

**FORM U-1A 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 Boiler and Pressure Vessel Code Rules, Section VIII, Division 1**

1. Manufactured and certified by HEATEC INC. 5200 WILSON ROAD CHATTANOOGA, TENNESSEE 37410

(Name and address of Manufacturer)

2. Manufactured for ENCORE DEC 14830 KIVETT LANE RENO, NV 89521

(Name and address of Purchaser)

3. Location of installation ENCORE DEC RYZE RENEWABLES 611 PERU STREET MECARRAN, NV 89434

(Name and address)

4. Type SMLS PIPE COIL 18-136 NONE 18136-HCD 3208 2018  
 (Horizontal or vertical, tank) (Manufacturer's serial number) (CRN) (Drawing number) (National Board number) (Year built)

5. ASME Code, Section VIII, Div. 1 2017 EDITION NONE U-1H,UW-2(d)DIRECT FIRED  
 (Edition and Addenda, if applicable (date)) (Code Case number) (Special service per UG-120(d))

6. Shell SA-312 0.337" 0.0625" 3.826" 31' - 8 3/8"  
 (Material spec. number, grade) (Nominal thickness) (Corr. allow.) (Inner diameter) (Length (overall))

**Body Flanges on Shells**

No.	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location	Bolting			
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-

7. Seams SEAMLESS NONE 100 NONE N/A WELDED, SNGL, BUTT FULL 100 100  
 (Long. (welded, dbl., sngl., lap, butt)) (R.T. (spot or full)) (Eff., %) (H.T. temp.) (Time, hr) (Girth (welded, dbl., sngl., lap, butt)) (R.T. (spot or full)) (Eff., %) (No. of courses)

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

**Body Flanges on Heads**

	Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Bolting			
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
(a)	-	-	-	-	-	-	-	-	-	-	-	-
(b)	-	-	-	-	-	-	-	-	-	-	-	-

9. MAWP 1,400 psig 0 at max. temp. 775 F 775 F  
 (Internal) (External) (Internal) (External)

Min. design metal temp. -20 F at 1,400 psig . Hydro., pneu., or comb. test pressure HYDROTEST 2,167 psig .

Proof test - .

10. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
INLET	4	4"	RTJWN	SA-312	SA-182	0.337"	.0625"	NONE	WELDED	WELDED	END
OUTLET	4	4"	RTJWN	SA-312	SA-182	0.337"	.0625"	NONE	WELDED	WELDED	END
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

11. Supports: Skirt NO Lugs NONE Legs NONE Other NONE Attached NONE  
 (Yes or no) (Number) (Number) (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: NO SAFETY DEVICES INSTALLED BY HEATEC INC. SAFETY DEVICES BY END USER PER UG-125.

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

IMPACT TESTING EXEMPT PER UCS-66(b). SEE ATTACHED U-4 FORM.

## FORM U-1A

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Manufactured by HEATEC INC.  
Manufacturer's Serial No. 18-136 CRN NONE National Board No. 3208

## CERTIFICATE OF SHOP/FIELD 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 BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization number 20348 expires 10/01/2021.

Date 12/12/18 Co. name HEATEC INC. Signed Chin Col  
(Manufacturer) (Representative)

## CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by HEATEC INC. at 5200 WILSON. RD. CHATTANOOGA, TN. 37410.

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by Arise of BRECKSVILLE, OHIO

have inspected the component described in this Manufacturer's Data Report on 12-12-18, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her 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 12-12-18 Signed Robert Benoit Commissions NB 716  
(Authorized Inspector) (National Board Authorized Inspector Commission number)

1. Manufactured and certified by	HEATEC INC. 5200 WILSON ROAD CHATTANOOGA, TENNESSEE 37410		
	(Name and address of Manufacturer)		
2. Manufactured for	ENCORE DEC 14830 KIVETT LANE RENO, NV 89521		
	(Name and address of Purchaser)		
3. Location of installation	ENCORE DEC RYZE RENEWABLES 611 PERU STREET MECARRAN, NV 89434		
	(Name and address)		
4. Type	SEAMLESS PIPE COIL	HEAT EXCHANGER	18-136
	(Horizontal, vertical, or sphere)	(Tank, separator, heat exch., etc.)	(Manufacturer's serial number)
NONE	18136-HCD	3208	2018
(CRN)	(Drawing number)	(National Board number)	(Year built)

Certificate of Authorization: Type U No. 20348 Expires 10/01/2021

Date 12/12/18 Name HEATEC INC. Signed Chin Cox  
(Manufacturer) (Representative)

Date 12-12-18 Name Robert Boudette Commissions NB 716  
(Authorized Inspector) (National Board Authorized Inspector Commission number)