

TEM NO. VC-2307

CPO# B85-RF-053-488-02

SD# F-69653

## FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS

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

94" JKT. VESSEL

1. Manufactured and certified by GASTON COUNTY DYEING MACH. CO. - HWY 27 WEST- MT. HOLLY, NC 28120

(name and address of manufacturer)

2. Manufactured for ROSEMMUND INC. - CHARLOTTE, NC

(name and address of purchaser)

3. Location of installation DOW CHEMICALS - PITTSBURG, CALIF.

(name and address)

4. Type VERT. JKT. TANK F-69653-1185-1

(name of vessel, tank)

(MFR's serial no.)

(CWR)

EF-0046-HH

(drawing no.)

17935

(Nat'l. Bd. no.)

1986

(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: 1983

(year)

S-85

(reference code)

(Code Case no.)

(special service per UG-120(d))

Items 6-11 inclusive to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers. (HALF PIPE COIL)

6. Shell: SA312 TP316L .154 0 2.067 APPROX. 174'

(mat'l. spec. no., grade)

(nom. thickness (in.))

(corr. allow. (in.))

(dia. ID (ft. &amp; in.))

(length overall (ft. &amp; in.))

7. Seams: --- --- --- N/A WLD SGL BUTT NONE ---

(long. dist. angl.)

(RT joint or full)

(eff. (%))

(RT temp. (°F))

(time)

(grain (dist. angl.))

(RT (spot, partial, or full))

(no. of courses)

8. Heads: (a) --- (b) ---

(mat'l. spec. no., grade)

(mat'l. spec. no., grade)

	Location Req. bottom, angle	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)10. Jacket closure: --- If bar, give dimensions: --- If bolted, describe or sketch.

(describe as angle &amp; weld, bar, etc.)

11. MAWP: 150 at max. temp. 392 Min. temp.: --- Hydro. XXXXXXX test press.: 227

(psi)

(°F)

(when less than -20°F)

(psi)

(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 gauged))

(no.)

(type (straight or U))

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

14. Shell: SB625 N08904 5/16" 0 7' 9 7/8" 3' 11 3/8"

(mat'l. spec. no., gr.)

(nom. thickness (in.))

(corr. allow. (in.))

(dia. ID (ft. &amp; in.))

(length overall (ft. &amp; in.))

15. Seams: WLD DBL BUTT SPOT 85% N/A WLD DBL BUTT PARTIAL 1

(long. dist. angl.)

(RT joint or full)

(eff. (%))

(RT temp. (°F))

(time)

(grain (dist. angl.))

(RT (spot, partial, or full))

(no. of courses)

16. Heads: (a) SB625 N08904 (b) SB625 N08904

(mat'l. spec. no., grade)

(mat'l. spec. no., grade)

	Location Req. bottom, angle	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	1/2" NOM	0	94.5	5.67	---	---	---	---	BOTH
(b)	BOTTOM	3/8" NOM	0	---	---	---	---	---	93.8125	0.0

If removable, bolts used (describe other fastenings):

(mat'l. spec. no., gr., size, no.)

17. MAWP: 75/F V at max. temp. 392 Min. temp.: --- Hydro. XXXXXXX test press.: 113

(psi)

(°F)

(when less than -20°F)

(psi)

(psi)

Items on reverse side to be completed for all vessels where applicable.

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1066 Crupper Ave., Col's., OH 43229

NS-25  
Rev. 6

**FORM U-1 (back)**

**18. Nozzles, inspection and safety valve openings:**

Purpose (inlet, outlet, drain, etc.)	Number	Dia. or Size	Type	Mat'l.	Thickn.	Reinforcement Memory	How Attached	Location
MANWAY	1	22"	FLANGED	SB625 N08904	.500		WELDED	HEAD
OUTLET	1	16 X 19.66"	FLANGED	SB625 N08904	.750 X .375		WELDED	HEAD
AGITATOR	1	13"	BOLT PAD	SB625 N08904	1.500		WELDED	HEAD
LIGHT PORT	1	4"	BOLT PAD	SB625 N08904	1.500		WELDED	HEAD
OUTLET	1	4"	FLANGED	SB673 N08904	.237		WELDED	HEAD
IN. OUTLET	5	2"	FLANGED	SB673 N08904	.154		WELDED	HD&SHELL
IN. OUTLET	3	1 1/2"	FLANGED	SB673 N08904	.145		WELDED	SHELL
INLET	1	3"	FLANGED	SB673 N08904	.216		WELDED	HEAD
IN. OUTLET	3	1"	FLANGED	SB673 N08904	.133		WELDED	HD&SHELL
OUTLET	1	1/2"	FLANGED	SB673 N08904	.109		WELDED	NOZZLE
OUTLET	1	1/2"	COUPLING	N08904	3000#		WELDED	HEAD

