CiphercoN™ 1500 Fully Automated Haz Gas Cabinet

CiphercoN™ 1500 Fully Automated Gas Cabinet is representative of SDC®’s continuous drive and commitment to providing the industry’s safest and most reliable Ultra-High-Purity (UHP) specialty gas equipment available. Mass customization and modular design concepts of the gas panels, controls architecture and cabinet enclosure have combined to widen the product configuration spectrum and greatly increase user flexibility. From the Fab to the Lab to the University, SDC® sets itself apart as the clear choice for value in today’s budget-conscious environment.

All welding and assembly is performed in a 4000 ft² CLASS 100/CLASS 10 clean room facility by ASME® Section IX Certified Weld Technicians.

Standard Configurations
- 2-cyl, [1-process, 1-purge]
- 2-cyl, [2-process], external purge source
- 3 cyl, [2-process, 1-purge]
- Independent out or auto-sitchover
- Cabinet-to-cabinet switchover

Standard Features
- PLC control of all critical functions
- Bright 10.4” color touch screen interface
- Proven auto-sequenced routines for all aspects of operations and maintenance
- User settable limits for all process and alarm parameters
- Exhaust pressure monitor
- On-screen warnings, alarms, prompting and instructions
- Emergency Off (EMO)
- EMO and EGO inputs
- Alarm outputs
- Multi-level password protection
- Diagnostics screen
- Valve cycle count screen
- Z-Purge ready for Class I Div II compliance

2-Cylinder Model
**Process Panel Features**

- Ultra-High-Purity (UHP) 316L SS or VAR construction
- Surface finish 10 Ra avg. or better
- Springless diaphragm valves
- Tied-diaphragm process regulator
- Precision flow sensor
- Vacuum assisted purging
- UHP orbitally welded with strategic VCR® breaks
- Helium leak tested to $1.0 \times 10^{-9}$ atm*cc/s
- CLASS 100 / CLASS 10 clean room assembly and tested

**Dimensions**

- 1 cyl. - 24”W x 84”H x 19”D
- 2 cyl. - 24”W x 84”H x 19”D
- 3 cyl. - 36”W x 84”H x 19”D

* Height dimensions include controller. Add 6.0” to width with cylinder heating option.

**Codes and Standards**

- ASME Section IX
- SEMI® S2 Safety Guidelines for Semiconductor Manufacturing Equipment
- NFPA® 79, 496, 70 [NEC®]
- Factory Mutual®
- UL®
- CE®

The CiphercoN™ 1500 makes it easy to meet your exact gas delivery needs. Our Modular Design Concept allows for component-level replacement, ease of service and upgradeability. Begin by choosing one of several “core” gas cabinet configurations. Start customizing right at the gas panel level with standard choices for regulator type, valve type, transducer ranges and purity level. Zero in further with a myriad of options like: integrated scales, onboard gas leak detection, purgeable splitters, RFO, filtration, purification, and many more. SDC®’s step-by-step worksheet will walk you through this process in a simple manner. SDC® Sales Engineers are always available to work through the customization process with you, either by phone, or in person.

**FACILITIES REQUIREMENTS**

<table>
<thead>
<tr>
<th>Facility</th>
<th>Requirement</th>
<th>Maximum</th>
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</thead>
<tbody>
<tr>
<td>Pneumatic Supply</td>
<td>Adjustable to 90 psig</td>
<td>1 slm max.</td>
</tr>
<tr>
<td>Process Purge</td>
<td>Adjustable to 80 psig</td>
<td>30 slm max.</td>
</tr>
<tr>
<td>Vacuum Drive</td>
<td>Adjustable to 85 psig</td>
<td>85 slm max.</td>
</tr>
<tr>
<td>Process Vent</td>
<td>&gt;1.0” WC</td>
<td>100 slm</td>
</tr>
<tr>
<td>Power</td>
<td>115V/3A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sprinkler [if used]</td>
<td>30 psig</td>
<td>31 gpm</td>
</tr>
<tr>
<td>Exhaust*</td>
<td>&gt;0.15” WC</td>
<td>300 scfm (2-cyl)</td>
</tr>
<tr>
<td></td>
<td>&gt;0.15” WC</td>
<td>450 scfm (3-cyl)</td>
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</tbody>
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* Damper must be adjusted to meet 200 fpm face velocity as required by UFC.