Bugbox · Concept
Anaerobic & Microaerophilic Workstations

A range of easy-to-use anaerobic and microaerophilic incubated workstations for growing obligate or facultative anaerobes.
See Things Differently

Experience Ruskinn Anaerobic Workstations

For 20 years Ruskinn anaerobic workstations have been the trusted choice for laboratories around the world. More than 1000 anaerobic workstations are installed in more than 40 countries - and more than 200 research publications feature the Ruskinn anaerobic technology. Our anaerobic workstations are designed specifically to help microbiologists cope with rising workloads and provide the best primary isolation rates.

Ultimate Control for Optimum Cell Environment

- Accurate temperature control—from ambient + 5˚C to 45˚C.
- Accurate and automated humidity control—no dry spots.
- Palladium catalyst maintains anaerobic environment—plus anaerobic color-indicator strips verify anoxic conditions.
- Ezee Sleeve™ entry system allows access without disrupting the atmosphere within the chamber.

Convenient & Comfortable User Experience

- Quick and easy direct access. Gloveless, cuffed sleeve system (Ezee Sleeve™) takes just seconds to get inside the workstation with hands. (40 seconds with Ezee Plug™ and 10 seconds with Ezeevin™ port.)
- Shortest airlock cycle time in the industry—as little as 15 seconds.
- Single plate entry system (SPES). Standard on most models, this mailbox-like slot allows quick side entry or exit of individual plates, bypassing the interlock cycling process.
- Energy-saving lighting. Read plates easily under perfect illumination without O₂ exposure.
- High-intensity inspection spot lamp for close sample analysis is foot-operated for ease of use.
- Automatic controls are easy to access.
- Petri dish holders for quick plate transfer are included.
- Microaerophilic options available. Bugbox M and Concept 400M include the I-CO₂,N₂,JC gas mixing system to create the perfect environment for growing facultative anaerobes.
Economic and Reliable for Long Term Savings
- Standard dual gas operation - low gas consumption and running costs.
- Lower cost per plate compared to anaerobic jars.
- Minimal maintenance and downtime - with annual or biennial preventative maintenance kits available.

Designed to Protect Your Results
- The acrylic airtight chamber is flooded with anaerobic gas mix (H₂ in N₂) and O₂ is displaced.
  - If any O₂ remains or is allowed to enter, it is “scavenged” by a palladium catalyst, situated under the floor tray - the O₂ reacts with the H₂ to form water.
- Interlock uses an N₂ purge, so when a user brings in plates through the interlock, no O₂ enters the main chamber - inner and outer interlock doors cannot be opened simultaneously.
- Ezee Sleeves™ are purged using N₂ gas via foot pedals, so no O₂ enters the main chamber when the glove ports are opened.

Versatile and Flexible to Fit Your Workload
Multiple models and a variety of options are available to fit your specific needs.

Bugbox - Your Personal Workstation
- Up to 200 90-mm plate capacity
- Interlock transfer - 10 plates in 15 seconds

Bugbox PLUS - Compact Workstation with Larger Interlock
- Up to 180 90-mm plate capacity
- Interlock transfer - 18 plates in 35 seconds

Concept 400 - Perfect for Mid-Size to Large Workloads
- Up to 471 90-mm plate capacity
- Interlock transfer - 26 plates in 45 seconds

Concept PLUS - Larger Interlock For Transfer of Small Equipment
- Up to 520 90-mm plate capacity
- Programmed to automate an interlock transfer - 78 plates in 5 minutes

