaser)

3. Location of installation UNKNOWN
(name and address)

4. Type: VERT.JKT.TANK (horiz. or vert., tank) F80095-1288-1 (mfr's. serial no.) (CRN) E-3600170 (drawing no.) 20200 (Nat'l. Bd. no.) 1989 (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: 1986 (year),

1987 (addenda (date)) (Code Case no.) (special service per UG-120(d))

Items 6-11 inclusive to be completed for single, jackets of jacketed vessels, or HALF PIPE COILS ON SHELL.

6. Shell: SA312-304 (mat'l. (spec. no., grade)) .216 (nom. thickness (in.)) 0 (corr. allow. (in.)) 3.068" (dia. ID (ft. & in.)) (length (overall) (ft. & in.))

7. Seams: NONE (long. (dbl., sngl.)) ----- (RT (spot or full)) ---- (eff. (%)) N/A (HT temp (°F)) N/A (time) WLD SGL BUTT (girth (dbl., sngl.)) NONE (RT(spot, partial, or full)) ------- (no. of courses)

8. Heads: (a) (mat'l. (spec. no., grade)) (b) (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)										
(b)										

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

9. Type of jacket: HALF PIPE COIL Proof test: UG101(1) 360 PSI

10. Jacket closure: N/A (describe as ogee & weld, bar, etc.) If bar, give dimensions: If bolted, describe or sketch.

11. MAWP: 125 psi at max. temp. 302°F. Min. design metal temp. -20 °F at 125 psi.
Hydro., [illegible] test press. 213 psi.

Items 12 and 13 to be completed for tube sections.

12. Tubesheets: (stationary mat'l. (spec. no., gr.)) (dia. (in.) (subject to pressure)) (nom. thickness (in.)) (corr. allow. (in.)) (attachment (welded, bolted))

(floating mat'l. (spec. no., gr.)) (dia. (in.)) (nom. thickness (in.)) (corr. allow. (in.)) (attachment)

13. Tubes: (mat'l. (spec. no., gr.)) (OD (in.)) (nom. thickness (in. or gauge)) (no.) (type (straight or U))

Items 14-17 inclusive to be completed for inner chambers of jacketed vessels.

14. Shell: SA240-316L (mat'l. (spec. no., gr.)) 1/4" (nom. thickness (in.)) 0 (corr. allow. (in.)) 6' 6 1/4" (dia. ID (ft. & in.)) 3' 1 1/8" (length (overall) (ft. & in.))

15. Seams: WLD DBL BUTT (long. (dbl., sngl.)) NONE (RT (spot or full)) 70% (eff. (%)) N/A (HT temp. (°F)) (time) WLD DBL BUTT (girth (dbl., sngl.)) NONE (RT (spot, partial, or full)) 1 (no. of courses)

16. Heads: (a) SA240-316L (mat'l. (spec. no., grade)) (b) SA240-316L (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)	TOP	3/8"NOM.	0	78"	4.7325					BOTH
(b)	BOTTOM	3/8"NOM.	0						81" O.D.	

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

17. MAWP: 50 / FULL VACUUM psi at max. temp. 302 °F. Min. design metal temp. -20 °F at FV/50 psi.
Hydro., [illegible] test press. 75 psi.

FORM U-1 (back)

18. Nozzles, inspection and safety valve openings:

Purpose (inlet, outlet, drain, etc.)	Number	Dia. or Size	Type	Mat'l	Nom Thickness	Reinforcement Material	How Attached	Location
OUTLET	1	20"	FLANGED	SA240-316L	.500		WELDED	HEAD
MANWAY	1	18"	FLANGED	SA240-316L	.500		WELDED	HEAD
OUTLET	1	15 3/4"	BOLT PAD	SA240-316L	2.262		WELDED	SHELL
AGITATOR	1	13 1/4"	BOLT PAD	SA240-316L	1.250		WELDED	HEAD
SIGHT GLASS	1	4"	BOLT PAD	SA240-316L	1.375		WELDED	HEAD
LIGHT GLASS	1	4"	PAD	SA240-316L	1.250		WELDED	HEAD
OUTLET, SAFETY	2	3"	FLANGED	SA312-316L	.216		WELDED	HD & SHELL
OUTLET	1	2"	FLANGED	SA312-316L	.154		WELDED	HEAD
IN, OUTLET	2	3"	FLANGED	SA312-304	.216		WELDED	JACKET
IN, OUTLET	4	1 1/2"	FLANGED	SA312-304	.145		WELDED	HEAD
IN, OUTLET	7	1 1/2"	FLANGED	SA312-316L	.145		WELDED	HEAD

19. Supports: Skirt NO (yes or no) Lugs 0 (no.) Legs 0 (no.) Other _____ (describe) Attached _____ (where and how)

20. **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)

IMPACT TESTING NOT REQUIRED PER PAR. UG-20(f), UCS-66(a)(b) & UHA-51(b). UNF-65. THE FLAT BOTTOM IS STRUCTURALLY SUPPORTED WITH (5) WF8 x 48# BEAMS, SA36. THE INTERNAL BOTTOM JACKET IS NOT INCLUDED IN THIS CERTIFICATION.
THE FOLLOWING IDENTIFICATION IS SCRIBED WITHIN 8" OF THE CODE NAMEPLATE: NB 20200 G.C.

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. 11254 expires 1-31, 19 90

Date 5-16-89 Name GASTON COUNTY DYEING MACH. CO (manufacturer) Signed Bobby Shelton (representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by GASTON COUNTY DYEING MACHINE CO. at MT. HOLLY, NC

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the state or province of NORTH CAROLINA and employed by DEPARTMENT OF LABOR of RALEIGH, NC have inspected the pressure vessel described in this Manufacturers' Data Report on 5-16, 19 89, 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 5-16-89 Signed J. F. Ward (Authorized Inspector) Commissions OHIO COMM.-PA WC 1962 NC 722 NB 6072 BSN (Nat'l Bd. incl. endorsements, state, prov. and no.)

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the field assembly construction of all parts of this vessel conforms with the requirements of Section VIII, Division 1 of the ASME BOILER AND PRESSURE VESSEL CODE

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

Date _____ Name _____ (assembler that certified and constructed field assembly) Signed _____ (by 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 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 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 _____ Signed _____ (Authorized Inspector) Commissions _____ (Nat'l Bd. incl. endorsements, state, prov. and no.)