

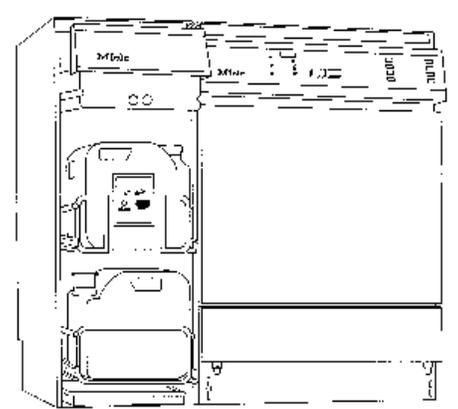
47-38 Miele Thermal Disinfector (Project 93-39) (7/95)

For **UPDATE**, [click here](#). (Miele recently provided DECS with several product updates including new contact information.)

Although automated instrument washers are an important component of central instrument processing in most hospitals, their use in dental facilities has been limited by space and fiscal considerations. As a result, most dental services rely on hand scrubbing or small table-top ultrasonic cleaners which do not offer the same level of efficacy or protection from the risk of bloodborne pathogen exposure afforded by automated instrument washers.

The Miele Thermal Disinfector is a medical/dental instrument washer that provides for automated washing cycles and is designed to provide high-level thermal disinfection using a 10-minute cycle held at 93°C. The model evaluated also has an integrated drying cycle. The unit can be installed under-the-counter or free-standing in a manner similar to a home dishwasher. This product has received FDA pre-market clearance as a medical instrument washer and thermal disinfector (File #K884151).

Installation requirements include two cold water outlets, two drains, and 220 VAC. The device meets German VDE electrical standards and has been submitted to ETL Laboratories for testing.



Manufacturer: (Call for technical information only)

Miele Appliances, Inc.
22 D World Fair Drive
Somerset, NJ 08873
(800) 843-7231
(908) 560-0899
(908) 560-9649 FAX

Source: (For sales and pricing information)

Patterson Dental Company
1031 Mendota Heights Rd
St Paul, MN 55120
(800) 328-5536
(612) 686-1600
(612) 686-9331 FAX

Suggested Retail Price: Miele uses menu pricing with a variety of optional accessories. The following price-out is for a basic set up (Total: \$5,770.00)

\$4,995.00	Dental Thermal Disinfector G7781
\$300.00	Upper Basket O165
\$225.00	Lower Basket U165
\$250.00	Two inserts E131
(\$125.00 each)	

Government Price: Same as Suggested Retail Price

Miele offers a number of accessories, including washing racks, instrument baskets, and automatic detergent and acid rinse dispensers which were not specifically evaluated for this report. A larger model instrument washer (Model G7736) is also available that offers a forced air and condenser drying option which may improve instrument drying.

ADVANTAGES:

- + Automatic washing with high-level thermal disinfection decreases risk of exposure to bloodborne pathogens when compared to manual cleaning or use of table-top ultrasonic cleaners.
- + Superior cleaning of instruments compared to other methods.
- + More convenient than conventional methods.
- + Saves time and labor for sterilization technicians.
- + Least expensive instrument washer currently on the market.
- + Compact design permits under-the-counter or free-standing operation.
- + Uses standard cold water plumbing connections.
- + Built-in water softener.
- + Multiple wash rack configurations enhances versatility.
- + "Dishwasher-style" operation is familiar to users.
- + Optional detergent rinse dispenser enhances ease of use.
- + Sufficient capacity and throughput to meet user needs in most small- to medium-size facilities.

DISADVANTAGES:

- Longer cycle times for individual kits when compared to conventional methods.
- Lack of forced-air instrument drying.
- High-pH detergents can cause damage to some materials such as anodized aluminum.
- Relatively high cost of German detergent, acid rinse, and water softener salt recommended by the manufacturer.
- Floor-level, dishwasher-style configuration is less ergonomically efficient than waist-level units.
- No pass-through configuration available.

SUMMARY AND CONCLUSIONS:

Automated instrument washer-disinfectors offer the promise of both improved performance and safety. The Miele G7781 Thermal Disinfecter provides a relatively cost-effective approach to achieving state-of-the-art instrument re-processing in even the smallest dental facilities. The adaptation of a domestic dishwasher-style unit for medical/dental use results in a compact device that is convenient, effective, and intuitive in its manner of use. With a throughput capability of over 100 instrument cassettes per day, a single unit can easily handle the typical workload of clinics with up to 12 Dental Treatment Rooms (DTRs). Optional features, including automatic detergent dispensers, add convenience. In laboratory tests of simulated orthopedic soil removal, the Miele Thermal Disinfecter Model G7781 outperformed both table-top and automated ultrasonic systems. Clinical evaluator response was overwhelmingly favorable with safety, convenience, and cleaning effectiveness receiving the highest ratings. Although users reported individual time savings, long instrument turn-around times were cited as a disadvantage. Clinics adopting this method must ensure an adequate instrument inventory and distribution system to avoid bottlenecks. Problems with drying and damage to anodized aluminum caused by high-pH detergents were also identified as shortcomings. Re-design of a faulty pump motor appears to have solved much of the drying problem, and use of neutral pH detergents can reduce damage to sensitive materials. This device offers a uniquely economical and convenient way to safely and effectively decontaminate instruments, even in small- to medium-size dental clinics. The **Miele Thermal Disinfecter Model G7781** is rated **Recommended** for use by the federal dental services.

