

**FORM UHA MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS**  
 (Alternative Form for Single Chamber, Completely Shop or Field Fabricated Vessels Only)  
 As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured and certified by: Bota Welding, LLC 402 - 56<sup>th</sup> Street, Niagara Falls, NY 14304  
(Name and address of manufacturer)

2. Manufactured for: Thermal Kinetics Systems, LLC 667 Tiftt Street Buffalo, NY 14220  
(Name and address of purchaser)

3. Location of installation: UNKNOWN  
(Name and address)

4. Type: Vertical TP-4113 6018-MQ-4113 115 2007  
(Height or vert diam) (Wg's serial No.) (CRN) (Drawing No.) (Nett Dk. 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, Div. 1 2004  
Year

6. Shell SA-240 TP-304L 25 0 4' 5-1/2" 11' 9-7/8"  
Agenda (Serial) (Nom. Hk. (in)) (Corr. Allow. (in)) (Spec. Serial No. per UG-110 (a)) (Stem. ID. (in. S.N.)) (Length overall (in. S.N.))

7. Seams: Type 1 None 70 N/A Type 1 None 2  
(Leg. (welded) (Blk. Steel, Lp. (Inch)) (R.T. (Spec. or Fail)) (Eff. (%) (H.T. Temp. (°F)) (Time (hr)) (Grth. (welded) (Blk. Steel, Lp. (Inch)) (R.T. (Spec. or Fail)) (No. of Courses

8. Heads: (a) Mat SA-240 TP-304L (b) Mat SA-240 TP-304L  
(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) TOP	.1875	0			2.1				CONCAVE
(b) BOTTOM	.25	0			30				CONCAVE

If removable, bolts used (describe other fastenings):

9. MAWP 25 15 230 230 of 25 psi. Hydro. pneu., or corr.b. test press. 33 psi  
(internal) (external) (internal) (external) (internal) (external)

10. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Mat	Nom. Thk	Reinforcement Material	How Attached	Location
Level	1	3"	stud-pad	SA-240 TP-304L	1.437	N/A	Attached	shell
CIP	1	6"	Cl150Flg	SA-312 TP-304L	.2800	SA240b/p304L	UW16.1⊗	shell
Feed & Liquid Outlet	2	12"	Cl150Flg	SA-312 TP-304L	.3750	SA240b/p304L	UW16.1⊗	shell-cone
Vapor Outlet	1	12"	W.E	SA-312 TP-304L	.3750	SA240b/p304L	UW16.1⊗	head
Manway	1	20"	Cl150Flg	SA-312 TP-304L	.3750	SA240b/p304L	UW16.1⊗	shell

11. Supports: Skirt YES Lugs Legs Others Attached Welded  
(Yes or No) (Yes or No) (Yes or 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:

(2) 1/4" SA240 stiffener rings welded to shell (1) welded to head, (1) seam 70% E. 2 Lifting Lugs welded to head for lifting empty ONLY.  
**CERTIFICATE OF SHOP/FIELD COMPLIANCE**  
 Impact Test Exempt Per UHA-51(d)&(g) UCS 66(c), Owner/User responsible for Pressure Relief Valve

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. 32,004 Expires 12/31/2009

Date 2/2/07 (a) Name Bota Welding, LLC Signed [Signature]  
(Manufacturer)

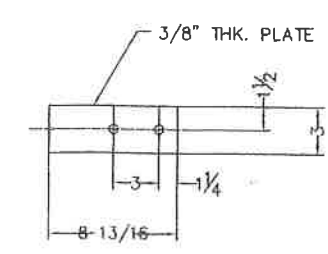
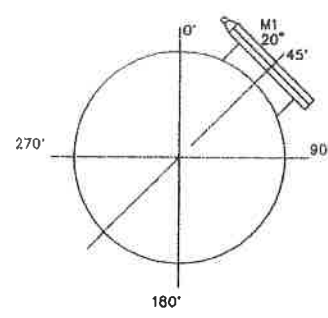
Vessel constructed by Bota Welding, LLC at 402 - 56<sup>th</sup> Street, Niagara Falls, NY 14304  
(Name and address of manufacturer)

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 York and employed by HSB CI  
(State or Province) (Name and address)

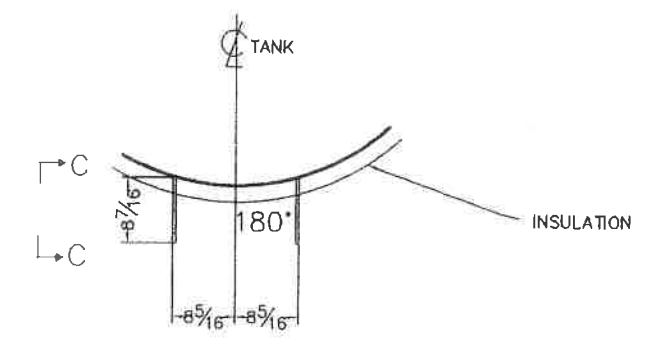
have inspected the component described in this Manufacturer's Data Report on 2/2/07 and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME Code, Section VIII, Division 1. By signing this certificate neither the inspector nor 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 2/2/07 Signed [Signature] Commissions NB11103ANV5078  
(Name and address of inspector) (Name and address of inspector) (State, Prov. and No.)

