

**MELAdem®**

Everything you need for water treatment



Quality – made in Germany

**MELAG**  
competence in hygiene

# The success of a family-led company – through innovation and quality.

As an owner-run and operated family concern founded in 1951, we have a long history of successful specialization in hygiene products for practice-based use. It is this specialization that enables our 100 person-strong development team of specialist engineers and IT experts to maintain and develop our product range at its current world-class standards.

Our focus on quality, innovation and the highest of safety standards has established MELAG as the world's leading manufacturer in the »hygiene products for the medical practice« field, selling over 490,000 devices to date. Our entire product range is produced exclusively in Germany (Berlin). Over 300 employees work on premises of c. 22,000 m<sup>2</sup>.

We have consistently rejected outsourcing to low-wage third countries, as we did not want to risk a reduction in our world-beating quality. We have also ruled out emulating the trend towards expanding our product range to exceed provision in our area of core competence, practice hygiene.

Today we are easily the world's largest specialist manufacturer of practice sterilizers and washer-disinfectors concentrating exclusively on this area. We remain convinced that quality requires consistent specialization on a narrow range of high-quality products.

You, our customer are justified in your demand for the best products, quality and reliability. Providing »**competence in hygiene**« and »**Quality – made in Germany**« we guarantee that these demands will be met.

It is our declared aim to contribute to the success of your daily work in the area of instrument treatment and hygiene.

The MELAG management and team.



## The requirements.

High-quality, clean demineralized or distilled water is very important for treating instruments in a medical or dental practice. This water is purified from tap/drinking water: containing a range of minerals, it requires treatment. Using water of a lower quality results in deposits of particulate matter (such as calcium carbonate) on the instruments and the chamber of the steam sterilizer. This accelerates their wear. A conductivity of even c. 30  $\mu\text{S}/\text{cm}$  can result in discoloration and rust. Only the use of demineralized water guarantees optimal value-retention of your steam sterilizer and protects your instruments.



Everything from a single source – solutions for the processing cycle

## The solution.

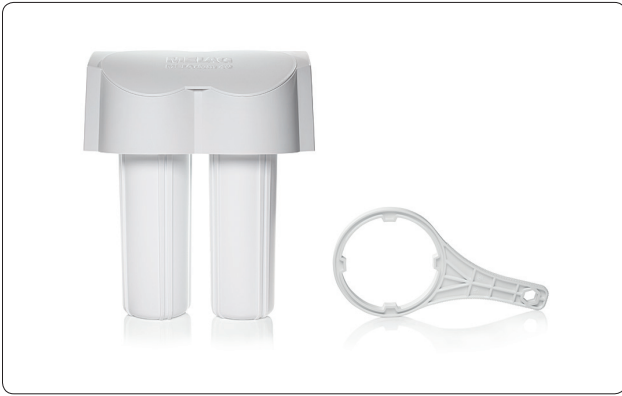
All MELAG water treatment units provide high-quality demineralized water for the cleaning, disinfection and sterilization process. The water thus produced satisfies our recommendations and specifications for the operation of steam sterilizers and instrument treatment in a washer-disinfector (WD). We offer a range of solutions to fit your requirement for demineralized water. Depending on their structure, the units can be fitted easily in a floor unit or on the wall. Water treatment units represent a value-for-money, environmentally-friendly and highly effective method with which to produce demineralized water of a constantly high quality.

## The advantages.

**Saving time:** Water treatment units enable the automatic filling of demineralized water in the steam sterilizer and washer-disinfector when they are connected directly. Moreover, the time-consuming acquisition and disposal of aqua dem canisters is now a thing of the past.

**Value-retention:** A constant supply of demineralized water ensures the optimal operation of your steam sterilizer and washer-disinfector. Demineralized water protects against corrosion and helps avoid the development of stains and surface alterations, thus protecting your devices and instruments.

**Safety:** The water quality in MELAG steam sterilizers and the MELAtherm washer-disinfector is subject to automatic checks.



MELAdem® 40 with cartridge key



MELAdem® 53 and MELAdem® 53 C



Vacuklav® 40 B+ with MELAdem® 40 and MELAJet® spray pistol



MELAdem® 53 fitted in a floor unit

## MELAdem® 40

The compact ion exchanger for practice steam sterilizers.

This compact ion exchanger has been designed for the supply of a practice steam sterilizer which will not be operated more than 3–4 times per day. The MELAdem 40 bracket enables it to be fitted in the immediate vicinity of or directly next to all MELAG steam sterilizers which are to be supplied automatically with water. The replacement of the mixed bed resin cartridges can be performed quickly and easily by the practice personnel using the cartridge key.

