

# Cliniclave® 45

The large steam sterilizer for practice and clinic use



[www.melag.com](http://www.melag.com)

Quality – made in Germany

**MELAG**  
competence in hygiene



# 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. It is this specialization that enables our 100 person-strong expert development team to maintain and develop our product range to its current world-class.

Our focus on innovation, quality and the highest standards of operational reliability has established MELAG as the world's leading manufacturer in the sector of instrument treatment and hygiene, selling over 485,000 devices to date. Our entire product range is developed and produced exclusively in Germany (Berlin). Over 275 employees work on a c. 20,000 m<sup>2</sup> premises.

We have consistently rejected outsourcing to low-wage countries, as we did not want to risk a reduction in our world-beating quality. We have also ruled out purchasing products to expand our product range which exceed provision in our area of core competence, practice hygiene.

Today we are far and away 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 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.



# Cliniclave<sup>®</sup> 45 – Better for the treatment of your instruments

## Saving time

With a maximum load of up to 35 kg, the Cliniclave 45 can sterilize significantly more instruments than other devices of its class. Sterilize your instruments in less than 45 minutes, including drying.

## Safe documentation

The extra-large colour-touch display enables intuitive operation. Its integrated documentation and clearance software permits complete reproducibility.

## Ergonomic working

A range of batch configurations can be inserted in and removed from the Cliniclave 45 quickly and ergonomically.

## Saving energy

The large load sizes and its low water and energy consumption make the Cliniclave 45 one of the most efficient and compact large steam sterilizers of its class.

# Cliniclave® 45 – Integrated software for clearance and instrument traceability

The documentation and clearance software already installed in Cliniclave 45 permits complete reproducibility and secure traceability. The very large colour-touch display enables intuitive operation, helping the operator to avoid errors and find all the important information.



*"The user-friendly batch clearance provided by the Cliniclave 45 facilitates documentation of the sterilization process, thereby simplifying instrument treatment. The logs are easy to save and are available at any time. This represents an important contribution to maintaining the high quality of practice processes."*

Petra, Day hospital Krahl, Dr. Beltz, Dr. Poppelbaum

An individual PIN can be issued to every user to enable safe traceability in the clearance procedure. Authentication of the batch clearance can be performed quickly and safely on the display.

The Cliniclave 45 provides a number of documentation methods including: integration in a network via an Ethernet interface, the printing of bar code labels for the labelling of wrapped instruments and log output to a CF card.



# Cliniclave<sup>®</sup> 45 – Loading and unloading made easy

The loading system of the Cliniclave 45 enables the loading and unloading of a wide range of loading configurations without exertion.



The door hinge can be located on the left or the right hand-side of the Cliniclave 45, to adapt to difficult room conditions.

*"The loading and unloading of the large steam sterilizer using the loading system and the transport trolley guarantees ergonomic and safe working practices."*

Sabine, SPREEDOCS Outpatient surgery centre

# Cliniclave® 45 – Processing more instruments faster

The sterilization of larger quantities of instruments and textiles and their quick availability is one of the most important requirements in clinics, practices and outpatient centres.

With a maximum load of up to 35 kg of instruments, or up to 7 kg of textiles, the Cliniclave 45 can sterilize significantly more instruments than almost all other large steam sterilizers. Wrapped instruments can be processed in a record time of 30 minutes (including drying). Used in connection with specially-designed mounts, the cylindrical sterilization chamber provides the best solution for all departments.



*"The large load volumes and short operating times make an important contribution to improving the energy-efficiency of our practice"*

*Kirsten, Oral surgeons Dres. Frey*



*"Sterilization with a Cliniclave 45 is significantly faster, thus saving time. The excellent drying results are even better than the predecessor model."*

*Kim, Oral and maxillofacial surgery clinic  
Prof. Dr. Dr. Strunz und Dr. Dr. Strunz*

# Cliniclave<sup>®</sup> 45 – Even greater efficiency and convenience

It is often the small things that make our working lives more pleasant. The versatility of the Cliniclave 45 enables you to make working processes more simple, safe and convenient.



