



GAS LINE HEATERS

Modular, Insulated Heat Wrap Solutions

More control. Uniform heat.

Semiconductor fabrication demands precision heating of gas delivery lines, fore lines, vacuum lines and valves to prevent deposition of impurities that can ruin a wafer. Heatron's modular heaters are custom-fitted and interconnect to completely envelop gas delivery piping systems, ensuring a uniform temperature gradient and protection against particulate formation.

Snap on. Snap off.

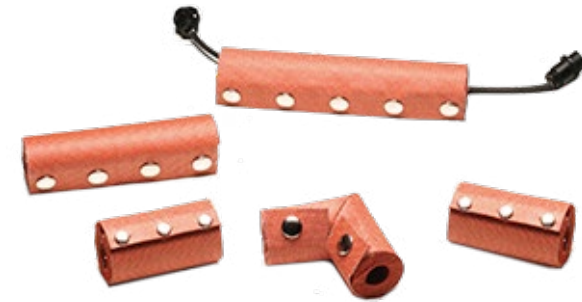
Heatron's modular gas line heaters are customized for your system. Pipe wraps, formed valve covers, and interlocking angles interconnect with insulated leads. Each piece snaps right into place, reducing downtime for installation. Heatron's gas line products are manufactured in the USA.

*Endlessly inventive
heating solutions for
high-performing applications.*



SPECIFICATIONS

Performance beyond specifications listed here is possible with custom design.



UL 94 V-0 Gas Line Heaters

UL 94HB Gas Line Heaters

Specifications	Metric	English
Max. Operating Temperature (UL)	150°C	302°F
Max. Watt Density (Gas line to 3/4")	0.4 W/cm ²	2.5 W/in. ²
Max. Watt Density (Pump line to 2")	0.25 W/cm ²	1.5 W/in. ²
Max. Watt Density (Pump line to 4")	0.2 W/cm ²	1.25 W/in. ²
Insulation Options	Foam and Formed Silicone Rubber	
Typical Voltage	120V, 208V, 240V (AC)	
Color:	Grey	

Specifications	Metric	English
Max. Operating Temperature (UL)	200°C	392°F
Max. Watt Density (Gas line to 3/4")	0.4 W/cm ²	2.5 W/in. ²
Max. Watt Density (Pump line to 2")	0.25 W/cm ²	1.5 W/in. ²
Max. Watt Density (Pump line to 4")	0.2 W/cm ²	1.25 W/in. ²
Insulation Options	Foam and Formed Silicone Rubber	
Typical Voltage	120V, 208V, 240V (AC)	
Color:	Orange	

APPLICATIONS

LINES...

- Gas Lines
- Gas Panels
- Vacuum Lines
- Exhaust Lines
- Fore Lines
- Pump Lines
- Valves

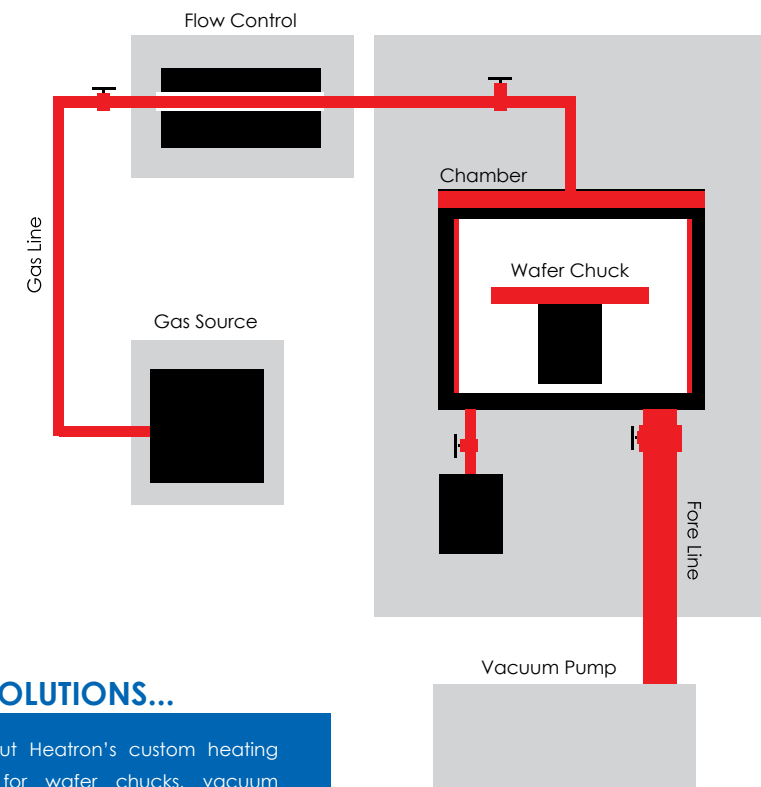
GASES...

- Silicone Nitride
- Aluminum Etch
- Tungsten Etch
- CVD

Heatron modular pipe wrap systems are primarily used in high-temperature, high-volume gas delivery, exhaust and pump systems, like those used in semiconductor fabrication.

The snap-to-fit design is easier to apply and remove than heated tape, and creates a tighter fit than Velcro®, making it the best option for high-maintenance systems where temperature fluctuation can drive up costs.

GAS LINE HEATERS ARE COMPLIANT WITH SEMI S2-93 SAFETY REQUIREMENTS.



MORE SOLUTIONS...

