MELA*dem*®

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 m².

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 a calcium carbonate) on the instruments and the chamber of the steam sterilizer. This accelerates their wear. A conductivity of even c. 30 µS/cm can result in discolouration and rust. Only the use of deminieralized 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.

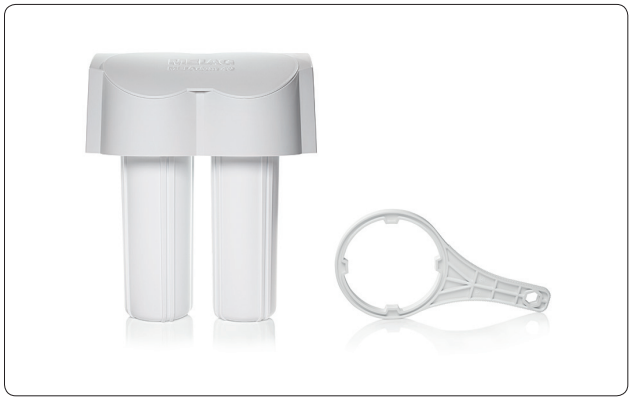
All MELAG water treatment units provide high-quality demineralized water for the cleaning, disinfection and sterilization process. The water thus produced satisfies our recommendations and specifications for the operation of steam sterilizers and instrument treatment in a washer-disinfector (WD). We 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 MELA*therm* washer-disinfector is subject to automatic checks.



MELA*dem*® 40 with cartridge key

MELA*dem*® 53 and MELA*dem*® 53 C

Vacuklav® 40 B+ with MELA*dem*® 40 and MELA*jet*® spray pistol

MELA*dem*® 53 fitted in a floor unit

MELA*dem*® 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 MELA*dem* 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

MELA*dem*® 53
MELA*dem*® 53 C

Ion exchanger for MELA*therm* and further devices

The MELA*dem* 53 and 53 C also operate according to the ion exchange procedure and are suitable for practices with large requirements for demineralized water. The MELA*dem* 53 presents a standard size and capacity, whilst the small MELA*dem* 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 MELA*dem* 53 units enable the connection of multiple steam sterilizers in addition to the MELA*therm*.

Art. no. 01038 MELA*dem* 53
Art. no. 01036 MELA*dem* 53 C

MELA*dem*®47 with removal valve and storage container, fitted in a floor unit

MELA*dem*®56

MELA*dem*®56 with storage container, fitted in a floor unit of the Cliniclave®45

MELA*dem*® 47

The reverse osmosis unit for practice steam sterilizers.

The return 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

MELA*dem*® 56 and MELA*dem*® 56 M

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

The MELA*dem* 56 was designed for the special requirements of the Cliniclave 45. The MELA*dem* 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 MELA*dem* 56
Art. no. 11057 MELA*dem* 56 M

MELA*jet*® installed on the MELA*dem*® 40

Fig. left: MELA*jet*® with individual attachments
Fig. right: MELA*jet*® with point jet

MELA*dest*® 65 with glass flask

MELA*jet*® for MELA*dem*® 40 and MELA*dem*® 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 MELA*jet* 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 MELA*therm* adapters for Luer-Lock or hose connections and thus the rinsing of the instruments. The MELA*jet* is connected directly to the water treatment unit MELA*dem* 40 or MELA*dem* 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

MELA*dest*® 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

MELA*test*® 60 inc. protective cap

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

MELA*test*® 60

Conductivity meter for checking the quality of the feed water.

The MELA*test* 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	MELA*dest* 65	MELA*dem* 40	MELA*dem* 53	MELA*dem* 53 C	MELA*dem* 47	MELA*dem* 56	MELA*dem* 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 (*61.5 cm including connecting bend)	Ø 24 × 44,3* cm (*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 (2)	18 kg (2)	24 kg (2)
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	0.9 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	+	+	+ (1)	+ (1)	+	-	-
Profi/S-Class	+	+	+ (1)	+ (1)	+	-	-
MELA*quick* 12+/12+p	+	+	+ (1)	+ (1)	+	-	-
Cliniclave 45	-	-	+	+	-	+	-
Cliniclave 45 M	-	-	+	+	-	-	+
MELA*therm* 10	-	-	+	+	-	-	-

\+ compatible + (1) compatible only in connection with MELA*therm* or Cliniclave - incompatible (2) overall weight, with filters and storage container (unfilled)

Further information regarding these topics, our products and all current questions available under: **www.melag.com**

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

Quality – made in Germany

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MELAG
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