

Jul 25, 2006 10:21 AM

NBB ORDER DEPT

No. 2828 P. 2/5

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

As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured by Hockmeyer Certified Tank Corp., Harrison, New Jersey 07029  
(Name and address of manufacturer)

2. Manufacturer for 3M Company, St. Paul, Minnesota 55133  
(Name and address of purchaser)

3. Location of installation 3M Company, Springfield, Missouri 65802  
(Name and address)

4. Type Vert. Mixer Vessel No. 2175 (Mfr's Serial No.) D-5313 (Drawing) 12 (Net Brd No.) Year Built 1980  
(HORIZ. or vert. tank) (CRN)

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 1977 and Addenda to Winter 1979 (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 SA240-304 (Spec. No., Grade) Nominal Thickness 105 in. Corrosion Allowance --- in. Diam. 6 ft 1 1/4 in. Length 5 ft 4 in.

7. Seams: Longitudinal Sngl. Butt (Welded, Dbl., Sngl., Lap, Butt) R.T. --- Efficiency --- % H.T. Temp --- F  
Time --- Girth Lap fillet (Welded Dbl., Dngl., Lap, Butt) R.T. --- (Spot, Partial or Full) No. of Courses 8

8. Heads: (a) Material --- (Spec. No., Grade) (b) Material --- (Spec. No., Grade)

|     | Location<br>(Top, Bottom, Ends) | Minimum<br>Thickness    | Corrosion<br>Allowance | Crown<br>Radius                         | Knuckle<br>Radius | Elliptical<br>Ratio |
|-----|---------------------------------|-------------------------|------------------------|-----------------------------------------|-------------------|---------------------|
| (a) | ---                             | ---                     | ---                    | ---                                     | ---               | ---                 |
| (b) | ---                             | ---                     | ---                    | ---                                     | ---               | ---                 |
|     | Conical<br>Apex Angle           | Hemispherical<br>Radius | Flat<br>Diameter       | Side to Pressure<br>(Convex or Concave) |                   |                     |
| (a) | ---                             | ---                     | ---                    | ---                                     |                   |                     |
| (b) | ---                             | ---                     | ---                    | ---                                     |                   |                     |

If removable, bolts used (describe other fastenings) ---

9. Type of Jacket Dimple (Material, Spec. No., Gr., Size, No.)  
Proof Test UG101-1200PSIG

10. Jacket Closure Embossed & Swaged (Describe as open & weld, bar, etc.) If bar, give dimensions --- If bolted, describe or sketch.

11. Constructed for max. allowable working pressure 100 psi at max. temp. 339 F Min. temp. (when less than -20 F) --- F  
Hydrostatic, pneumatic, or combination test pressure 180 psi

Items 12 and 13 to be completed for tube sections

12. Tubesheets: Stationary—Material --- (Spec. No., Gr.) Diam. --- in. Nominal Thickness --- in. Corrosion Allowance --- in. Attachment --- (Welded, Bolted) Floating—Material --- (Spec. No., Grade) 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 SA240-304 (Spec. No., Gr.) Nominal Thickness 3/8 in. Corrosion Allowance .056 in. Diam. 6 ft 0 in. Length 5 ft 6 in.

15. Seams: Longitudinal Dbl. butt (Welded, Dbl., Sngl., Lap, Butt) R.T. --- Efficiency --- % H.T. Temp --- F Time ---  
Girth Dbl. butt (Welded, Dbl., Sngl., Lap, Butt) R.T. --- (Spot, Partial, or Full) No. of courses 1

16. Heads: (a) Material SA240-304 (Spec. No., Grade) (b) Material SA240-304 (Spec. No., Gr.)

|     | Location<br>(Top, Bottom, Ends) | Minimum<br>Thickness    | Corrosion<br>Allowance | Crown<br>Radius                         | Knuckle<br>Radius | Elliptical<br>Ratio |
|-----|---------------------------------|-------------------------|------------------------|-----------------------------------------|-------------------|---------------------|
| (a) | <u>Top</u>                      | <u>1/2"</u>             | <u>.049</u>            | <u>66</u>                               | <u>4 3/8</u>      | <u>---</u>          |
| (b) | <u>Bottom</u>                   | <u>1/2"</u>             | <u>.049</u>            | <u>66</u>                               | <u>4 3/8</u>      | <u>---</u>          |
|     | Conical<br>Apex Angle           | Hemispherical<br>Radius | Flat<br>Diameter       | Side to Pressure<br>(Convex or Concave) |                   |                     |
| (a) | ---                             | ---                     | ---                    | <u>Concave</u>                          |                   |                     |
| (b) | ---                             | ---                     | ---                    | <u>Concave</u>                          |                   |                     |

If removable, bolts used (describe other fastenings) ---

(Material, Spec. No., Gr., Size, No.)

