Midmark Automatic Sterilizers

You have plenty to worry about when it comes to delivering the best patient experience. That's why we've designed the Midmark family of sterilizers to be simple and reliable with features like intuitive displays, simple prompts and an automatic-open door for drying. And who better to trust than the market leaders? With our strong heritage of quality, value and reliability, you can't go wrong with Midmark sterilizers.

Create peace of mind by making the dental market's leading sterilizer manufacturer your preferred office choice.

Standard Features

Open Door Drying
Once sterilization is complete, the door opens automatically and quietly to dissipate steam and dry your instruments. You'll have dry, sterile instruments every time.

LCD Display
Indicates cycle selected, exposure time, temperature and pressure. When the cycle enters sterilization mode, remaining time is displayed as well as temperature and pressure.

Pre-Programmed Controls
Once a programmed cycle is selected, the unit is designed to automatically sterilize without any operator assistance.

Unprecedented Support
Our service and support network will work with you throughout the life of your product. For tips and tutorials, visit the Midmark Dental channel on YouTube® or midmark.com.

Our full line of sterilizers are designed to address all of your critical cleaning needs. In fact, we're sure you'll find a Midmark sterilizer that's just right for your office. From the capacity of the market-leading M11 UltraClave® Automatic Sterilizer to the speed of the M3 UltraFast®, the Midmark family of sterilizers was designed to meet the specific needs of your office.

- Fast and easy to use for efficient instrument processing
- Reliability and effectiveness for infection control assurance
- Virtually effortless operation – one-step loading, push-button start and automatic drying
Midmark Autoclaves

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Steam-Flush Pressure Pulse

Midmark autoclaves utilize a Steam-Flush Pressure Pulse Air Removal System, a form of dynamic air removal. This system was designed to be efficient and to ensure good steam penetration for all load types, allowing for the passing of air removal tests required on more complex vacuum steam sterilizer systems. Plus, less complexity means better reliability and a cost-effective solution for your sterilization needs.

Accessories that add convenience.

M11 & M9 Accessories

Impact Printer

Records and prints critical sterilization cycle data, including chamber temperature and pressure.

Cool Hand Tool

This accessory is designed to help reduce the risk of staff injury by making it safer and simpler to load and unload your sterilizer. Use the tool before and after each cycle to handle hot trays.

Vertical Cassette Rack

This rack is designed to hold up to four 8” x 11” plus four 3” x 8” or twelve 4.5” x 8” cassettes.

Horizontal Cassette Rack

This rack is designed to hold up to four 8” x 11” plus four 3” x 8” or twelve 4.5” x 8” cassettes.

M3 Accessories

Pouch Rack

Conveniently separates sterilization pouches for proper steam circulation and drying.

Door Tray

The door tray accessory allows you to prepare an additional load for sterilization before the previous load is complete, saving valuable time.

Vertical Cassette Rack

This rack is designed to hold up to four 8” x 11” plus four 3” x 8” or twelve 4.5” x 8” cassettes.

Horizontal Cassette Rack

This rack is designed to hold up to four 8” x 11” plus four 3” x 8” or twelve 4.5” x 8” cassettes.

Printer

The standalone printer is designed for mechanical monitoring of each cycle. It records and prints critical sterilization cycle data, including chamber temperature and pressure.

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Standard Features

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### Standard Features

#### Front Loading
- **Door Style**: Standard or automatic open door for drying.
- **Tray**: Lightweight, durable stainless steel.
- **Draining and Filling**: Fast, easy draining and filling with a front reservoir fill port and drain tube.
- **Tall Water Level Sensor**: Automatically detects water level sensors allow for high levels of performance.
- **Lightweight, Durable Stainless Steel**: Provides a robust and reliable construction.

#### Programmable Controls
- **Programmability**: Allows for the dry time to be adjusted (20 to 60 minutes) for each pre-programmed cycle.
- **Programmable Dry Cycle**: The dry time can be programmed from 0 to 60 minutes.

