## MELAdem®47 / MELAdem®55

Water treatment units according to the principle of reverse osmosis

Benefit from the many advantages provided by connecting your autoclave to a MELAG water treatment unit:

- Always fresh aqua dem which protects your instruments and your autoclave. This means years of safeguarding value.
- Automatic water feed supply, e.g. in connection with MELAG Vacuklav®, Vacuquick®, Euroklav® und Cliniklav®25.
   This means efficiency.
- Manual filling of distilled / demineralized water in the autoclave is no longer required. This means time saving.
- Automatic monitoring of the water quality when connected to a MELAG Vacuklav<sup>®</sup>, Vacuquick<sup>®</sup>, Euroklav<sup>®</sup> oder Cliniklav<sup>®</sup>25.
   This means a high degree of security.
- No danger of "spillage" of demineralized water (short circuit hazard!)
- No soiled water storage tank, which takes valuable time to clean.
- No necessary checking of the water level in the water storage tank.
- No time-intensive procurement of demineralized or distilled water, which often does not even conform to the VDE 510 standard requirements.
- No time-consuming disposal of empty cans



An excellent and reasonably priced method of producing demineralized water with consistently high quality in the practice is to use a water treatment unit. An autoclave should be exclusively used in the one-way water system, which protects the instruments.

We recommend the MELAdem® water

We recommend the MELAdem® water treatment units. Thanks to their compact construction, they may be mounted without difficulty in a lower cabinet or on the wall.

## **Environmentally friendly**

A regeneration of the equipment with acids and alkaline solutions is not required. The water treatment units MELAdem®47 and MELAdem®55 work according to the environmentally-friendly reverse osmosis method. Recognized institutions recommend water treatment units which work on the principle of reverse osmosis.



MELA*dem*® units require no electric power connection. Depending on the quality of the tap water and consumption, the filter cartridges are only replaced after 6 to 12 months (or even later).

Thus MELAdem®47 and MELAdem®55 are especially thrifty in their consumption and maintenance.

### Safe and reliable

Due to quality control. Because MELAdem®47 and MELAdem®55 feature a conductance measuring option which makes it possible to check the water quality at all times. This monitoring is integrated in the MELAG autoclaves Vacuklav®, Vacuquick®, Euroklav® and Cliniklav®25 as part of the standard series.



#### **Versatile**

MELAdem®47 not only delivers high-grade demineralized water for operating an autoclave. The supplied faucet can also meet the requirements for high-quality demineralized water for many other applications in the practice as well.

### **Automatic**

MELA*dem*®47 and MELA*dem*®55 permit a direct connection to the MELAG autoclaves Euroklav®, Vacuklav®, Vacu*quick*® and Cliniklav®25 automatically feed the demineralized water required to generate steam.



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# Why does bad water cause damage?

Demineralized water (quality according to VDE 510) is required for steam sterilization. Unfortunately the quality of the water fluctuates depending on the source and production method (e.g. pharmacy, drugstore, do-it-yourself market etc.). Water of inferior quality can lead to deposit formation in the chamber and in the water storage tank of the autoclave, on the instruments and on other parts which come in contact with the water steam.

At longer exposure times, especially with chloride-containing residues, damage to the passive protective coat of stainless steels formed by atmospheric oxygen is possible. If iron or rust molecules penetrate this passive coating, even the initiation of the rusting process on stainless steel instruments cannot be excluded.

## In two sizes: MELA dem® 47

The water treatment unit for the practice with an average consumption of high-quality demineralized water for the autoclave and for the additional removal of water for other purposes in the practice. MELAdem®47 creates about 3 liters per hour, the supplied water storage tank has a volume of about 5 liters of demineralized water.

MELA*dem*®47 ① is installed in a lower cabinet with the water storage tank ② and tap ③



#### Technical data (W x H x D)

MELA $dem^{\otimes}$  module 39 x 47 x 15cm storage tank Ø 24 x 51cm

### MELA dem®55

The water treatment unit for the practice which requires a great deal of high-quality demineralized water for the MELAG autoclave Cliniklav®25. MELAdem®55 creates about 7 liters per hour, the supplied water storage tank has a volume of about 15 liters demineralized water.



MELA*dem*®55 with storage tank

### Technical data (W x H x D)

MELA*dem*® module 39 x 47 x 15cm storage tank 23 x 42 x 27cm

### **More performance**

The water treatment units MELAdem®47 and MELAdem®55 not only filter out sodium, calcium and magnesium, but also hydrocarbons, chlorine, pesticides etc. from the tap water. In comparison, in many conventional units only anions and cations are removed from the tap water.

## **Advantage of reverse osmosis**

Water treatment units which work on the principle of reverse osmosis, e.g. MELA*dem*®47 and MELA*dem*®55, require no regeneration of components needing large quantities of acids and alkaline solutions.

The reversion of the physical principle of osmosis, where the pure water diffuses from a solution of higher concentration through a

semipermeable membrane, is therefore an extremely economical and environmentally-friendly type of water treatment.

MELA*dem*<sup>®</sup>47 and MELA*dem*<sup>®</sup>55 additionally feature an extremely simple operation.

The desalination rate is 90-98%.

The yield of demineralized water is 25-30% of the tap water.

## Quality und precision for most exacting hygienic requirements

More than 50 years ago, MELAG began in Berlin to specialize in the manufacture of sterilization equipment. As a result of high-level quality consciousness, reliability, and innovative eagerness – together with the highest in safety objectives – the family-run enterprise MELAG has succeeded in becoming a leading



producers of sterilization equipment. Verification of this success has been the sale of more than 385,000 MELAG units around the world. Decades of experience, modern computeraided production technology in application on over 7,000 sq. metres of production floor, the employment of highest-quality materials, and an experienced and reliable staff — all these have made MELAG equipment renowned for its quality and convenience of operation. MELAG corporate policy includes systematic specialization in a limited line of products. In this way it is possible for MELAG as a successful

medium-size business to employ its highly specialized development team to effectively satisfy market demands and to further develop the MELAG line of products on a leading international level. The entire MELAG staff is proud to have made an important contribution to the protection of the health of patients and of medical staff, with the equipment and accessories it produces for reliable sterilization and safe storage of sterilized articles.