(3/77)

This form (E00108) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

1286 TO TOP.  
OF STRAIGHT SIDE

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17. Constructed for max. allowable working pressure 100 FORM U-1 (BACK) 339 F. Min. temp. (when less than -20 F) --- F.  
 Hydrostatic, pneumatic, or combination test pressure 150 psi.

Items below to be completed for all vessels where applicable

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

19. Nozzles:

| Purpose<br>(Inlet, Outlet, Drain) | Number | Diam.<br>or Size | Type | Material | Nominal<br>Thickness | Reinforcement<br>Material | How<br>Attached |
|-----------------------------------|--------|------------------|------|----------|----------------------|---------------------------|-----------------|
| Inlet & Vent                      | 2      | 8" IPS           | Flg. | 304 SS   | .322                 | 3/8" Cstl.                | Welded          |
| Solvent & Temp                    | 2      | 2" IPS           | "    | 304 SS   | .154                 | 3/8" "                    | "               |
| Vacuum                            | 1      | 2" IPS           | "    | 304 SS   | .237                 | " "                       | "               |
| Mixer                             | 1      | 16" IPS          | "    | 304 SS   | .375                 | " "                       | "               |
| Mixer                             | 2      | 12" IPS          | "    | 304 SS   | .375                 | " "                       | "               |

20. Inspection Openings:

Manholes No. (1) Size 20" Location Top

Handholes No. --- Size --- Location ---

Threaded No. --- Size --- Location ---

21. Supports: Skirt --- Lugs 3 Legs --- Other --- Attached Side-welded  
 (Yes or no) (No.) (No.) (Describe) (Where and how)

22. Remarks: Tank used as reactor.

### 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 3/24/80 Signed Hockmeyer Certified Tank by Joseph Kennedy

(Manufacturer)

(Representative)

"U" Certificate of Authorization No. 14067

expires

June 17,

1980

### CERTIFICATE OF SHOP INSPECTION

Vessel made by Hockmeyer Certified Tank at Harrison, NJ 07029

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 Jersey and employed by Royal Insurance Co.

of New York have inspected the pressure vessel described in this Manufacturers' Data Report on 3/24/80 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 3/24/80

Signed P. B. Bunting (Inspector)

Commissions NB 5351 NJ 417  
 (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 --- (Authorized Inspector)

Commissions ---  
 (Nat'l Board, State, Province and No.)

770 00700 Hockmeyer Mixer

FORM R REPORT OF WELDED ☒ REPAIR OR ☐ ALTERATION  
as required by the provisions of the National Board Inspection Code

1. Work performed by Precision Stainless, Inc. L-7236  
(name of repair or alteration organization) (P.O. no., job no., etc.)

3300 E. Pythian, Springfield, MO 65802  
(address)

2. Owner 3M Company  
(name)

3211 East Chestnut Expressway, Springfield, MO 65802  
(address)

3. Location of installation 3M Company  
(name)

3211 East Chestnut Expressway, Springfield, MO 65802  
(address)

4. Unit identification: Pressure Vessel Name of original manufacturer Hockmeyer Certified Tank Corp.  
(boiler, pressure vessel)

5. Identifying nos.: 2175 12 - - 1980  
(mfr's. serial no.) (original National Board no.) (jurisdiction no.) (other) (year built)

6. Description of work Repair a leak at a dimple weld on dimpled jacket. Leak located on  
(use back, separate sheet, or sketch if necessary)  
bottom head jacket. Repaired by backgrinding and rewelding.

Pressure test, if applied 100 psi

7. Replacement Parts. Attached are Manufacturers' Partial Data Reports properly identified and signed by Inspectors for the following items of this report:

N/A

8. Remarks: N/A  
(name of part, item number, mfr's. name and identifying stamp)