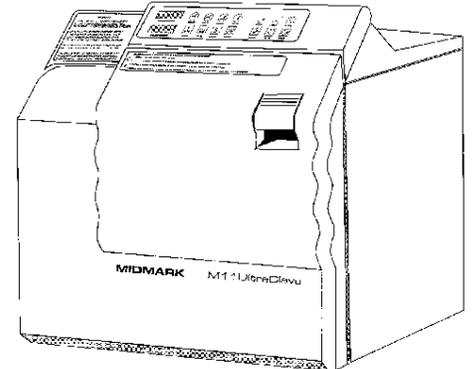


49-29 Midmark M11 UltraClave Sterilizer (Project 95-19) (8/96)

The Midmark M11 is a fully-automated, microprocessor-controlled sterilizer with an 11-inch, round, stainless-steel chamber. The exterior dimensions of the sterilizer are 17 inches high by 18 inches wide by 22 inches deep (handle included) or 22¾ inches deep (with power cord connector). The system operates at 110/120 volts ± 5 %, 50/60 Hz, with a loading of 1.4kW. The unit is also available as 220/240 volts ± 5%, 50/60 Hz, with a loading of 1.5kW. The sterilizer can be configured for plug-in or hard-wired connection and requires a 20- ampere circuit breaker. A dedicated electrical circuit is recommended for fault-free operation. The microprocessor-controlled parameters are constantly monitored to assure proper sterilization for each program cycle selected. The controller sequences through the complete cycle at the touch of one of the four icon-marked programs on the Padswitch (e.g., wrapped, unwrapped, paper/plastic pouches, or liquids). All selections are preset for drying except for the liquids cycle. Upon completion of the sterilization cycle, the unit exhausts and the door automatically opens. Cycle completion is announced by five series of three audible beeps. The display shows "Drying" for the next 30 minutes. At the end of the drying period, another audible signal consisting of five series of three beeps occurs. The display then shows "Complete." All sterilization parameters (date, time, pressure, and temperature), are digitally displayed and can be recorded with an optional printer. The digital display indicates functioning checks during operation and error codes for testing and trouble shooting. The sterilizer is UL Listed and ISO 9001 certified.



Manufacturer/Source:

Midmark Corporation.
60 Vista Drive
Versailles, OH 45380
(800) 643-6275
(513) 526-3662
(800) 365-8631 FAX

Government Sales Contact:

Sales Representative, Dental Products
10430 Willow Meadow Circle
Alpharetta, GA 30202
(800) 633-0508 ext. 2438 (voice mail)
(404) 667-6525

VA Contract number: V797P3429

Contract Period: 1 October 1994 through 30 September 1996

Suggested Retail Price:

M11 (11 inch x 18 inch chamber)
\$4,934.00 with printer and cassette rack
\$4,435.00 without printer but with cassette rack

Government Price:

M11 (11 inch x 18 inch chamber)
\$2,594.80 with printer and cassette rack
\$2,270.45 without printer but with cassette rack

ADVANTAGES:

- + Automatic door opening expedites drying and safety latch prevents complete door opening to protect operator.
- + Four cycles available (e.g., liquids, wrapped, unwrapped, and paper/plastic pouches).
- + Microprocessor controlled for accurate cycle management.
- + Lever-type door handle with gravity locking system (i.e., when door is locked the weight of the locking pin allows it to fall into place).
- + Has resident diagnostics to identify proper functioning of sterilizer.
- + Reservoir can be easily and completely drained for cleaning.
- + Rotatable, reversible door gasket (no tools required).
- + Can use standard off-the-shelf interchangeable parts for some repairs.
- + Operating and servicing instructions are clear and easy to understand with exploded parts location and breakdown.
- + User-replaceable chamber filter (no tools required).
- + Can be back flushed which aids in cleaning.
- + Chamber wire rack options allows both cassette racks or trays.
- + Optional Printer is available for documenting sterilizer parameters.

DISADVANTAGES:

- Is front-end heavy which can be a tipping hazard when door is fully opened.
- Wire rack and bottom tray can be assembled and installed upside down and backwards which may damage the chamber filter.
- Because of the location of the reservoir's filler spout, containers with wide openings cannot be used.
- Non uni-body construction for exterior covers makes servicing cumbersome.
- Need to reposition the power connector from the rear panel when servicing.
- Top cover must be in place for testing during maintenance.
- No power on/off switch.
- Tinnerman clips used to retain screws can be misplaced or lost during maintenance.

SUMMARY AND CONCLUSIONS:

The Midmark M11 UltraClave has a unique, automatic door opener, which aids in instrument drying. The sterilizer has four cycles: liquids, flash, wrapped, and paper/plastic pouches. Its microprocessor operation allows for accurate cycle management while providing diagnostics. Door gasket replacement, chamber filter cleaning, and reservoir cleaning can be accomplished without tools. Documentation is well organized with pictorial aids to assist in servicing. When the chamber door is opened, the unit's center of gravity is changed such that minimal additional weight on the chamber door may result in the sterilizer tipping forward. The sterilizer can accommodate two standard (8½ inch x 11½ inch x 1½ inch) and two small (4½ inch x 8½ inch x 1½ inch) dental instrument cassettes placed horizontally with its standard tray- rack system. An optional cassette rack can accommodate two large and four small dental cassettes. The standard tray-rack system can be configured with the trays removed to accommodate four standard and two small vertically-placed cassettes. With efficiency being a product of cycle speed and drying time, the Midmark M11 is comparable to other tabletop sterilizers. This sterilizer is an appropriate choice for clinics of all sizes. The user-friendly appearance and controls make it easy to use while being informative during all phases of operation. The sterilizer proved to be very reliable throughout the evaluation period and was rated as "Excellent" by both clinical evaluators. The **Midmark M11 UltraClave** sterilizer is rated **Acceptable** for use by the federal dental services.