



ISO 9001  
Certified

# Zimmer™

## LPG Vaporizer



[algas-sdi.com](http://algas-sdi.com)

### DESIGN PROOF

FILE NAME: Algas\_Zimmer\_Broch  
LAST MODIFIED: March 12, 2012 2:44 PM  
VERSION NUMBER: 6  
DESIGNER: CDT

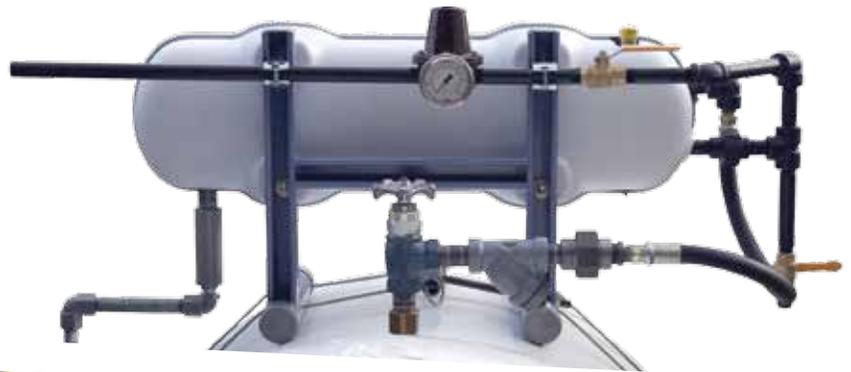
## LPG Vaporizer

**Zimmer**<sup>™</sup> is the most innovative, easy-to-use, and reliable small capacity LPG vaporizer in the world. Our patented technology provides the marketplace quality and affordability.

When quality, simplicity and value are your priorities,  
**just choose Zimmer.**<sup>™</sup>

### Key Points

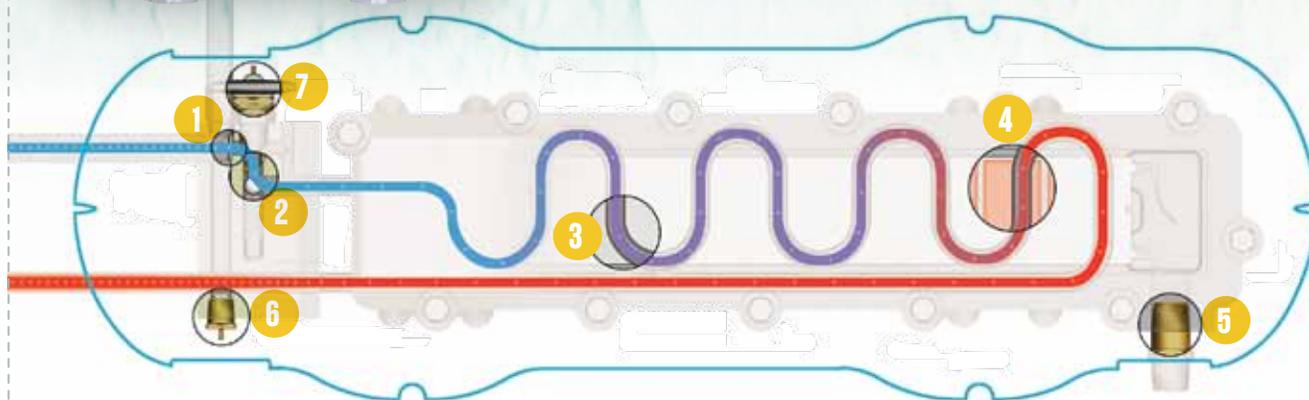
- ➔ Dry electric design
- ➔ Self-regulating heaters match heat output to LPG usage
- ➔ No switches, thermostats, floats or relays to fail
- ➔ Expect 3 to 5 years of NO maintenance!
- ➔ Voltage options: 100-240VAC or DC
- ➔ Explosion-proof — Class I, Div 1, Gr D; EEx d IIA T4, Ex II 2G
- ➔ Approved by UL/Demko; CE and ATEX marked
- ➔ Corrosion-resistant heat exchanger



Zimmer is protected under various granted and pending USA, European, Japanese and Korean patents including but not limited to: 6816669, 6707987, 02734559.4, 10-0882382, 6957013, 03779340.3, 4667872, 2010-225074, 10-2005-7006945

### DESIGN PROOF

FILE NAME: Algas\_Zimmer\_Broch  
LAST MODIFIED: March 12, 2012 2:44 PM  
VERSION NUMBER: 6  
DESIGNER: CDT



### Step 1

Liquid LPG enters the vaporizer via an inlet control valve.

### Step 2

The control valve's inverted, metal to metal seat provides durability while preventing debris from collecting on the valve seat.

### Step 3

Liquid LPG enters the steel heat exchanger tubes cast into the aluminum body. The steel tubes provide

a secure pressure boundary and enhance heat transfer.