## Automatic shutdown

Activating this function before starting the last batch of the day means that the Cliniclave 45 shuts down automatically, immediately after the end of the program run. Batch clearance can then be performed the next day, immediately after activating the steam sterilizer.



## Additional drying

For especially demanding loads such as anaesthetic hoses, plastic containers or silicon mats, use the settings menu to extend the drying time by up to 50 per cent.



## Energy-saving mode

If the Cliniclave 45 is not to be switched off during longer operating pauses, activate the energy-saving function. This shortens the pre-heating time during the next start.

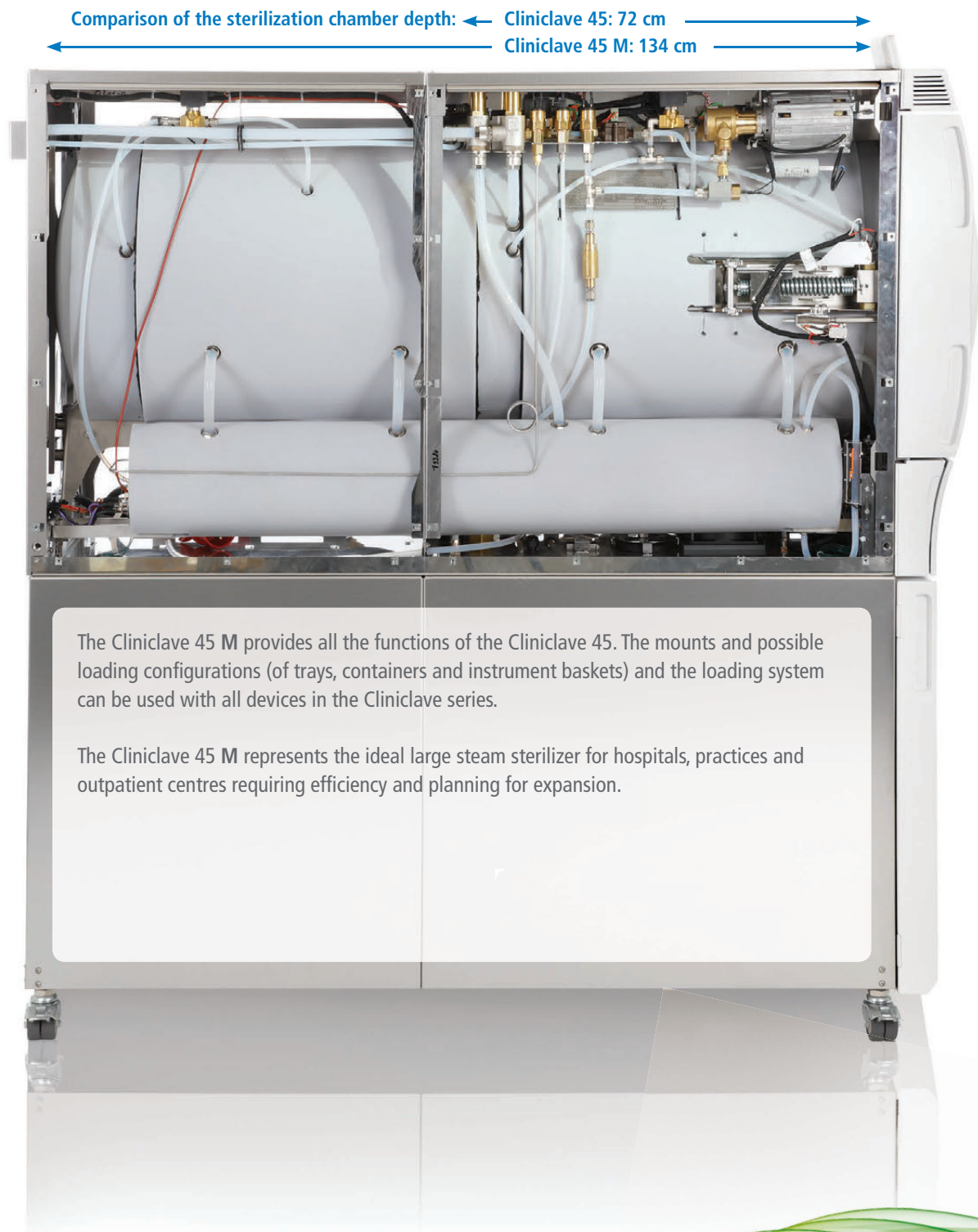


## Start time pre-selection

The start-time pre-selection function enables the user to select any program and then start it at a specific time, e.g. in order to perform a routine test program.