UPDATE (11/09)

Miele recently provided DECS with several product updates—please see below:

Miele G7881 Thermal Disinfecter:

The Miele G7881 Dental Disinfecter is a dental instrument washer that provides for automated washing cycles and an integrated drying cycle. It has been designed to provide high-level thermal disinfection using a 10 minute cycle held at 93°C. The unit can be installed under counter or free standing. This product has been FDA 510 (k) cleared to market for high-level disinfection (File #K031799) and is UL certified by CSA to U.S. standards (Certificate of Compliance #1319665). This product and accessories, including detergents, have been submitted for approval under the GSA Schedule.

Cleaning Mechanism:

Rotary, three multi-jet spray arms
Direct injection (using optional 0177 Upper Basket)

Plumbing Connections: (One or two water connections as follows):

Tap: cold water for wash cycles. 5' 5" connection hose with ¾" hose thread unions
Minimum flow rate of 2.5 gpm/10-147 psi (recommended 25–60 psi)

DI Source: (use optional): 5' 6" connection hose with ¾" hose thread unions

Minimum flow rate of 2.5 gpm/10-147 psi (recommended 25–60 psi)

Drain Connections:

One 7/8" ID flexible drain hose connection, 4' 7" long
Maximum drain height, 39.4" / Maximum drain length, 13'

Electrical Requirements:

Single Phase 208V, 60Hz, 30 Amps
Three Phase 208V, 60Hz, 20 Amps (available as an optional conversion)
Unit is equipped with a 5' 11", 10 AWG, 3 wire, non-terminated power cord
Units are UL certified by CSA to U.S. standards (certificate of compliance #1319665)

Dimensions:

Interior 18.5" H x 20.5" W x 20.5" D
Exterior 33.46" H x 23.54" W x 24" D (Height is 32.28" without lid)

Noise level:

<60 dBa

Customizable Door & Toe Kick Service Panel:

Door panel: 442 mm H x 586 mm W x 1.2 mm thick
Toe Kick panel: 117 mm H x 586 mm W x 1.2 mm thick
Stainless steel and cabinet matching panels available

**** 2010 Design Change:**

Permanent Integrated Stainless Steel Door & Toe Kick Service Panel

Manufacturer:

Miele & Cie GmbH & Co.
PO Box 10.01.07
Miele Strasse 2
Bielefeld 33611
Germany

U.S.A. Location (Sales & Technical Information):

Miele Inc.
9 Independence Way
Princeton, NJ 08540
(800) 991-9380
(609) 419-4241 FAX

Suggested Retail Price:

- \$9,450.00 **G7881 Pkg 1**
General Dentistry Pkg includes G7881 with (1) 0190 upper basket, (1) U874 lower basket, (1) E379 mesh basket (for upper or lower basket), (3) E523 inserts for 6+ cassettes each (for upper or lower basket)
- \$10,350.00 **G7881 Pkg 2**
Oral Surgery Pkg includes G7881 with (1) 0177 upper basket with 26 injectors for hollow instruments, (1) U874 lower basket, (1) E379 mesh basket (for upper or lower basket), (2) E523 inserts for 6+ cassettes each (for upper or lower basket)
- \$335.00 **Pwdr Detergent Pkg 1**
Contains Neodisher MA powder detergent, Neodisher N neutralizer, Mielclear rinse aid, B1644 Water Softener Reactivation salt – set of three 1.2 kg boxes
- \$275.00 **LQD Detergent Pkg 2**
Contains Neodisher FA liquid detergent, Neodisher N neutralizer, Mielclear rinse aid, B1644 Water Softener Reactivation salt – set of three 1.2 kg boxes (needs Dos G60/1 not included)
- \$725.00 **Dos G60/1**
p/n 69747007 - to dispense liquid detergent

Government Price:

Same as Suggested Retail Price

** Contact authorized Military Representative, **Tryco, Inc.**, under "Source"

Source:

This product is sold through dental distributors. Miele's G7881 Dental Disinfector is now available through Tryco, Inc., who is an authorized military representative for Miele—(DBPA - contract #SPM20010A9284). Tryco has established government pricing levels for these units and associated accessories, including the recommended detergent, neutralizer, rinse aid and water softener reactivation salt. Additional established dental distributors with branches throughout the U.S. include Patterson, Burkhart and Benco Dental.

Tryco, Inc.

6736 Old Mclean Village Drive
Mclean, VA 22101
(800) 934-3452
(703) 734-0467
(703) 734-0511 FAX
E-mail: tryco@tryco.org