### M9 & M11 UltraClave®

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Cycle Parameters</th>
<th>M9</th>
<th>M11</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fill</strong></td>
<td>(Heat-up &amp; Vent)</td>
<td>10 min</td>
<td>17 min</td>
</tr>
<tr>
<td><strong>Heat-up</strong></td>
<td>(Heat-up &amp; Vent)</td>
<td>12 min</td>
<td>17 min</td>
</tr>
<tr>
<td><strong>Vent</strong></td>
<td>(Heat-up &amp; Vent)</td>
<td>1 min</td>
<td>1 min</td>
</tr>
<tr>
<td><strong>Total Hot Cycle</strong></td>
<td></td>
<td>30 min</td>
<td>36 min</td>
</tr>
<tr>
<td><strong>Time w/o dry</strong></td>
<td></td>
<td>25 min</td>
<td>32 min</td>
</tr>
<tr>
<td><strong>Total Hot Cycle</strong></td>
<td></td>
<td>47 min</td>
<td>52 min</td>
</tr>
<tr>
<td><strong>Time w/dry</strong></td>
<td></td>
<td>70 min</td>
<td>74 min</td>
</tr>
</tbody>
</table>

#### Self-Program Controls
- **Preset drying is 30 minutes but can be programmed from 0 to 60 minutes.**
- **NOTE**: Cycle times are approximate and may vary depending on instrument loads.

#### Pulse Air Removal System
- **Indicates cycle selected, exposure time, temperature & pressure.**

#### Pre-Programmed Controls
- **There are four pre-programmed sterilization cycles:**
  - Unwrapped (132°C or 270°F for 3 minutes),
  - Pouched (132°C or 270°F for 6 minutes),
  - Handpieces (unwrapped and pouched) (132°C or 270°F for 5 minutes),
  - Packs (121°C or 250°F for 30 minutes).

#### Pressure & Temperature
- **M9 & M11 UltraClave®**
  - **M9**: 27.1 psi (186 kPa), 24.8 psi (169 kPa),
  - **M11**: 30.2 psi (208 kPa), 28.9 psi (200 kPa).

#### Sterility
- **Indicates cycle selected, exposure time, temperature & pressure.**

#### Programmable Dry Cycle
- **Programmability allows the dry time to be adjusted (20 to 60 minutes) for each pre-programmed cycle.**

### M3 UltraFast®

#### Efficiency and Capacity
- **Efficiency and capacity go hand in hand. Increase your instrument’s efficiency when you increase your instrument’s efficiency.**
- **Increased capacity means better productivity.**

#### Safety Features
- **Electronic bellows purge air from chamber three times prior to sterilization for efficient air removal.**
- **Three air removal purges.**

#### Convenience
- **There are four pre-programmed sterilization cycles:**
  - Unwrapped (132°C or 270°F for 3 minutes),
  - Pouched (132°C or 270°F for 6 minutes),
  - Handpieces (unwrapped and pouched) (132°C or 270°F for 5 minutes),
  - Packs (121°C or 250°F for 30 minutes).

#### Programmability
- **Programmability allows the dry time to be adjusted (20 to 60 minutes) for each pre-programmed cycle.**
- **NOTE**: Cycle times are approximate and may vary depending on instrument loads.

#### Capabilities
- **Efficiency and capacity go hand in hand. Increase your instrument’s efficiency when you increase your instrument’s efficiency.**
- **Increased capacity means better productivity.**

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- **There are four pre-programmed sterilization cycles:**
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- **Programmability allows the dry time to be adjusted (20 to 60 minutes) for each pre-programmed cycle.**
- **NOTE**: Cycle times are approximate and may vary depending on instrument loads.
Accessories that add convenience.

M11 & M9 Accessories

Impact Printer
Records and prints critical sterilization cycle data, including chamber temperature and pressure.

Pouch Rack
Conveniently separates sterilization pouches for proper steam circulation and drying. The M9 holds one pouch rack, and the M11 holds two.

