

Shop Order Number

(Alternative Form for Single Chamber, Completely Shop-Fabricated Vessels Only)

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

1. Manufactured and certified by **Trinity Industries, Inc. - Plant 04, 1549 Vance Street, Rocky Mt., North Carolina, 27801, USA**
(Name and address of manufacturer)

2. Manufactured for **Hamilton Mechanical Service, Inc., P.O. Box 148, Choccolocco, Alabama, 36254, USA**
(Name and address of purchaser)

3. Location of Installation **Hamilton C/O Emory University, Inc., 1456 Briarcliff Road, Atlanta, Georgia, 30306, USA**
(Name and address)

4. Type **Horizontal** **R0013703** **N/A** **ST-9 r-** **R0013703** **2000**
(Horiz. or Vert. tank) (Mfr's serial No.) (CRN) (Drawing No.) (Nat'l. Bd. No.) (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 Rules, Section VIII, Division 1 **1998** to **A99**
(year) (Addenda (Date))

N/A **N/A**
Code Case Nos. Special Service per UG-120(d)

6. Shell: **SA-612** **0.589"** **0"** **9' 0.168" (ID)** **31' 10.0"**
Mat'l. (Spec. No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I.D. (ft. & in.) Length (overall) (ft. & in.)

7. Seams: **TYPE 1** **Full** **100%** **N/A** **N/A** **TYPE 1** **Spot** **4**
Long. (Welded, Dbl., Sngl., Lap, Butt) R.T. (Spot or Full) Eff. (%) H.T. Temp (°F) Time (hr) Girth. (Welded, Dbl., Sngl., Lap, Butt) R.T. (Spot, Partial or Full) No. of Courses

8. Heads: (a) Mat'l: **SA612 HOT FORM NORMALIZED** (b) Mat'l: **N/A**
(Spec. No., Grade) (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)	Ends	0.338"	0"	0.0"	N/A	N/A	N/A	54.335"	N/A	Concave
(b)	N/A	N/A	N/A	0.0"	N/A	N/A	N/A	0.0"	N/A	N/A

If removable, bolts used (describe other fastenings) **N/A**
(Mat'l., Spec. No., Gr., Size, No.)

9. MAWP **250** psi at max. temp. **125** °F

Min. design metal temp. **2** °F at **250** psi Hydro, pneu., or comb. test pressure **Hydro. at 325** psi.

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Mat'l.	Nom. Thk.	Reinforcement Mat'l.	How Attached	Location
MANWAY	1	15"	PTFLG	SA516-70N	2.5"	INTEGRAL	(i)	Head
LEVEL GAUGE	1	2.5"	CPLG	SA105	3000#		(y-2)	N/A
ROTARY GAUGE	1	2"	CPLG	SA105	3000#		(y-2)	N/A
THERMOWELL	1	0.75"	CLPG	SA105	6000#		(y-2)	N/A

Additional Nozzles - See Attached U-4...

11. Supports: Skirt **NO** Lugs **N/A** Legs **N/A** Other **N/A** Attached **N/A**
(Yes or no) (No.) (No.) (Describe) (Where and how)

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

Trinity Head #1: T373-249-H5 Trinity Head #2: T373-249-H10

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

TANK, HORIZONTAL STORAGE: 109.346"OD x 18,000WG. ST-9 SHT 1 r-, SHT 2 rA. TO BE USED IN A NON-CORROSIVE SERVICE. MDMT -20 DEG. F @ 195 PSI. LINE 9: MDMT/PSI BASED ON UCS-66 (a), UCS-66 (b) AND UG-20 (f).

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. **10829** expires **July 7, 2003**

Date **11/03/2000** Co. name **Trinity Industries, Inc. - Plant 04** Signed **[Signature]**
(Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by **Trinity Industries, Inc. - Plant 04** at **1549 Vance Street, Rocky Mt., North Carolina, 27801, USA**, I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province **TX** and employed by **IB&M RE, INC., of Arlington, TX** have inspected the component described in this Manufacturer's Data Report on **November 3, 2000** 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 **01/04/2001** Signed **[Signature]** Commissions **9680 A, TX1117**
(Authorized Inspector) (Nat'l Board (incl. endorsements), State, Prov. and No.)

FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET

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

1. Manufactured and certified by Trinity Industries, Inc. - Plant 04, 1549 Vance Street, Rocky Mt., North Carolina, 27801, USA
(Name and address of Manufacturer)

2. Manufactured for Hamilton Mechanical Service, Inc., P.O. Box 148, Choccolocco, Alabama, 36254, USA
(Name and address of Purchaser)

3. Location of Installation Hamilton C/O Emory University, Inc., 1456 Briarcliff Road, Atlanta, Georgia, 30306, USA
(Name and address)

4. Type Horizontal N/A R0013703
(Horiz, vert., or sphere) (Tank, separator, heat exh., etc.) Mfg's serial No.

N/A ST-9 r- R0013703 2000
(CRN) (drawing no.) (Nat'l Bd. No.) (Year built)

Additional nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Mat'l.	Nom. Thk.	Reinforcement Mat'l.	How Attached	Location
LL-PG	1	0.75"	CPLG	SA105	6000#		(y-2)	N/A
VAPOR	1	2"	CPLG	SA105	3000#		(z-1)	N/A
LIQUID OUT	1	3"	CPLG	SA105	6000#		(z-1)	N/A
FILL	1	2"	CPLG	SA105	3000#		(z-1)	N/A
VAPOR	1	2"	CPLG	SA105	3000#		(y-1)	N/A
RELIEF	2	2"	CPLG	SA105	3000#		(z-1)	N/A

Additional remarks pertaining to Manufacturer's Partial Data Reports:

Additional Remarks:

Certificate of Authorization: Type "U" No. 10829 Expires July 7, 2003

Date 11/03/2000 Name Trinity Industries, Inc. - Plant 04 Signed [Signature]
(Manufacturer) (Representative)

Date 01/04/2001 Name [Signature] Commission 9680 A, TX1117
(Authorized Inspector) (Nat'l Board (incl. endorsements), State, Province and No.)

FORM U-2A MANUFACTURER'S PARTIAL DATA REPORT (ALTERNATIVE FORM)

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

112
R0013703

1. Manufactured and certified by TRINITY INDUSTRIES INC. AV. FCO. I MADERO ZONA INDUSTRIAL FRONTERA COAH. MEX.
(Name and address of manufacturer)

2. Manufactured for TRINITY INDUSTRIES, INC. P.O. BOX. 56887, DALLAS, TX. 75356-8887
(Name and address of Purchaser)

3. Location of installation NOT KNOWN
(Name and address)

4. Type HEMISPHERICAL HEAD T373-249-H5 N.A.
(Description of vessel part (shell, two-piece head, tube bundle)) (mfg's serial No.) (CRN)

N.A. 1713010005-01 REV.0 TRINITY INDUSTRIES, INC. 2000
(Nat'l Bd. No.) (Drawing No.) (Drawing prepared by) (Year built)

5. ASME Code, Section VIII, Div. 1 98 A 00 N.A. N.A.
(Edition and Addenda (date)) (Code Case No.) (Special Service per UG-120 (d))

6. Shell (a) No. of course(s): N.A. (b) Overall length (ft & in.): N.A.

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
N.A.														

7. Heads: (a) SA-612N (b) N.A.
(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.
	0.360	0					54.673"			X	1	SPOT	85%

If removable, bolts used (describe other fastening) N.A.
(Mat'l Spec. No., Grade, Size, No.)

