Humidity Cabinets

Designed to reproduce test conditions of high humidity.

www.cw-spec.com
C&W humidity cabinets are designed to reproduce test conditions of high humidity at constant or cycling temperatures.

The test chamber environment is created by water being heated to precise temperatures to generate the production of water vapour. The water vapour saturates the air in the test area which is constantly being circulated by the internal fan to ensure even distribution. The test panels or components are enveloped in the moisture enriched air, allowing the water to be absorbed by the coating and oxidising with the base metal resulting in either blistering of the coating or the formation of red rust or oxidation on a non-ferrous metal. This test is used to reproduce the exposure to naturally occurring condensation or by cycling the temperature, in the cabinet dew formation can be produced. Pioneering designs have made C&W the UK leader in the manufacture of accelerated corrosion and environmental test cabinets.

Operating Modes
C&W humidity cabinets provide a wide range of environmental test conditions:

- Any constant temperature between 30°C and 80°C ±/– 1°C accuracy.
- Cyclic temperatures, step-up / step-down over time.
- Constant high humidity – 95% to 100% saturated.

Precise Control
C&W humidity cabinets are designed for ease of operation. Their comprehensive package of control and display features ensures that all cycles, events and functions can be closely monitored.

- Microprocessor controller with seven-programme memory.
- Full digital display of test conditions.
- Low water sensor protection.
- Air circulation by internal fan ensures uniform test conditions.
- Time cycle facility for precise test duration control.
- NTC temperature sensor for precise control.
- Over temperature safety cut-out system.
**Standards**

C&W cabinets conform to all leading corporate, national and international standards including:

**British/ISO/EN Standards:**
BS 3900 F2, BS 3900 F9, BS 3900 F15, ISO 6270, ISO 11503, EN 1096

**German Standards:**
DIN 50017

**American Standards:**
ASTM D4585, ASTM D2247, INS 30.16.08,

**Corporate Standards:**
Ford, GM, Honda, Nissan, Toyota, Volvo, Jaguar, Renault, VW, VG.95210, VG. 95332.

---

**Warranty**

Subject to agreed maintenance procedures a two year warranty is available. The standard warranty is one year.

---

**Fully automatic liquid level control of humidifier reservoir.**

**Low maintenance - high quality.**

---

**Design Benefits**

C&W humidity cabinets - clean functional design with high specification components

- Ergonomically designed control panel.
- Fire retardant GRP plastic structure with high chemical, water and temperature tolerance.
- Standard panel racks included. Options available.
- Wet seal apex roof, insulated or transparent.
- Corrosion resistant throughout.

---

**Humidity Function**

Humidity cabinets are dedicated cabinets only allowing humidity testing. But you can also obtain a standard corrosion test with humidity function added. This option is available for the following models:

<table>
<thead>
<tr>
<th>Volume</th>
<th>SF/AB</th>
<th>SF/AB/MP</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>CW1701</td>
<td>CW1901</td>
</tr>
<tr>
<td>200</td>
<td>CW1702</td>
<td>CW1902</td>
</tr>
<tr>
<td>450</td>
<td>CW1704</td>
<td>CW1904</td>
</tr>
<tr>
<td>750</td>
<td>CW1707</td>
<td>CW1907</td>
</tr>
<tr>
<td>1000</td>
<td>CW1710</td>
<td>CW1810</td>
</tr>
<tr>
<td>2000</td>
<td>CW1720</td>
<td>-</td>
</tr>
</tbody>
</table>
## Technical Specifications

<table>
<thead>
<tr>
<th>Models</th>
<th>CW1301 100 litre</th>
<th>CW1302 200 litre</th>
<th>CW1304 450 litre</th>
<th>CW1307 750 litre</th>
<th>CW1310 1000 litre</th>
<th>CW1320 2000 litre</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Dimensions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>1020 mm</td>
<td>1000 mm</td>
<td>1330 mm</td>
<td>1730 mm</td>
<td>1950 mm</td>
<td>2760 mm</td>
</tr>
<tr>
<td>W</td>
<td>730 mm</td>
<td>830 mm</td>
<td>1020 mm</td>
<td>1290 mm</td>
<td>1350 mm</td>
<td>1350 mm</td>
</tr>
<tr>
<td>H</td>
<td>780 mm</td>
<td>1040 mm</td>
<td>1120 mm</td>
<td>1370 mm</td>
<td>1380 mm</td>
<td>1650 mm</td>
</tr>
<tr>
<td><strong>Internal Dimensions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>600 mm</td>
<td>610 mm</td>
<td>825 mm</td>
<td>1120 mm</td>
<td>1460 mm</td>
<td>2000 mm</td>
</tr>
<tr>
<td>W</td>
<td>450 mm</td>
<td>510 mm</td>
<td>635 mm</td>
<td>870 mm</td>
<td>1030 mm</td>
<td>1000 mm</td>
</tr>
<tr>
<td>H¹</td>
<td>375 mm</td>
<td>455 mm</td>
<td>610 mm</td>
<td>760 mm</td>
<td>700 mm</td>
<td>850 mm</td>
</tr>
<tr>
<td>H²</td>
<td>538 mm</td>
<td>625 mm</td>
<td>810 mm</td>
<td>1090 mm</td>
<td>1065 mm</td>
<td>1175 mm</td>
</tr>
<tr>
<td><strong>Panel Capacity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>72</td>
<td>80</td>
<td>132</td>
<td>210</td>
<td>344</td>
<td>516</td>
</tr>
<tr>
<td><strong>Power Supply Amp</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>13</td>
<td>12</td>
<td>13</td>
<td>20</td>
<td>32</td>
</tr>
<tr>
<td><strong>Style</strong></td>
<td>TableTop</td>
<td>Floor Mounted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The external and internal dimension may vary a few centimeters.

- **Power Supply**: 230 V 50/60Hz single phase, other voltages on request
- **Water Type**: De-ionised or mains water below 50 mg/litre TDS
- **Water Pressure**: 2 to 4 bar (30 to 60 psi)
- **Drain**: 36 mm outside diameter plastic pipe to liquid waste

## Optional Extras

- Continuous paper temperature recorder.
- Entry ports for sensors, air or power connections.
- Sample racks, sample rods and spiked racks designed to customer requirements with slots cut to any width, vertical, 6 degrees or 15 degrees.
- Air purge facility for cabinet ventilation as BS 3900 F15.
- Slotted apex roof for ISO 6270 - BS 3900 F9 testing.
- Water temperature controller with submerged sensor to ISO 6270.

All cabinets are CE marked and have calibration traceable to international standards. Certificates of Conformity are supplied on request. Due to continuous development we reserve the right to introduce improvements and/or modify specifications without prior notice.

C&W Specialist Equipment Ltd. is part of the Inks & Coatings division of Industrial Physics (www.industrialphysics.com).