Concept 1000 - Dual Chambers for Multi-User Access
- Up to 942 90-mm plate capacity
- Shared interlock for workload transfers - 78 plates in 5 minutes
Bugbox and Concept Workstation Specification Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>Bugbox / Bugbox M</th>
<th>Bugbox PLUS</th>
<th>Concept 400 / 400 M</th>
<th>Concept PLUS</th>
<th>Concept 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Dimensions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>800 mm</td>
<td>830 mm</td>
<td>1120 mm</td>
<td>1620 mm</td>
<td>2400 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>660 mm</td>
<td>660 mm</td>
<td>720 mm</td>
<td>720 mm</td>
<td>720 mm</td>
</tr>
<tr>
<td>Height</td>
<td>650 mm</td>
<td>650 mm</td>
<td>750 mm</td>
<td>750 mm</td>
<td>780 mm</td>
</tr>
<tr>
<td><strong>Internal Dimensions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>500 mm</td>
<td>500 mm</td>
<td>800 mm</td>
<td>1000 mm</td>
<td>800 mm (per chamber)</td>
</tr>
<tr>
<td>Depth</td>
<td>460 mm</td>
<td>460 mm</td>
<td>500 mm</td>
<td>500 mm</td>
<td>500 mm (per chamber)</td>
</tr>
<tr>
<td>Height</td>
<td>420 mm</td>
<td>420 mm</td>
<td>480 mm</td>
<td>480 mm</td>
<td>480 mm (per chamber)</td>
</tr>
<tr>
<td><strong>Maximum Capacity</strong></td>
<td>90-mm Plates</td>
<td>270</td>
<td>234</td>
<td>536 / 676</td>
<td>650</td>
</tr>
<tr>
<td><strong>Working Capacity</strong></td>
<td>90-mm Plates</td>
<td>200</td>
<td>180</td>
<td>471 / 520</td>
<td>520</td>
</tr>
<tr>
<td><strong>Interlock Dimensions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>100 mm</td>
<td>150 mm</td>
<td>120 mm</td>
<td>320 mm</td>
<td>320 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>100 mm</td>
<td>230 mm</td>
<td>280 mm</td>
<td>300 mm</td>
<td>300 mm</td>
</tr>
<tr>
<td>Height</td>
<td>200 mm</td>
<td>190 mm</td>
<td>260 mm</td>
<td>300 mm</td>
<td>300 mm</td>
</tr>
<tr>
<td><strong>Interlock Capacity</strong></td>
<td>90-mm Plates</td>
<td>10</td>
<td>18</td>
<td>26 / 28</td>
<td>78</td>
</tr>
<tr>
<td><strong>Interlock Time Cycle</strong></td>
<td></td>
<td>15 sec.</td>
<td>35 sec.</td>
<td>45 sec.</td>
<td>5 min.</td>
</tr>
<tr>
<td><strong>Interlock Door Operation</strong></td>
<td></td>
<td>manual</td>
<td>manual</td>
<td>manual</td>
<td>automatic</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>45 kg / 65 kg</td>
<td>55 kg</td>
<td>80 kg / 100 kg</td>
<td>120 kg</td>
<td>150 kg</td>
</tr>
<tr>
<td><strong>Petri Dish Holders (Standard)</strong></td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td><strong>Wire Racks (Standard)</strong></td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

**Standard Features**

- Removable front (not available on the Bugbox or Bugbox Plus)
- Internal electrical outlet (optional on Bugbox/Bugbox Plus)
- Detox advanced carbon filtration system
- Ezee Sleeve™ direct hand entry system
- Energy-saving fluorescent illumination
- Inspection spot lamp
- Low gas alarm
- Automatic humidity control
- Palladium catalyst
- Anaerobic indicator strips
- Petri dish holders and wire racks (Quantity varies by model, see table above)
- Single Plate Entry System (SPES) (optional on Bugbox)
- Excessive gas use alarm (not available on the Bugbox or Bugbox PLUS)

**Options and Accessories**

- Vacuum line port
- Gas sample port
- Cable gland port
- Ultrasonic humidity control (not available in Bugbox/Bugbox Plus)
- Gas tank regulators and filter modules (US only)
- Workstation stand
- External docking facility for anaerobic jars (Bugbox only)
- Power failure back-up system
- Data logging connection

**For a microaerophilic environment - Bugbox, Concept 400 and Concept 1000 can be built with I-CO2N2IC gas mixing system. Please enquire about Bugbox M, Concept 400 M. I-CO2N2IC allows:**

- User to control O2 from 0.0% to 20.9% in 0.1% increments
- User to control CO2 from 0.0% to 30.0% in 0.1% increments
- Automatic calibration of the O2 sensor through screen control
- Microaerophilic cycling, facilitating up to 4 different O2 and CO2 concentrations through a user-defined sequence of time

Baker Ruskinn is a global leader and supplier of anaerobic and precision low oxygen culture systems for microbiology and tissue/cell culture applications. Its advanced line of anaerobic chambers, hypoxia workstations and media conditioning solutions help improve research results by providing precisely controlled conditions for anoxic and low-oxygen studies. To learn how Baker Ruskinn products can benefit your research, visit www.bakerruskinn.com.