Art. no. 01049

## MELAdem® 53 MELAdem® 53 C

Ion exchanger for MELAtherm and further devices

The MELAdem 53 and 53 C also operate according to the ion exchange procedure and are suitable for practices with large requirements for demineralized water. The MELAdem 53 presents a standard size and capacity, whilst the small MELAdem 53 C is suitable for especially compact installation situations. The scope of delivery consists of two filled cartridges: If the capacity of the first cartridge has been exhausted and it requires regeneration, the second must be connected. The high-performance of the MELAdem 53 units enable the connection of multiple steam sterilizers in addition to the MELAtherm.

Art. no. 01038 MELAdem 53

Art. no. 01036 MELAdem 53 C



MELAdem®47 with removal valve and storage container, fitted in a floor unit



MELAdem®56



MELAdem®56 with storage container, fitted in a floor unit of the Cliniclave®45

## MELAdem® 47

The reverse osmosis unit for practice steam sterilizers.

The reverse osmosis principle is an especially environmentally friendly and economic method of water treatment. The high capacity of up to 1,900 l facilitates the problem-free connection of multiple practice steam sterilizers. The removal valve included in the scope of delivery enables the removal of high-quality demineralized water for other purposes.

Art. no. 01047

## MELAdem® 56 and MELAdem® 56 M

The reverse osmosis unit for the Cliniclave 45 and Cliniclave 45 M.

The MELAdem 56 was designed for the special requirements of the Cliniclave 45. The MELAdem 56 M was developed for use with the very large autoclave Cliniclave 45 M (2 StU). This water treatment unit has a considerably larger storage container. Both appliances (together with their storage containers) can be integrated in the floor unit of the Cliniclave 45 and Cliniclave 45 M without problem.

Art. no. 11056 MELAdem 56

Art. no. 11057 MELAdem 56 M



MELAJet® installed on the MELAdem® 40



Fig. left: MELAJet® with individual attachments

Fig. right: MELAJet® with point jet



MELAdest® 65 with glass flask

## MELAJet® for MELAdem® 40 and MELAdem® 53

Rinsing the instruments and the  
removal of demineralized water.

We recommend that the instruments be rinsed thoroughly with demineralized water after manual disinfection and cleaning of the instruments and before their automatic treatment or sterilization. The MELAJet spray pistol enables the rinsing of cleaning fluids and disinfectants with a point jet or a cone spray. The modular spray pipe enables the connection of a wide variety of MELAtherm adapters for Luer-Lock or hose connections and thus the rinsing of the instruments. The MELAJet is connected directly to the water treatment unit MELAdem 40 or MELAdem 53 thus facilitating the easy removal of demineralized water for other purposes.

- Throughflow rate (point jet): at 3 bar max. 0.9 l/min
- Water pressure (min./max.): 2–10 bar
- Pistol length total: c. 32 cm
- Hose length: 1.5 m
- Weight: 0.45 kg

Art. no. 27300

## MELAdest® 65

Water distiller – For distilled water,  
fast and economically.

This practical water distiller produces water of the highest quality in accordance with what represents one of the oldest methods of water treatment. When the device is activated, the water temperature increases and escaping gases are boiled, then led through an opening. The water temperature increases to 100 °C and begins to boil. During evaporation, the chemicals, salts and soiling remain in the container. The stream flows through the cooling coil system in the upper section where it cools and condenses into distilled water.

- Dimensions of the water distiller (Ø × H): Ø 230 × 380 mm
- Dimensions glass flask (Ø × H): 18 × 18.3 cm
- Capacity: c. 0.7 litres/hr.
- Conductivity of the distilled water: 2–3 µS
- Empty weight of the water distiller: 3.0 kg

Art. no. 01065



MELAtest® 60 inc. protective cap



The water stop consisting of a control device (left) and a solenoid valve (right)

## MELAtest® 60

Conductivity meter for checking the quality of the feed water.

The MELAtest 60 enables a manual check of the conductivity of the demineralized water produced for sterilization/disinfection in order to protect those instruments and steam sterilizers not equipped with an integrated conductivity sensor from the effects of poor water quality.

- Dimensions (W × H × D): 41 × 175 × 23 mm
- Measurement range : 0.1–99,9 µS/cm
- Measurement increments: 0.1 µS/cm
- Deviation tolerance: ± 2.0 µS/cm
- Batteries (included in the scope of delivery): : 4 × 1.5 V

Art. no. 01060

## Water stop

Safety valve for the water supply.

