# AUTOMATIC STERILIZERS



# MIDMARK DELIVERS WHAT YOU NEED IN INSTRUMENT PROCESSING.



Our full line of sterilizers is designed to address all of your critical instrument cleaning needs. 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.

- I 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

# RELIABILITY

## 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.



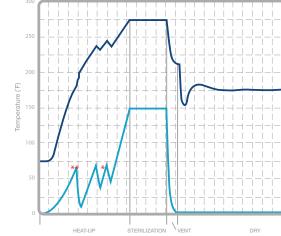
**Pre-Programmed Controls** Once a programmed cycle is selected, the unit is designed to automatically sterilize without any operator assistance.



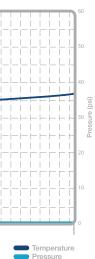
Unprecedented Support

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<sup>\*</sup> or midmark.com.





\*Three air removal purges. Electronic bellows purge air from chamber three times prior to sterilization for efficient air removal.



## 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.

# M9 & M11 UltraClave®



### Capacity

Efficiency and capacity go hand in hand. Increase your practice's efficiency when you increase your instrument processing capacity. With one of the largest chamber sizes of any tabletop sterilizer on the market, the Midmark M11 is designed to optimize sterilization output-reducing time and effort, but not effectiveness.

### 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 5 minutes), Packs (121° C or 250° F for 30 minutes), Handpieces (unwrapped and pouched) (132° C or 270° F for 6 minutes).

#### Self Program Controls

With programmable controls, you can create different cycle parameters by changing the following selections: Exposure Time, Temperature, Dry Time and Vent. The #1 and #2 buttons allow you to store the change if desired.

#### Safety Features

If the door is not closed completely or the reservoir water level is low, the LCD display will provide the appropriate message. In either case, sterilization will not continue until you've attended to the unit.

### Draining and Filling

For ease of draining and filling, both the M9 and M11's reservoir fill port and drain tube are in the front of the unit, not on top or in back.

Symbol	Pre-programmed Cycle	Sterilization Temperature	Hot Cycle Time (Fill, Heat-up & Vent)	Sterilization Time	Dry Time	Total Hot Cycle Time w/o dry	Total Hot Cycle Time w/dry
		M9 M11	M9 M11	M9 M11	M9 M11	M9 M11	M9 M11
8	Unwrapped	132° C 132° C 270° F 270° F	11 min 15 min	3 min 3 min	30 min 30 min	14 min 18 min	44 min 48 min
	Pouches	132° C 132° C 270° F 270° F	12 min 17 min	5 min 5 min	30 min 30 min	17 min 22 min	47 min 52 min
X	Packs	121°C 121°C 250°F 250°F	10 min 14 min	30 min 30 min	30 min 30 min	40 min 44 min	70 min 74 min
	Handpieces (Unwrapped & Pouches)						47 min 52 min

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

# M3 UltraFast<sup>®</sup>



## Speed

When your practice requires instruments and handpieces to be processed quickly, the M3 delivers. Sterilize unwrapped instruments in only 6 minutes and pouched instruments in just over 10 minutes.

#### Convenience

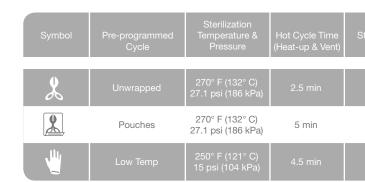
From the simple way you load and unload the tray to the thoughtful touches like the ergonomic condensate tank handle and guick-release top, the M3 is sophisticated technology that is easy to use.

### Technology

The M3 has integrated technology that informs the operator if reservoir water is low or if the condensate tank is full, eliminating the need to continually monitor water levels.

#### Programmable Dry Cycle

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







#### Door Tray

Lightweight, durable stainless steel. Ergonomically designed handle for balance and comfort.

#### Drain Access Panel

Front reservoir drain with on-board drain tube storage is practical and time saving.



#### Top Fill

Convenient access to water reservoir. Water level sensor provides intelligent system monitoring and feedback.