### Step 4

Self-regulating heaters replenish energy extracted during the vaporization process. The unique design prevents overheating and uses NO temperature sensors, relays, or similar control devices.

### Step 5

Accepts AC or DC power.

### Step 6

The temperature of the LPG vapor exiting the vaporizer is monitored by a temperature sensitive bulb. This bulb provides feedback to the inlet control valve.

### Step 7

The inlet control valve modulates the flow of liquid LPG into the vaporizer relative to the vapor exit temperature to ensure complete vaporization occurs.

## IDEALLY SUITED FOR:



Hotels & Resorts



Poultry Farms



Hog Barns



Ski Areas



Restaurants



Small Factories



Construction Zones



Buses



HVOF Coatings

## Operational Overview

**Zimmer** is comprised of an electrically heated aluminum heat exchanger, packaged within an aesthetically pleasing, UV protective thermoplastic resin enclosure. The entire vaporizer assembly weighs approximately 65 lbs (30 kg) and is fully self-contained. To say **Zimmer** is easy to use is an understatement.

End users benefit from **Zimmer's** minimal space requirements and flexible mounting configurations. Typical applications include commercial kitchens, small light industrial loads, mobile requirements and high-end residential users. With **Zimmer**, your LPG tank will provide consistent trouble free vapor supply, day-in and day-out.

Start Up: 30 – 50 minutes depending on temperature

[algas-sdi.com](http://algas-sdi.com)

### DESIGN PROOF

FILE NAME: Algas\_Zimmer\_Broch  
LAST MODIFIED: March 12, 2012 2:44 PM  
VERSION NUMBER: 6  
DESIGNER: CDT

# Zimmer™ Specifications



<b>Vaporizer Type/Model:</b>	Electric   Model Z40			
<b>Electrical Information:</b> 100-240v 50-60 hz	<b>Voltage</b>	<b>Phase</b>	<b><sup>1</sup>Watts</b>	<b>Amps</b>
	2120	1	3,270	27.3
	208	1	4,510	21.7
	220	1	4,680	21.3
	240	1	4,680	19.5
<b>Hazardous Area Classification:</b>	EEx d IIA T4, II 2 G Class I, Division 1, Group D T4			
<b>Approvals:</b>	UL, CE, DEMKO, <sup>3</sup> PED, ATEX			
<b><sup>4</sup>Vaporization Capacity:</b>	1.82 MMBTU/h (20 US Gal/h)	0.448 MMkcal/h (40 kg/h)		
<b>Heat Exchanger:</b>	<b>Relief Valve Set Point:</b>	250 PSIG	17.2 Barg	
	<b><sup>5</sup>Design Pressure:</b>	250 PSIG	17.2 Barg	
	<b><sup>6</sup>Proof Pressure:</b>	1250 PSIG	86.2 Barg	
<b>Unit Dimensions:</b>	31.1" L x 10.3" H x 6.4" W 791mm L x 260 mm H x 163.mm W			
<b>Shipping Weight:</b>	70 lbs. 32 kg			
<b>Shipping Dimensions:</b>	35"L x 15"W x 12"H 889mm L x 381mm W x 305mm H			
<b>Optional Accessories:</b>	Mounting Kit, Tank Mount Kit, Valve and Strainer Kit, Outlet Regulator			

<sup>1</sup> Wattages shown reflect peak consumption. Vaporizer power consumption modulates to LPG input rate. Electrical Consumption: 0.1 kWh./kg vaporized.

<sup>2</sup> Continuous vaporization capacity at 120V is 25% less than shown.

<sup>3</sup> PED is per 'Standard Engineering Practice' SEP.

<sup>4</sup> LPG composition effects rated capacity. Note that alternative models and capacities are **only available** in certain countries **outside** the USA and Canada. Contact your Region Manager for details.

<sup>5</sup> Max Allowable Working Pressure or MAWP.

<sup>6</sup> Pressure the product is capable of withstanding without suffering permanent damage such deformation, bending or warping of the material.

**Note:** LPG containing asphaltenes, paraffins or similar substances will impact performance.

Algas-SDI developed its first vaporizer in 1932. Over eighty years later, we still lead the market in quality, innovation and **commitment to purpose**. Our products allow businesses located off the gas grid or under curtailment, to operate. We eliminate downtime ensuring **workers can work and goods and services can flow to market**.



151 S. Michigan Seattle, WA USA 98108  
P 206-789-5410 | F 206-789-5414  
sales@algas-sdi.com



ZIM-03/2012

algas-sdi.com

Zimmer™ is a Trademark of Algas-SDI, LLC.



## DESIGN PROOF

FILE NAME: Algas\_Zimmer\_Broch  
LAST MODIFIED: March 12, 2012 2:44 PM  
VERSION NUMBER: 6  
DESIGNER: CDT