8. MAWP N.A. N.A. psi at max. temp. N.A. N.A. °F. Min. design metal temp. N.A. °F. a N.A. psi
(internal) (external) (internal) (external)

9. Impact test NO
(Indicate yes or no and the component(s) impact tested)

10. Hydro., pneu., or comb. test press. N.A. Proof test N.A.

11. Nozzles, inspection, and safety valve openings: UW-16.1

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	
ROTO GA.	1	2"	CPLG.	SA105		3000#			Y-2		

12. Supports: Skirt NO Lugs N.A. Legs N.A. Others N.A. Attached N.A.
(Yes or no) (No.) (No.) (Describe) (Where and how)

13. Remarks: DOLLAR PLATES AND HEAD SEGMENTS ARE HOT FORMED AND AIR COOLED
JOB. NO. T373-249

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. 23678 Expires JUL / 18 / 2003

Date 10/5/00 Name TRINITY INDUSTRIES INC. Signed FIDENCIO TRINIDAD CEDILLO
(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/or the State or Province of TEXAS and employed by IB & M RE, INC. of ARLINGTON TX. have inspected the pressure vessel part described in this Manufacturer's Data Report on 10/02/2000 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 10/09/2000 Signed [Signature] Commissions TX-987
(Authorized inspector) (Nat'l Board incl. endorsement, State, Province and No.)

FORM U-2A MANUFACTURER'S PARTIAL DATA REPORT (ALTERNATIVE FORM)

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

2/2
R0013703

1. Manufactured and certified by TRINITY INDUSTRIES INC. AV. FCO. I MADERO ZONA INDUSTRIAL FRONTERA COAH. MEX.
(Name and address of manufacturer)

2. Manufactured for TRINITY INDUSTRIES, INC. P.O. BOX. 56887, DALLAS, TX. 75356-8887
(Name and address of Purchaser)

3. Location of installation NOT KNOWN
(Name and address)

4. Type HEMISPHERICAL HEAD T373-249-H10 N.A.
(Description of vessel part (shell, two-piece head, tube bundle)) (mfg's serial No.) (CRN)

N.A. 1713010006-01 REV.0 TRINITY INDUSTRIES, INC. 2000
(Nat'l Bd. No.) (Drawing No.) (Drawing prepared by) (Year built)

5. ASME Code, Section VIII, Div. 1 98 A 00 N.A. N.A.
(Edition and Addenda (date)) (Code Case No.) (Special Service per UG-120 (d))

6. Shell (a) No. of course(s): N.A. (b) Overall length (ft & in.): N.A.

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
N.A.													

7. Heads: (a) SA-612N (b) N.A.
(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.
	0.365	0					54.673"			X	I	SPOT	85%

If removable, bolts used (describe other fastening) N.A.
(Mat'l Spec. No., Grade, Size, No.)

8. MAWP N.A. N.A. psi at max. temp. N.A. N.A. °F. Min. design metal temp. N.A. °F. a N.A. psi
(internal) (external) (internal) (external)

9. Impact test NO
(Indicate yes or no and the component(s) impact tested)

10. Hydro., pneu., or comb. test press. N.A. Proof test N.A.

11. Nozzles, inspection, and safety valve openings: UW-16.1

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	
MANWAY	1	15" I.D.	FLG.	SA105	SA105	250#				i	
FLOAT GA.	1	2.500"	CPLG	SA105		3000#			Y-2		
THERMO	1	0.750"	CPLG	SA105		6000#			Y-2		
PG. LL.	1	0.750"	CPLG	SA105		6000#			Y-2		

12. Supports: Skirt NO Lugs N.A. Legs N.A. Others N.A. Attached N.A.
(Yes or no) (No.) (No.) (Describe) (Where and how)

13. Remarks: DOLLAR PLATES AND HEAD SEGMENTS ARE HOT FORMED AND AIR COOLED
JOB. NO. T373-249

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. 23678 Expires JUL / 18 / 2003

Date 10/5/00 Name TRINITY INDUSTRIES INC. Signed FIDENCIO TREMAD CEDILLO
(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/or the State or Province of TEXAS and employed by IB & M RE, INC. of ARLINGTON, TX. have inspected the pressure vessel part described in this Manufacturer's Data Report on 10/02/2000, 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 10/09/2000 Signed [Signature] Commissions TX-987
(Authorized inspector) (Nat'l Board incl. endorsement, State, Province and No.)