# EUROKLAV®+

The S-Class







# **QUALITY**AND**INNOVATION**THE SUCCESS OF A FAMILY-LED COMPANY

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. As a medium-sized company, it is this specialization that enables our 100 person-strong expert development team to maintain and develop our product range so as to extend our position as an international market-leader.

Our focus on quality and the highest standards of operational reliability has established MELAG as the world's leading manufacturer in the area instrument treatment and hygiene, selling over 490,000 devices to date. Our entire product range is developed and produced exclusively in Germany (Berlin). Over 300 employees work on a c. 22,000 m<sup>2</sup> premises.

We have consistently ruled out purchasing products to expand our product range which 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 this consistent specialization is the precondition for the high quality of our 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 field of instrument treatment and hygiene.

The MELAG management and team.



# THE **S-CLASS**QUALITY WINS OUT



→ QUALITY
HIGH-CLASS

AND DURABLE

#### → DOCUMENATION

**DIVERSE AND SECURE** 

#### → OPERATION

**QUICK AND SIMPLE** 

#### → PROGRAM

RELIABLE AND FLEXIBLE

#### → CYCLE RUNS

**ECONOMICAL AND EFFICIENT** 

#### → DESIGN

**FUNCTIONAL AND ATTRACTIVE** 

# **AUTOCLAVESWITHVACUUM**

The European Standard EN 13060 for small sterilizers describes the three methods/types of sterilization cycles: B, S and N. Autoclaves with B cycles must meet the most stringent requirements. They work with a fractionated pre-vacuum and their capacity can be compared to that of large hospital autoclaves. The medical practice operator stipulates in the risk analysis and specification of the preparation steps which method is applied to prepare the instruments used.

In practices which do not use narrow-bore and simultaneously long hollow-bodied instruments, a "Class S" autoclave can be the right alternative to the "Class B" autoclave. "Class S" autoclaves do not operate with a fractionated vacuum, but with a simple pre- and post-vacuum. Autoclaves which only offer "Class N" cycles are not suited for sterilizing wrapped instruments.



#### One system – two autoclaves

To meet the different needs in sterilizing instruments, MELAG offers the Euroklav®+ in two sterilization chamber sizes. The diameter for both autoclaves is 25 cm, the length of the sterilization chamber of the Euroklav® 29 VS+ = 35 cm and Euroklav® 23 VS+ = 45 cm.

## The special process

To meet the stringent requirements of a "Class S" autoclave according to EN 13060, the air must be completely removed from the sterilization chamber, the interior of the instruments and the wrappings. The Euroklav®+ autoclaves meet this specification by an effective pre-vacuum in combination with a fractionated gravity system.



The operator herself can easily handle special options such as switching over an internal feed water supply from the integrated water storage tank to an external water treatment unit connected to the autoclave. It is just as simple to select an output medium for the documentation, e.g. printer, MELAflash CF-Card-Printer or practice computer system. That also saves time in operating the autoclave.

## **Quick sterilization programs**

The Euroklav®+ autoclaves are usually considerably faster than other devices on the market.
Using the quick program, unwrapped instruments can already be removed after 20 minutes, including pre-vacuum and vacuum quick drying.

# QUICKINNOVATIVEFLEXIBLE

#### Automate!

The practice-friendly system: Automatic feed water supply with MELAdem®40 / MELAdem®47. All Vacuklav autoclaves can be automated by connecting the feed water supply with demineralized water to a water treatment unit. The used water is also disposed of automatically if the autoclave is connected to a drain. The measuring of the water quality integrated in the autoclave ensures that only water of the best quality for sterilization is fed into the system, thus protecting the autoclave and the valuable instruments.

#### We recommend:

■ MELAdem®40: for small water requirements or only a few sterilizations per day. This water treatment system works on the ion exchange principle. The dual-chamber system of MELAdem®40 guarantees an optimal utilization of the mixed-bed-resin pellets. The MELAdem®40 can be mounted directly on the autoclave, on the wall or in a sub cabinet.

■ MELAdem®47: for greater water requirements. This water treatment system works on the particularly environmentally friendly principle of reverse osmosis. It is especially well suited for practices which conduct more than four sterilization runs per day. The minimum use of consumables with a maximum yield of high-quality water relieves the environment and saves costs. The scope of delivery includes the water storage tank and a separate tap for demineralized water.



MELAdem®47 (1) installed in a sub cabinet with water tank (2) and tap (3).



## The design – functional and attractive

Not only the performance and production quality of the Euroklav®+ autoclaves underline MELAG's dominant position, their design makes these devices visually top class.



Operating the autoclaves should be both pleasurable and safe. The design fully supports this demand. It shows what's essential, and does its work efficiently. The large door lock is not only a design feature, but also ensures a safe and easy opening and closing of the door.



MELAdem®40 und MELAjet® mounted on the Euroklav® 29 VS+



easy refill

The large integrated funnel-shaped opening of the water storage tank makes it easy to fill the tank with demineralized or distilled water in the Euroklav® 23 VS+ and 29 VS+. Alternatively, both autoclaves could be fed the required water supply from any external reserve vessel or even be connected to a water-treatment unit.



quick release connector

The regular draining of the used distilled or demineralized water from the water storage tank of stand-alone autoclaves is generally a cumbersome manual task for the practice team. The used demineralized or distilled water can quickly be removed from the water storage tank without effort via the quick release connector of the Euroklav® 23 VS+ and 29 VS+ autoclaves. If the installation conditions permit, it is also recommended to connect the standalone autoclaves to a drain. Then the used water is automatically drained from the autoclave storage tank.

