EcoSys CDO863
The Industry Standard
for Thermal-Wet Treatment

The CDO™ series is an advanced point–of–use integrated thermal-wet treatment system designed to provide a controlled gas conditioning environment for today's demanding semiconductor process chemistries. The CDO series is the industry standard for controlled decomposition-oxidation treatment of flammable, pyrophoric, corrosive, and particulate generating process recipes.

The CDO 863 was specifically designed to treat fluorine generated by plasma chamber clean applications without the use of fuel or toxic reagents. Constructed with advanced metal alloys for corrosion resistance, the CDO 863 is the safest, most cost-effective abatement system for the treatment of F₂ at the point–of–use ensuring customers the highest reliability and tool uptime.

The patented water reagent technology incorporated in the CDO 863 combined with the latest advancements in system reliability provide the lowest cost of ownership for treating fluorine–based effluent.

Applications
• Flourine-based process chamber cleans

Advantages
• Designed for point–of–use fluorine abatement without fuel or toxic reagents
• Will treat incompatible gases from multiple process outlets
• Reduced water consumption with recirculating water system
• Non–clogging entry design
• Lowest cost of ownership
• Advanced alloys for improved corrosion resistance
• Ease of installation with standard pressurized drain
• Moisture suppression system reduces downstream condensation
• Semi S2 and CE compliant

Configurations
• Number of inlets (1–4)
• Fire retardant tank material– FM4910

Tool Communication and Interlocks
• Multiple dry contacts for customer defined requirements

Options and Accessories
• Remote indication box
• De–ionized water generator
EcoSys Specifications

Performance Specifications

- Process Flow
  - Per Inlet 100 slm (3.5 scfm) max
  - Per System 200 slm (7.1 scfm) max
- Fresh Water Consumption 0.3 gpm (1.4 Lpm) min
- Chilled Water Consumption 5 gpm (18.9 Lpm)
- Nitrogen Consumption 43 slm (1.5 scfm)
- CDA Consumption
  - w/o moisture suppression 80 slm (2.8 scfm)
  - with moisture suppression 240 slm (8.5 scfm)
- Process Exhaust
  - Static Pressure –5˝ to 0.5˝ w.c. (–1.2 to 0.12 kPA)
  - Exhaust Flow 566 slm (20 cfm)
- Electrical Consumption 5,600 watts
- Reliability
  - MTBF > 4,300 hours
  - MTTR 4 hours

Facilities Specifications

- Process Connections 1–4 inlets
  - KF–40, type 1
- Nitrogen Gas source 70–100 psi (4.8–6.9 bar)
  - 3/8˝ compression fitting
- Clean Dry Air source 80–100 psi (5.5–6.9 bar)
  - 1/2˝ compression fitting
- Fresh Water
  - 45–75 psi (3.1–5.2 bar)
  - 1/2˝ female NPT
- De-ionized Water
  - 13–17 psi (0.9–1.2 bar)
  - 1/4˝ compression fitting
- Chilled Water Inlet
  - 20–60 psi (1.4–4.1 bar)
  - 50 °F (10 °C)
- Chilled Water Inlet/Outlet
  - 1˝ female NPT
- Sump Pump Drain
  - 1/2˝ female NPT
- Enclosure Exhaust
  - 6˝ (152 mm) SS or FRP
- Process Exhaust
  - ISO 4˝ x (100 mm)
- Electrical Supply
  - 208/220 VAC, 50/60 Hz, 40 A, 3 or 4–wire
- Overall Dimensions
  - 77 H x 48 W x 41 D in (1,956 x 1,219 x 1,041 mm)
- Clearance
  - Front 36 in (914 mm)
  - Right/Left/Rear 12 in (305 mm)
- Weight
  - Shipping 602 lbs (223 kg)
  - Installed 830 lbs (375 kg)

Dimensions

<table>
<thead>
<tr>
<th>Item</th>
<th>Dimension</th>
<th>Item</th>
<th>Dimension</th>
<th>Item</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2˝ (50.8mm)</td>
<td>9</td>
<td>19.75˝ (49cm)</td>
<td>17</td>
<td>19.75˝ (49cm)</td>
</tr>
<tr>
<td>2</td>
<td>3.5˝ (90mm)</td>
<td>10</td>
<td>48˝ (121.9cm)</td>
<td>18</td>
<td>15˝ (38cm)</td>
</tr>
<tr>
<td>3</td>
<td>4˝ (101.6mm)</td>
<td>11</td>
<td>41˝ (104cm)</td>
<td>19</td>
<td>18˝ (45cm)</td>
</tr>
<tr>
<td>4</td>
<td>5.75˝ (146mm)</td>
<td>12</td>
<td>48˝ (121.9cm)</td>
<td>20</td>
<td>19.75˝ (49cm)</td>
</tr>
<tr>
<td>5</td>
<td>9.25˝ (235cm)</td>
<td>13</td>
<td>39˝ (99cm)</td>
<td>21</td>
<td>23˝ (58cm)</td>
</tr>
<tr>
<td>6</td>
<td>5.75˝ (146mm)</td>
<td>14</td>
<td>30˝ (76cm)</td>
<td>22</td>
<td>15˝ (38cm)</td>
</tr>
<tr>
<td>7</td>
<td>7.75˝ (196.8mm)</td>
<td>15</td>
<td>15˝ (38cm)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>11.75˝ (300mm)</td>
<td>16</td>
<td>7.5˝ (19cm)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>