Cool Hand Tool
This accessory is designed to help reduce the risk of staff injury by making it safer and simpler to load and unload your sterilizer. Use the tool before and after each cycle to handle hot trays.

Vertical Cassette Rack (M11 only)
This rack is designed to hold up to four 8" x 11" plus four 3" x 8" or twelve 4.5" x 8" cassettes.

Horizontal Cassette Rack (M11 only)
This rack is designed to hold up to four 8" x 11" plus four 3" x 8" or twelve 4.5" x 8" cassettes.

M3 Accessories

Printer
The standalone printer is designed for mechanical monitoring of each cycle. It records and prints critical sterilization cycle data, including chamber temperature and pressure.

Door Tray
The door tray accessory allows you to prepare an additional load for sterilization before the previous load is complete, saving valuable time.

Top Cover Protector
Use the cover protector to shield the M3 top from scratches or damage.
### Specifications

<table>
<thead>
<tr>
<th></th>
<th>M3</th>
<th>M9</th>
<th>M11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall length w/plug:</td>
<td>22&quot; (55.9 cm)</td>
<td>20.38&quot; (51.8 cm)</td>
<td>23.8&quot; (60.5 cm)</td>
</tr>
<tr>
<td>Overall width:</td>
<td>17.8&quot; (45.2 cm)</td>
<td>15.3&quot; (38.9 cm)</td>
<td>17.8&quot; (45.2 cm)</td>
</tr>
<tr>
<td>Overall height wprinter:</td>
<td>6.9&quot; (17.5 cm)</td>
<td>15.8&quot; (40.1 cm)</td>
<td>17.8&quot; (45.2 cm)</td>
</tr>
<tr>
<td>Minimum countertop area:</td>
<td>24&quot; (61 cm) D x 22&quot; (55.9 cm) W</td>
<td>17.88&quot; (45.4 cm) D x 15.3&quot; (38.9 cm) W</td>
<td>21&quot; (53.3 cm) D x 17.8&quot; (45.2 cm) W</td>
</tr>
<tr>
<td>Chamber:</td>
<td>12.1&quot; (30.7 cm) L x 7.6&quot; (19.3 cm) W x 1.6&quot; (4.1 cm) H</td>
<td>9&quot; diameter (22.9 cm), 15&quot; depth (38.1 cm)</td>
<td>11&quot; diameter (28 cm), 18&quot; depth (47.5 cm)</td>
</tr>
<tr>
<td></td>
<td>0.49 gal (1.8 liters) usable volume</td>
<td>3.5 gal usable volume (13.4 liters)</td>
<td>6.5 gal usable volume (24.6 liters)</td>
</tr>
<tr>
<td>Trays:</td>
<td>11.75&quot; (29.8 cm) L x 7.25&quot; (18.4 cm) W x 1&quot; (2.5 cm) H</td>
<td>Two large – 7.3&quot; W x 12&quot; L x 0.8&quot; D (18.6 cm x 30.5 cm x 2.2 cm)</td>
<td>Two large – 9&quot; W x 15&quot; L x 1.1&quot; D (22.9 cm x 38 cm x 2.9 cm)</td>
</tr>
<tr>
<td></td>
<td>Holds the Hu-Friedy® Signa-Stat Cassette (6.5&quot; x 10.5&quot; x 1.25&quot;)</td>
<td>Two small – 5.6&quot; W x 12&quot; L x 0.8&quot; D (14.3 cm x 30.5 cm x 2.2 cm)</td>
<td>Two small – 6.6&quot; W x 15&quot; L x 1.1&quot; D (16.8 cm x 38 cm x 2.9 cm)</td>
</tr>
<tr>
<td>Unit weight:</td>
<td>71 lb (32.2 kg)</td>
<td>115 lb (51.7 kg)</td>
<td>99 lb (44.9 kg)</td>
</tr>
<tr>
<td>Shipping weight:</td>
<td>80 lb (36.3 kg)</td>
<td>81 lb (36.7 kg)</td>
<td>131 lb (59.4 kg)</td>
</tr>
<tr>
<td>Water reservoir capacity:</td>
<td>1.2 gal (4.5 liters)</td>
<td>1.1 gal (4.1 liters)</td>
<td>1.4 gal (5.3 liters)</td>
</tr>
<tr>
<td>Electrical requirements:</td>
<td>115 VAC, 50/60 Hz, 12 Amp Single Phase</td>
<td>115 VAC, 50/60 Hz, 15 Amps Single Phase</td>
<td>115 VAC, 50/60 Hz, 15 Amps Single Phase</td>
</tr>
<tr>
<td></td>
<td>230 VAC, 50/60 Hz, 6 Amp Single Phase</td>
<td>230 VAC, 50/60 Hz, 1425 watt tubular immersion heater</td>
<td>230 VAC, 50/60 Hz, 1425 watt tubular immersion heater</td>
</tr>
<tr>
<td></td>
<td>Heater Power: 1400 watts</td>
<td>230 VAC, 50/60 Hz, 10 Amps Single Phase</td>
<td>230 VAC, 50/60 Hz, 10 Amps Single Phase</td>
</tr>
<tr>
<td></td>
<td>Maximum Power Consumption: 1400 watts</td>
<td>230 VAC has 1500 watt tubular immersion heater</td>
<td>230 VAC has 1500 watt tubular immersion heater</td>
</tr>
<tr>
<td></td>
<td>UL Listed to U.S. &amp; Canadian Standards</td>
<td>UL Listed to U.S. &amp; Canadian Standards</td>
<td>UL Listed to U.S. &amp; Canadian Standards</td>
</tr>
<tr>
<td></td>
<td>UL 61010-1, 2nd Edition</td>
<td>UL 61010-1, 2nd Edition</td>
<td>UL 61010-1, 2nd Edition</td>
</tr>
<tr>
<td></td>
<td>FCC Part 15, Sub-part B</td>
<td>Meets the requirements of ASME Boiler and Pressure Vessel Code</td>
<td>Meets the requirements of ASME Boiler and Pressure Vessel Code</td>
</tr>
<tr>
<td></td>
<td>A separate (dedicated) circuit is recommended for this sterilizer.</td>
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<td>A separate (dedicated) circuit is recommended for this sterilizer.</td>
</tr>
</tbody>
</table>