# The optimum use of the sterilization compartment – you have the choice

The autoclaves are always delivered with a mounting for trays or cassettes, included in the price. The delivery contains Mount >A< (for 5 trays or 3 standard tray cassettes) by default. Please indicate in your order if you would alternatively at no extra charge prefer Mount >B< for 4 standard tray cassettes or Mount >D< for two high cassettes or container systems.





Mount >B< for 4 standard tray cassettes (or for 4 trays)









### **Sterilization containers**

Several MELAG sterilization containers, available in different lengths and heights, can alternatively fit in the large sterilization chamber of the Euroklav®+ autoclaves. They are furnished with fasteners and cover seals and thus conform to EN 868.



# **DOCUMENTATION**AND**BATCH**CONTROL

The documentation with the S-Class autoclaves as a proof for an effective and safe sterilization can be very easily and comfortably be done by the operator. This approach secures evidence in case of presumed infection in the dental and medical practice. In the context of public health department checks or medical practice inspections, proper documentation and batch control are also considered important criteria for the "release" of instruments by the medical assistant after sterilization.

#### **Black on white**

The connection of the MELA*print*®42 allows the traditional documentation of all cycle data on paper.





### Flexibility with CF-Card

The MELAflash CF-Card-Printer is a modern, paperless alternative to the printer.
All cycle data will be written automatically on the MELAflash CF-Card and can be read into any PC via the MELAflash CF-Card-Reader.

### **Documentation via Network**

The MELAnet Box connects the autoclaves of the S-Class to the practice network. The cycle data can be transfered automatically to the practice server and be stored permanently.



#### Perfection with MELAtrace®

MELAG has developed a software for the whole instrument treatment process.

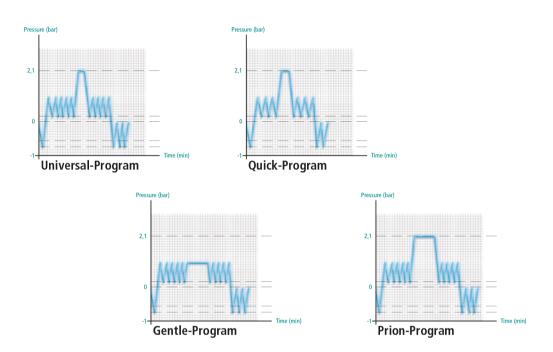
MELA*trace* connects all cleaning and disinfection steps of the instrument treatment with the sterilization process to ensure a comprehensive documentation.



THE S-CLASS

# **PROGRAMS**ANDTIMES

All autoclaves of the Class S offer four sterilization programs and two test programs. The test programs can check and document the function of the autoclave in the medical practice at any time. After selecting and starting the desired program, the modern microprocessor controls and monitors the entire process automatically.



## **Programs:**

	Universal-Program	Quick-Program	Gentle-Program	Prion-Program
	wrapped, 134°C hold time: 5.5 min.	unwrapped, 134° C hold time: 3.5 min.	wrapped, 121°C hold time: 20.5 min.	wrapped, 134°C hold time: 20.5 min.
Euroklav®23 VS+ Euroklav®29 VS+	25	15	40	40
Drying period	25	10	25	20

We manufacture autoclaves according to the following directives and standards:

93/42/EEC Medical device class IIb (Medical Devices Directive), 2014/68/EU (Pressure equipment directive), 2006/42/EC (Machinery directive), EN 13060 (Small steam sterilizers), DIN EN 61010-1/-2-040 (Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part 1: General Requirements), DIN EN 61326-1 (Electrical equipment for measurement, control and laboratory use - EMC requirements- Part 1: General requirements), DIN EN 1717 (Protection Against Pollution of Potable Water installations and general requirements of devices to prevent pollution by backflow)



All times in minutes



# **Technical data:**

	Euroklav®23 VS+	Euroklav®29 VS+	
chamber size	45 cm long x ø 25 cm dia	35 cm long x ø 25 cm dia	
chamber volume	22 litres	18 litres	
loading quantity	4 kg instruments 1 kg textilies	3 kg instruments 0,8 kg textilies	
dimensions (w x h x d)	42,5 cm x 48,5 cm x 69 cm feet of the unit fit on 60 cm tabletop	42,5 cm x 48,5 cm x 61 cm feet of the unit fit on 50 cm tabletop	
weight	45 kg	42 kg	
power supply	230 V; 50/60 Hz		
power consumption	2,600 Watt	2,100 Watt	

### "First aid" from the MELAG Service Center

Not every unexpected message from the autoclave indicates a technical defect. Often the problem only reflects an operating error or insufficient supply of operating resources, such as feed water. As contact partner for such problems which you can easily rectify yourself, you can consult the trained service personnel of your specialist dealer, the authorized MELAG Customer Service or the MELAG Service Center and ask for advice. In many cases a simple telephone call suffices to prevent the necessity of a service visit to your company.





### MELAG medical technology

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Further information about our products and prevailing standards, laws and directives as well as current questions can be found at:

www.melag.com