Ask about Heatron's custom heating options for wafer chucks, vacuum chambers, and more specialty heaters for the semiconductor industry.



UL 94V-0 Fore Line/Exhaust Line

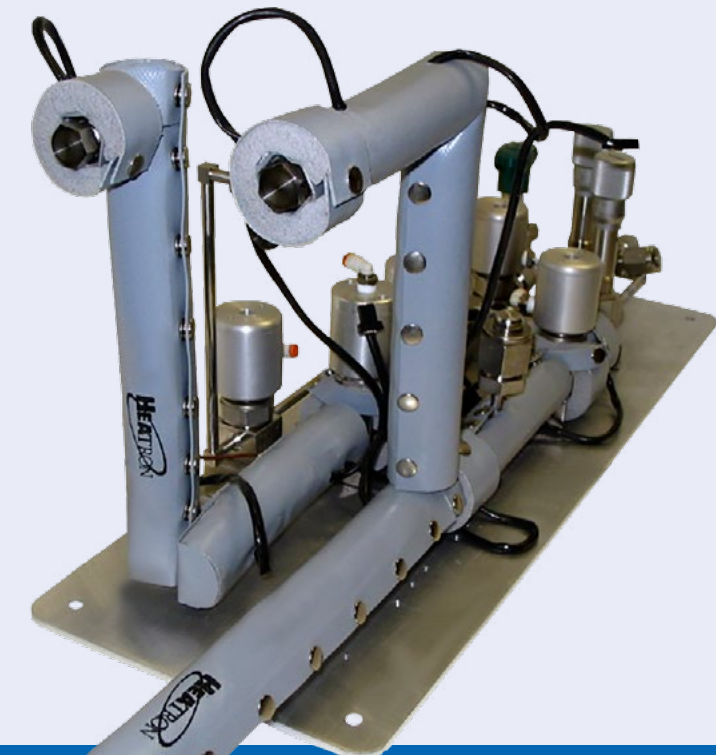
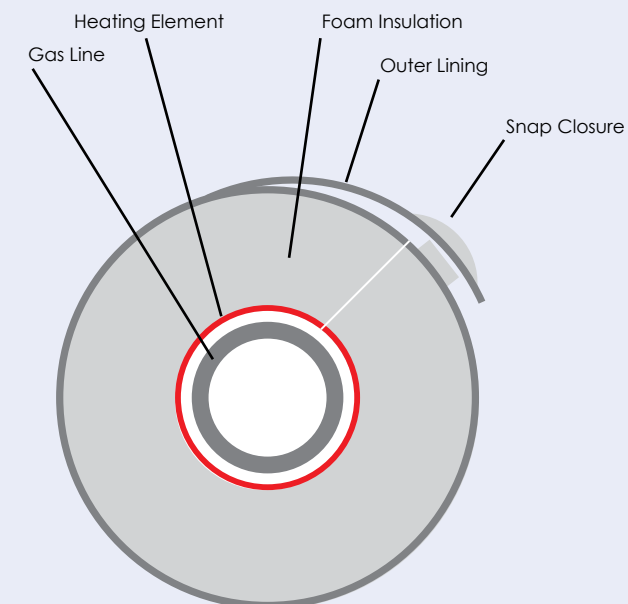
Specifications	Metric	English
Max. Operating Temperature (UL)	150°C	302°F
Max. Watt Density (Gas line to 3/4")	0.4 W/cm ²	2.5 W/in. ²
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Max. Watt Density (Pump line to 4")	0.2 W/cm ²	1.25 W/in. ²
Insulation Options	Foam and Formed Silicone Rubber	
Typical Voltage	120V, 208V, 240V (AC)	
Color:	Grey	

PROCESS

Complex assembly?
No problem.

Heatron takes your drawings or 3D models and designs each piece of the system to fit. Angles, curves and tight spaces are no problem. Linear pipe wraps, corners, fitted valve covers and formed caps are all checked for fit and performance before entering production.

The end result is a tight fit, with fast installation and maximum coverage, ensuring a smooth temperature gradient and better particulate control, even in the most complex systems.



ABOUT HEATRON



KAPTON/POLYIMIDE ETCH

Super-thin and precisely etched foil heaters with low outgassing for a wide range of applications.



SILICONE RUBBER

High strength fiberglass reinforcement with wire-wound or etched heating elements provide even heat.



ETCHED MICA

Rigid etched mica heaters offer high temperature, large physical dimensions and high watt density.



THICK FILM

Printed circuits on metal or ceramic provide unsurpassed control, high heat resistance and integrated controls.

More options for higher performance solutions.

Heatron is a global leader in design, engineering and manufacturing of heating solutions. Heatron's experienced engineers and designers offer complete solutions, from initial concept and design to complex integration and manufacturing. Heatron speeds time to market by bridging the gap between concept and commercialization.

Our expertise in design, manufacturing and market standards provides our customers with the documentation and knowledge of agency approvals that is essential in today's tightly regulated environment.



ISO 9001 • Registered by Underwriters Laboratories, Inc.
FDA Registration: 3001297547
A member of the NIBE Element group.

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Special applications for...

Heatron is a trusted manufacturing partner for a broad range of industries. We understand the exacting demands you face and what it takes to meet them.

3D Printing	Laboratory Equipment	Process Industries
Aviation/Defense	Medical Devices	Security
Commercial Equipment	Oil and Gas	Semiconductor
Food Service	Packaging	Telecommunications
Industrial Equipment	Plastics Processing	