#### M550, M250 and M150 Soniclean® Ultrasonic Cleaners

Prior to the disinfection and sterilization processes, all instruments should be cleaned to remove organic and inorganic debris. Using an ultrasonic cleaner increases instrument processing efficiency and reduces the handling of sharp instruments. The Midmark family of ultrasonic cleaners is designed to be an effective, easy to use, quiet and reliable solution to your pre-sterilization needs.

### Installation

Use on a level, water-resistant surface. For proper air circulation, allow a minimum of 2" (5 cm) clearance on sides and top; 4" (10 cm) clearance behind. Allow proper clearance for access to the reservoir fill port located on top of the sterilizer. Also, allow 14" height clearance for condensate tank.

- Use on a level, water-resistant material such as laminate, stainless steel or stone surface. Allow 2.0" (5.08 cm) on sides and rear, and 5" (12.7 cm) above to allow space to fill reservoir and change the printer paper roll.
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CARB 93120.2 Phase 2 Compliant

Midmark is an ISO 13485 and ISO 9001 Certified Company. For more information or a demonstration, contact your Midmark dealer or call: 1-800-MIDMARK Fax: 1-877-725-6495

Outside the U.S.A., call: 1-937-526-3662 Fax: 1-937-526-8214 or visit our website at midmark.com

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60 Vista Drive, Versailles, Ohio 45380
Products subject to improvement changes without notice

OSAP.org

Ultrasonic Cleaners - Manufactured by Branson, Danbury, CT 1-800-732-9262 for distribution by Midmark Corporation.