#### Condensate Tank

Traps and contains expelled steam. Water level sensor allows for efficient, worryfree use

terilization Time	Total Hot Cycle Time	Dry Time	Total Hot Cycle Time w/ Dry	
3.5 min	6 min		31 min	
5.5 min	.5 min 10.5 min		40.5 min	
20 min 24.5 min		50 min	74.5 min	

# 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

	M3	M9	M11	
Overall length w/plug:	22" (55.9 cm)	20.38" (51.8 cm)	23.8" (60.5 cm)	
Overall width:	17.8" (45.2 cm)	15.3" (38.9 cm)	17.8" (45.2 cm)	
Overall height w/printer:	6.9" (17.5 cm)	15.8" (40.1 cm)	17.8" (45.2 cm)	
Minimum countertop area:	24" (61 cm) D x 22" (55.9 cm) W	17.88" (45.4 cm) D x 15.3" (38.9 cm) W	21" (53.3 cm) D x 17.8" (45.2 cm) W	
Chamber:	12.1" (30.7 cm) L x 7.6" (19.3 cm) W x 1.6" (4.1 cm) H 0.49 gal (1.8 liters) usable volume	9" diameter (22.9 cm), 15" depth (38.1 cm) 3.5 gal usable volume (13.4 liters)	11" diameter (28 cm), 18" depth (45.7 cm) 6.5 gal usable volume (24.6 liters)	
Trays:	11.75" (29.8 cm) L x 7.25" (18.4 cm) W x 1" (2.5 cm) H Holds the Hu-Friedy® Signa-Stat Cassette	Two large – 7.3" W x 12" L x 0.8" D (18.6 cm x 30.5 cm x 2.2 cm)	Two large – 9" W x 15" L x 1.1" D (22.9 cm x 38 cm x 2.9 cm)	
	(6.5" x 10.5" x 1.25")	Two small – 5.6" W x 12" L x 0.8" D (14.3 cm x 30.5 cm x 2.2 cm)	Two small – 6.6" W x 15" L x 1.1" D (16.8 cm x 38 cm x 2.9 cm)	
Unit weight:	71 lb (32.2 kg)	73 lb (33.1 kg)	99 lb (44.9 kg)	
Shipping weight:	80 lb (36.3 kg)	81 lb (36.7 kg)	131 lb (59.4 kg)	
Water reservoir capacity:	1.2 gal (4.5 liters)	1.1 gal (4.1 liters)	1.4 gal (5.3 liters)	
Electrical requirements:	115 VAC, 50/60 Hz, 12 Amp Single Phase	115 VAC, 50/60 Hz, 15 Amps Single Phase	115 VAC, 50/60 Hz, 15 Amps Single Phase	
	230 VAC, 50/60 Hz, 6 Amp Single Phase	115 VAC has 1425 watt tubular immersion heater	115 VAC has 1425 watt tubular immersion heater	
	Heater Power: 1400 watts	230 VAC, 50/60 Hz, 10 Amps Single Phase	230 VAC, 50/60 Hz, 10 Amps Single Phase	
	Maximum Power Consumption: 1400 watts	230 VAC has 1500 watt tubular immersion heater	230 VAC has 1500 watt tubular immersion heater	
	UL Listed to U.S. & Canadian Standards	UL Listed to U.S. & Canadian Standards	UL Listed to U.S. & Canadian Standards	
	UL 61010-1, 2nd Edition	UL 61010-1, 2nd Edition	UL 61010-1, 2nd Edition	
	IEC 61010-2-040	IEC 61010-2-040, 1st Edition	IEC 61010-2-040, 1st Edition	
	CAN/CSA-C22.2 No. 61010-1, 2nd Edition	CAN/CSA C22.2 No. 61010-1, 2nd Edition	CAN/CSA C22.2 No. 61010-1, 2nd Edition	
	CSA C22.2 No. 61010-2-040	CSA C22.2 No. 61010-2-040-07, Part	CSA C22.2 No. 61010-2-040-07, Part 2-040, 1st edition	
	FCC Part 15, Sub-part B	2-040, 1st edition		
	Meets the requirements of ASME Boiler and Pressure Vessel Code	Meets the requirements of ASME Boiler and Pressure Vessel Code	Meets the requirements of ASME Boiler and Pressure Vessel Code	
	A separate (dedicated) circuit is recommended for this sterilizer.	A separate (dedicated) circuit is recommended for this sterilizer	A separate (dedicated) circuit is recommended for this sterilizer	
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.	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.	



#### M250 Soniclean® Ultrasonic Cleaner

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.

According to recommendations by: CDC Guidelines for Infection Control in Dental Health Care Settings – 2003 ANSI/AAMI ST79:2010 & A2:2011 & A3:2012

Comprehensive guide to steam sterilization and sterility assurance in health care facilities. CDC Guidelines for Disinfection and Sterilization in Healthcare Facilities, 2008. Please refer to your particular state's oral health regulations for instrument processing protocol specific to your area.

CARB 93120.2 Phase 2 Compliant

Midmark is an ISO 13485 and ISO 9001 Certified Company.



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