



**Algas-SDI**  
Origins in 1932

**TUV NORD**  
ISO 9001  
Certified

# DF Series™

Direct Fired Vaporizer



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

# Direct Fired Vaporizer

## Key Points

- ➔ No electricity required
- ➔ Auto re-ignitor standard
- ➔ Double liquid carry-over protection
- ➔ Thermostat easily operated with gloves
- ➔ Easy access inlet valve
- ➔ Low profiles (40/40 thru 120/60) for ease of portability
- ➔ Proprietary capacity control valve prevents lock up
- ➔ Burner gas isolation valve provided
- ➔ Thermowell allows easy replacement of gas valve
- ➔ “Snap-in” 40/40 pilot assembly
- ➔ UL Approved, CE Marked, PED Stamped

**Algas-SDI** direct fired vaporizers all carry the ASME U stamp, UL Approval (US and Canada) and the CRN mark for all Canadian Provinces. The 40/40 – 120.60 also carry the PED and CE/PED (DNV) marks.

Our **DF Series™** vaporizer, first patented in 1932, remains the most commonly used vaporizer in the world! It's simple, economical and easy to install. When an application lacks electricity or requires portability, **this is the ideal solution.**

## Operational Overview

By design, **DF Series direct fired** vaporizers apply heat directly to a pressure vessel containing liquid LPG. The heating process induces vaporization, while consuming a small amount of the vapor generated. DF Series vaporizers ensure a continuous vapor supply to your application.

**Algas-SDI** vaporizers are built tough. A rugged heavy gauge metal enclosure with powder coat applied over zinc plating protects against harsh environments. The stainless steel exhaust flue and stainless steel tubing eliminate corrosion and extend service life. The stainless steel tubing also minimizes potential clogging of the vaporizer's temperature controller and burner orifices.

Access to the vaporizer internals is provided via a <sup>1</sup>latch-less reliable door panel. The design allows easy removal of the burner if required. Our domed exhaust top combined with our unique flue collar design, prevents water rain infiltration to the burner. **Algas-SDI** provides an automatic 9VDC re-ignitor as standard. When service requires replacement of the re-ignitor, spade connectors make the field change simple. Removal of the 9VDC battery allows the end user to disable the re-ignitor.