DESIGN DATA	
CODE:	ASME VIII DIV1 STAMPED AND REGISTERED
SPECIFIC GRAVITY/CONTENTS:	1.26
DESIGN PRESS. 25/FV	(psig)
DESIGN TEMP.:	230 (F)
OPERATING PRESS.:	8.39 (psig)
OPERATING TEMP.:	185 (F)
MDMT:	-20 DEG. F
CORROSION ALLOWANCE:	NONE
HYDRAULIC TEST PRESSURE:	32.5 PSI

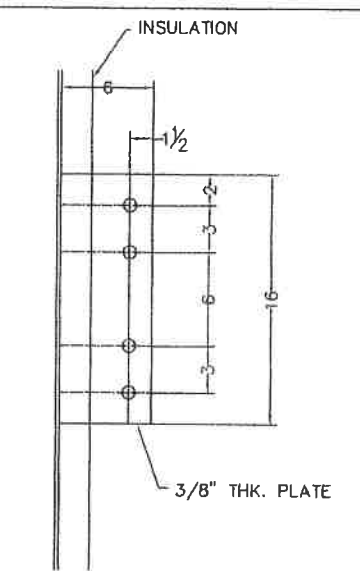


SECTION C-C



LADDER SUPPORT CLIP  
3 SETS REQ'D (23)

CLIP #	ELEVATION	ANGLE
LC-2	138"	150°
LC-1	6"	150°



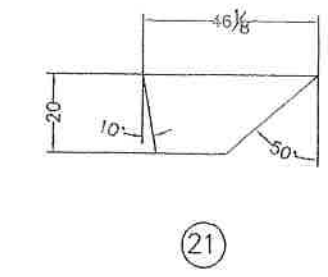
PLATFORM SUPPORT CLIP  
4 PCS REQ'D (24)

CLIP #	ELEVATION	ANGLE
PC-4	142-3/8"	5°
PC-3	142-3/8"	45°
PC-2	142-3/8"	86°
PC-1	142-3/8"	126°

- NOTES:
- 1) ALL BOLT HOLES TO STRADDLE NATURAL CENTERLINES UNLESS NOTED OTHERWISE.
  - 2) ALL STAINLESS STEEL TO BE 1 GRADE AND CERTIFIED.
  - 3) FOR ALL INTERIOR AND EXTERIOR SURFACES SEE THERMAL KINETICS CLEANING AND BLASTING SPEC GF-1.8.0 CLASS J
  - 4) ALL TOLERANCES PER ASME PRESSURE VESSEL CODE LATEST EDITION, SECTION VIII, DIVISION J
  - 5) WIND 80 MPH, EXP. C WF = 1.0
  - 6) ALL FILLET WELDS TO BE 3/16" UNLESS NOTED