19. Supports: Skirt YES Lugs        Legs        Other EXTENDED SHELL & BEAMS INTEGRAL & WELDED  
(yes or no) (no.) (no.) (describe) (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)

THE BOTTOM IS STRUCTUALLY SUPPORTED WITH (6) WF12 X 106# BEAMS, SA36 - PROOF TESTED  
 HALF PIPE COILS TO 256 PSI. PARTIAL X-RAYED TOP HEAD TO SHELL JOINT, FULL X-RAYED  
 TOP HEAD CATAGORY A JOINTS AND PARTIAL X-RAYED TOP HD. SHELL JOINT.  
 THE FOLLOWING IDENTIFICATION IS SCRIBED WITHIN 8" OF THE CODE NAMEPLATE: NB 17935 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 87

Date 5/30/86 Name GASTON COUNTY DYE MACH. CO. Signed *M. Duncan*  
(Manufacturer) (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 N.C. have inspected the pressure vessel described in this Manufacturers' Data Report on 5/30 19 86, 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. OHIO COMM. - PA WC1962

Date 5/30/86 Signed *J. F. Ward* Commissions NC 722 NB 6072  
(Authorized Inspector) (Part I, Sec. (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 \_\_\_\_\_ Signed \_\_\_\_\_  
(Inspector that certified and constructed field assembly) (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 \_\_\_\_\_ Commissions \_\_\_\_\_  
(Authorized Inspector) (Part I, Sec. (incl. endorsements) state, prov. and no.)

114448

**FORM R-1 REPORT OF REPAIR**in accordance with provisions of the *National Board Inspection Code*

1. Work performed by Jake Marshall LLC  
(name of repair organization)  
2912 South Hickory Street, Chattanooga, TN. 37407  
(address)

(Form Registration No.)  
J378  
(PO No., Job No., etc.)

2. Owner Sofix Corporation  
(name)  
2800 Riverport Road, Chattanooga, TN. 37406  
(address)

3. Location of installation Sofix Corporation  
(name)  
2800 Riverport Road, Chattanooga, TN. 37406  
(address)

4. Item identification Vert. Jkt. Tank Name of original manufacturer Gaston County Dyeing Machine Company  
(boiler, pressure vessel or piping)

5. Identifying nos.: F-69653-1185-1 17935 UNKNOWN 1986  
(mfg. serial no.) (National Board No.) (Jurisdiction No.) (other) (year built)

6. NBIC Edition/Addenda: 2013 None  
(edition) (addenda)

Original Code of Construction for Item: ASME/Section VIII / Div. 1 1983 / S-85  
(name / section / division) (edition / addenda)

Construction Code Used for Repair Performed: ASME/Section VIII / Div. 1 2013 / ----  
(name / section / division) (edition / addenda)

7. Repair Type: ☒ Welded ☐ Graphite Pressure Equipment ☐ FRP Pressure Equipment

8. Description of work: ☐ Form R-4, Report Supplementary Sheet is attached ☐ FFSA Form (NB-403) is attached  
(use Form R-4, if necessary)

Repaired by welding the Ring (Item 4, SA240 TO 304L) to the vessel wall (SA240 TP304L) using GTAW procedure and ER308L filler wire.

N/A Pressure Test, if applied \*                      psi MAWP 150 psi

9. Replacement Parts. Attached are Manufacturer's Partial Data Reports or Form R-3s properly completed for the following items of this report:

(name of part, item number, data report type or Certificate of Compliance, mfg. name, and identifying stamp)

10. Remarks: \* Dye Pen performed in lieu of hydrostatic test with A.I. concurrence

**CERTIFICATE OF COMPLIANCE**

I, Mike Williamson, certify that to the best of my knowledge and belief the statements in this report are correct and that all material, construction, and workmanship on this Repair conforms to the *National Board Inspection Code*.

National Board "R" Certificate of Authorization No. R-1432 expires on June 2, 2017

Date 6/30/2015, Jake Marshall LLC Signed Mike Williamson  
(name of repair organization) (authorized representative)

**CERTIFICATE OF INSPECTION**

I, STEVE ALEXANDER, holding a valid Commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency, where required, issued by the Jurisdiction of TENNESSEE and employed by ARISE of BROOKSVILLE, OHIO have inspected the work described in this report on 6-11-, 2015 and state that to the best of my knowledge and belief this work complies with the applicable requirements of the *National Board Inspection Code*.

By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

Date 6-30-, 2015 Signed [Signature] Commissions NB-12488A, TN-3499  
(inspector) (National Board and Jurisdiction No.)