<sup>1</sup> Latch-less doors are provided in Models 40/40 thru 120/60



## IDEALLY SUITED FOR:



Agriculture/  
Orchards



Animal  
Confinement

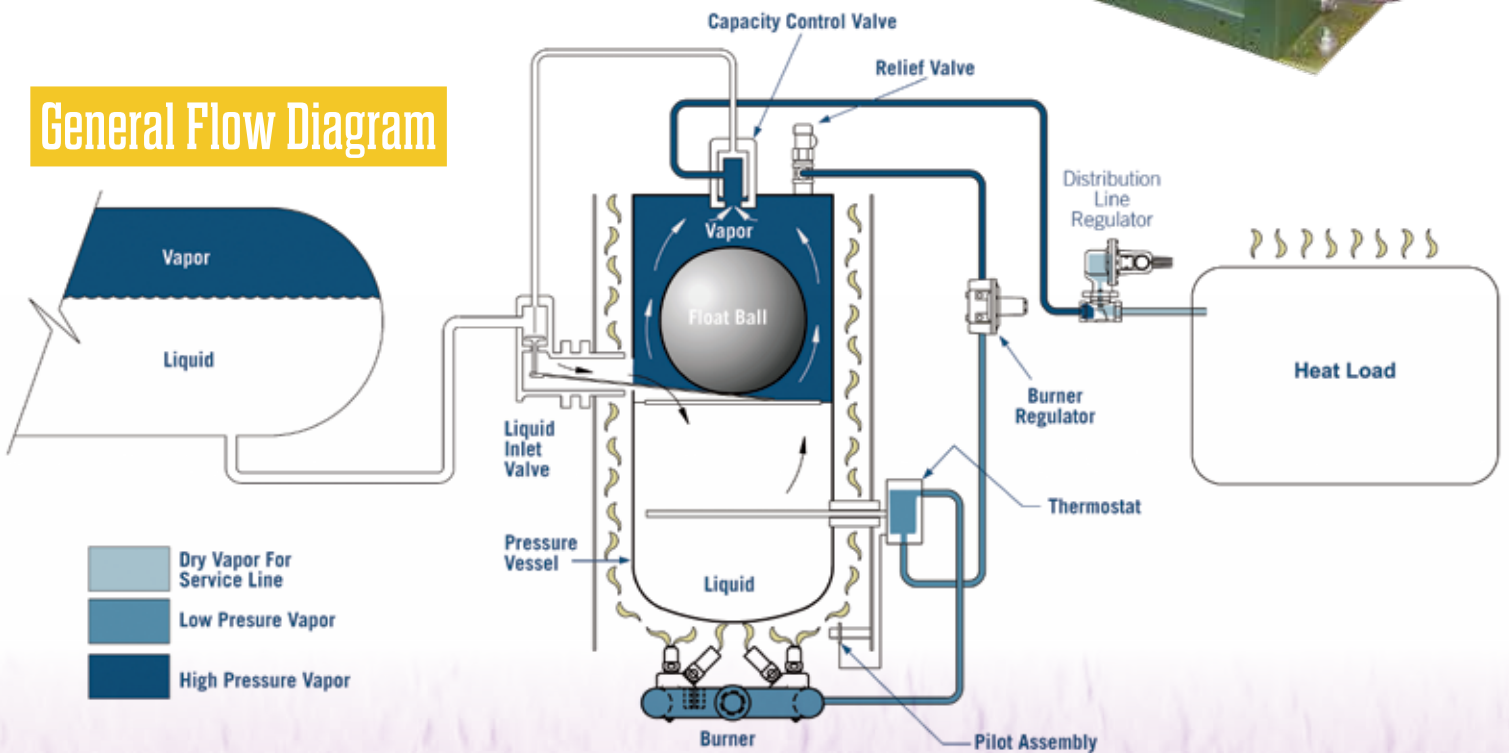


Crop  
Drying



Construction  
Heating

## General Flow Diagram



# DF Series™ Specifications

<b>Vaporization Type:</b>	Direct Fired / Flow Through							
<b>Electrical Data:</b>	None Required							
<b>Model Number:</b>	<b>40/40</b>	<b>80/40</b>	<b>120/60</b>	<b>160H</b>	<b>320H</b>	<b>480H</b>	<b>640H</b>	<b>800H</b>
<sup>1</sup> Design Pressure	← 290 PSIG / 20.0 Barg →							
Relief Valve Set Point	← 250 PSIG / 17.2 Barg →							
Hydrostatic Pressure	← 435 PSIG / 29.9 Barg →							
<b>Vaporizer Approvals:</b>								
ASME, UL (US and Canada)	●	●	●	●	●	●	●	●
CE, PED (DNV)	●	●	●					
Liquid <b>Inlet</b> (FNPT)	¾"	¾"	¾"	¾"	2"	2"	2"	2"
Vapor <b>Outlet</b> (FNPT)	1"	1"	1"	1"	2"	2"	2"	2"
<b>Vaporization Capacity:</b>								
Kg/h	80	160	240	320	640	960	1280	1535
[Nominal] <sup>2</sup> US Gal/h	40	80	120	160	320	480	640	800
MMBTU/h	3.6	7.2	10.9	14.6	29.1	43.7	58.2	72.8
<b>Burner Input:</b>								
(,000) Kcal/h	13.0	25.9	38.8	45.4	90.8	136.2	181.6	227.6
(,000) BTU/h	51.3	102.7	154.1	180.0	360.0	540.0	720.0	900.0
<b>Burner Ignition:</b>	9vdc Re-ignitor standard on all units							
<b>Shipping Weight:</b>	155 lbs 71 kg	220 lbs 100 kg	275 lbs 125 kg	405 lbs 184 kg	810 lbs 368 kg	1215 lbs 552 kg	1620 lbs 736 kg	2025 lbs 920 kg
<b>Shipping Dimensions:</b>								
Length	21" 534 mm	21" 534 mm	21" 534 mm	36" 915 mm	43" 1092 mm	43" 1092 mm	86" 2184 mm	43" 1092 mm
Width	22" 559 mm	35" 889 mm	35" 889 mm	36" 915 mm	48" 1219 mm	68" 1727 mm	39" 991 mm	108" 2743 mm
Height	42" 1067 mm	42" 1067 mm	52" 1321 mm	68" 1727 mm	72" 1829 mm	72" 1827 mm	72" 1829 mm	76" 1931 mm



- Optional Accessories:**
- Economy Operation Kit
  - Filtaire for Heavy Ends
  - Relief Valve "Pipe Away" Adapter
  - Auto Ignition Kit-110VAC

<sup>1</sup> Max Allowable Working Pressure (MAWP)  
<sup>2</sup> Vaporizer capacity shown as nominal. Actual capacity is affected by LPG composition and pressure.

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**.



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