AS BUILT DRAWING

(PC) PLATFORM CLIP  
(LC) LADDER CLIP



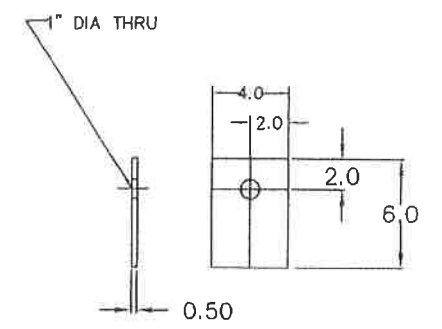
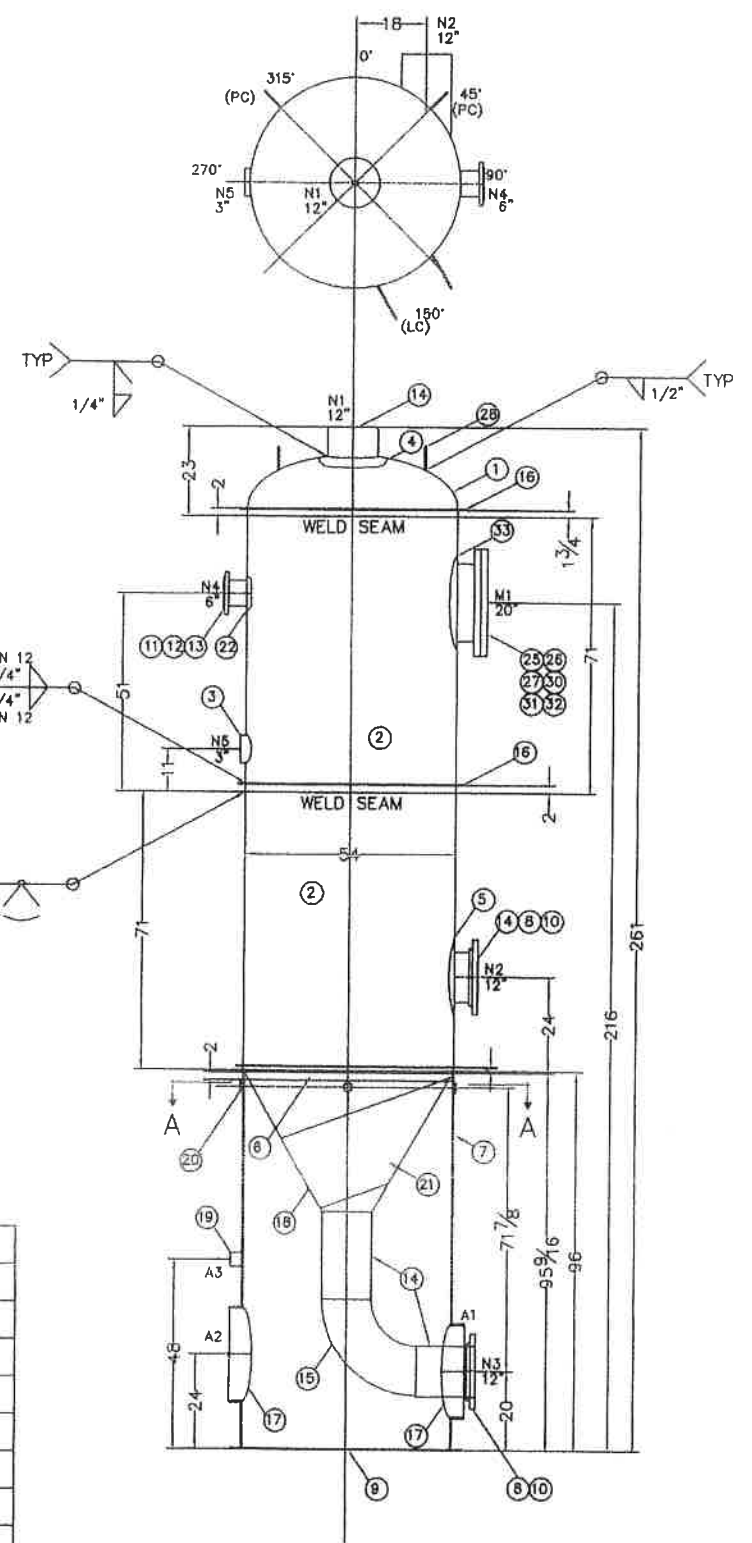
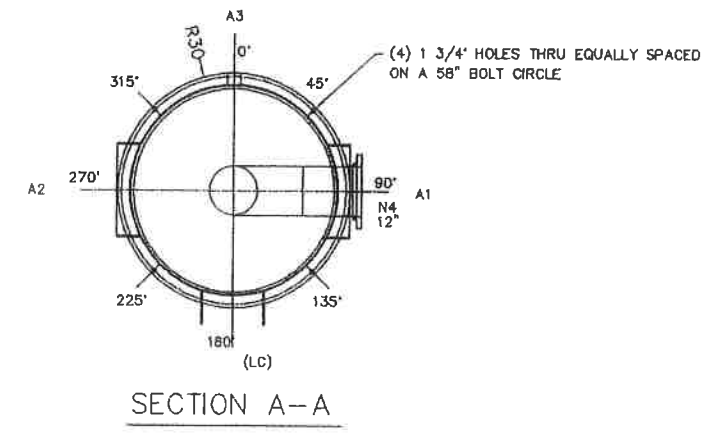
(21)

REV	BY	DATE	DESCRIPTION

**BOTA WELDING**

Customer: THERMAL-KINETICS  
Title: TP-4113

Drawing Scale: \_\_\_\_\_ Plot Scale: \_\_\_\_\_  
Customer Dwg. Number: 6018-MQ-4113  
Sheet: 2 of 2  
D DWG-NO: \_\_\_\_\_



(28) LIFT LUG

A3	FIRE PROTECTION	3"	ATMO	PLAIN	0°	
A2	SKIRT ACCESS	24"	ATMO	PLAIN	270°	
A1	SKIRT PENETRATION FOR N3	24"	ATMO	PLAIN	90°	
N5	LEVEL TRANSMITTER	3"	150#	W/P	LT-021	270°
N4	CIP	6"	150#	LJ		90°
N3	LIQUID OUTLET	12"	150#	LJ	TO PC-4113	90°
N2	FEED	12"	150#	LJ	FR PC-4112	0°
N1	VAPOR OUTLET	12"		BW	TO ET-4113	
NOZZ.	SERVICE	SIZE	RATING	TYPE	REMARKS	DEGREE

115  
BOTA WELDING LLC



25	X	X	X
250	X	X	X
15	X	X	X
20	X	X	X
25	X	X	X

TP-4113

2007