When using a water treatment unit, a washer-disinfector or a steam sterilizer with a fixed water supply and the water begins to escape, the water stop interrupts the water supply and issues an acoustic signal. Installation of the water stop valve helps prevent water damage resulting from leaks etc.

- Dimensions control device (W × H × D): 54 × 79 × 126 mm
- Dimensions solenoid valve (W × H × D): 41 × 102 × 82 mm
- Voltage supply: 220/240 V, 50/60 Hz
- Power supply: c. 3 W
- Working pressure solenoid valve (max.): 6 bar
- Cable length control device: 2 m
- Cable length solenoid valve: 1 m

Art. no. 01056

# Technical Data and Facts.

| Technical Data                | MELAdest 65          | MELAdem 40              | MELAdem 53  | MELAdem 53 C  | MELAdem 47                | MELAdem 56               | MELAdem 56 M             |
|-------------------------------|----------------------|-------------------------|---|---|---------------------------|--------------------------|--------------------------|
| Art. no.                      | 01065                | 01049                   | 01038   | 01036   | 01047                     | 01056                    | 01057                    |
| Dimensions (W × H × D)        | Ø 23 × 38 cm         | 32 × 35 × 15 cm         | Ø 24 × 57* cm<br>(*61.5 cm including connecting bend) | Ø 24 × 44,3* cm<br>(*48,8 cm including connecting bend) | 39 × 47 × 15 cm           | 50 × 44.4 × 17.3 cm      | 50 × 48 × 70.6 cm        |
| Storage container (Ø × H)     | Ø 18 × 18.3 cm       | –                       | –   | –   | Ø 28 × 51 cm              | Ø 30.5 × 44 cm           | Ø 31.8 × 48.1 cm         |
| Weight (with mixed bed resin) | 3.4 kg               | 3.7 kg                  | 18 kg   | 14 kg   | 12 kg <sup>(2)</sup>      | 18 kg <sup>(2)</sup>     | 24 kg <sup>(2)</sup>     |
| Volume                        | 4 l (Filling amount) | 1.4 l (mixed bed resin) | 20 l (mixed bed resin)                                | 15 l (mixed bed resin)                                  | 5.5 l (Storage container) | 13 l (Storage container) | 21 l (Storage container) |
| Max. trough-flow volume       | 0.7 l/h              | 120 l/h                 | 800 l/h   | 800 l/h   | 3–5 l/h                   | 4–7.5 l/h                | 4–7.5 l/h                |
| Resulting water quality       | 2–3 µS/cm            | 1–5 µS/cm               | 1–5 µS/cm   | 1–5 µS/cm   | < 1 µS/cm                 | < 1 µS/cm                | < 1 µS/cm                |
| Capacity at 10°dH             | -                    | c. 210 l                | c. 2800 l   | c. 2100 l   | c. 1900 l                 | c. 1900 l                | c. 1900 l                |
| Capacity at 20°dH             | -                    | c. 105 l                | c. 1200 l   | c. 960 l  | c. 1250 l                 | c. 1250 l                | c. 1250 l                |
| Min./Max. water pressure      | -                    | 1.5–10 bar              | 1.5–10 bar  | 1.5–10 bar  | 2–6 bar                   | 2–6 bar                  | 2–6 bar                  |
| Wall mount                    | -                    | +                       | -   | -   | +                         | -                        | -                        |
| Mounting on the device        | -                    | +                       | -   | -   | -                         | +                        | +                        |
| Premium-Plus-Class            | +                    | +                       | + <sup>(1)</sup>                                      | + <sup>(1)</sup>  | +                         | -                        | -                        |
| Profi/S-Class                 | +                    | +                       | + <sup>(1)</sup>                                      | + <sup>(1)</sup>  | +                         | -                        | -                        |
| MELAquick 12+/12+p            | +                    | +                       | + <sup>(1)</sup>                                      | + <sup>(1)</sup>  | +                         | -                        | -                        |
| Cliniclave 45                 | -                    | -                       | +   | +   | -                         | +                        | -                        |
| Cliniclave 45 M               | -                    | -                       | +   | +   | -                         | -                        | +                        |
| MELAtherm 10                  | -                    | -                       | +   | +   | -                         | -                        | -                        |

+ compatible +<sup>(1)</sup> compatible only in connection with MELAtherm or Cliniclave - incompatible <sup>(2)</sup> overall weight, with filters and storage container (unfilled)

Further information regarding these topics, our products and all current questions available under: [www.melag.com](http://www.melag.com)

**MELAG – A world-leading family-owned and run company based in Berlin.**



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MELAG Medizintechnik oHG  
Geneststraße 6–10  
10829 Berlin  
Germany

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