# Cliniclave<sup>®</sup> 45 M – The "M" stands for Magnum: even more loading capacity

With a sterilization chamber double the depth of its twin, the Cliniclave 45 M can accept two sterilization containers (30x30x60 cm). Representing double the loading quantity of the Cliniclave 45, it can hold 70 kg instruments or 14 kg of textiles. With its innovative form design, this device concept provides unbeatably good value for money.





# Cliniclave® 45 – Making your instruments available more quickly

Fast operating times and reliable sterilization results number amongst the most important requirements made of a large steam sterilizer. The multipoint steam intake and discharge technology deployed in the Cliniclave 45 guarantee that these requirements are met.

Program	Operating time <sup>1)</sup>		Drying <sup>2)</sup>	Packaging
	Cliniclave 45	Cliniclave 45 M	Cliniclave 45/45 M	
<b>Universal-Program</b> Partial load <sup>3)</sup> Full load <sup>4)</sup> Textiles <sup>5)</sup>	~23 Min. ~35 Min. ~26 Min.	~27 Min. ~48 Min. ~35 Min.	20 min. 20 min. 20 min.	Multiple wrapping
<b>Quick-Program B:</b> Partial load <sup>3)</sup>	~20 Min.	~25 Min.	10 min.	Single wrapped
<b>Quick-Program S</b> Partial load <sup>3)</sup>	~17 Min.	~22 Min.	6 min.	Unwrapped
<b>Gentle-Program</b> Partial load <sup>3)</sup> Textiles <sup>5)</sup>	~36 Min. ~42 Min.	~45 Min. ~53 Min.	20 min. 20 min.	Multiple wrapping
<b>Prion-Program</b> Partial load <sup>3)</sup> Full load <sup>4)</sup> Textiles <sup>5)</sup>	~38 Min. ~50 Min. ~41 Min.	~42 Min. ~63 Min. ~50 Min.	20 min. 20 min. 20 min.	Multiple wrapping

1) Without drying and dependent on the load and the set-up conditions e.g. mains voltage and air-pressure.

2) When taking into account the specified load quantities, the program-specific drying times guarantee excellent drying of the sterilized equipment. The drying time can be extended by 50% for especially difficult drying tasks by activating the additional drying function.

3) Partial load      Cliniclave 45/Cliniclave 45 M      15/30 kg

4) Full load        Cliniclave 45/Cliniclave 45 M      35/70 kg

5) Textiles        Cliniclave 45/Cliniclave 45 M      7/14 kg

# Cliniclave<sup>®</sup> 45 – Data and facts

Before installing a large steam sterilizer, it is important to ensure that local conditions permit efficient installation.

Performance features	Cliniclave 45	Cliniclave 45 M
Order no.	10045 (door hinge left) 10047 (door hinge right)	10048 (door hinge left or right)
Chamber volume	105 litres	200 litres
Chamber diameter   chamber depth	Ø 44 cm   72 cm	Ø 44 cm   134 cm
Dimensions (W x H x D) table-top device	65 x 91 x 91 cm	65 x 160 x 153 cm (The Cliniclave 45 M is only available with a floor unit)
Dimensions (W x H x D) floor unit	65 x 160 x 91 cm	
Empty weight table-top device	190 kg	Only available with floor unit
Empty weight with floor unit	230 kg   255 kg with MELAdem 56	310 kg   340 kg with MELAdem 56 M
Power supply	3 x 380-415 V, 50/60 Hz, 10,500 W	3 x 380-415 V, 50/60 Hz, 13,500 W



Supply with feed water is best performed via a MELAdem 56 reverse osmosis unit. Designed for use with the Cliniclave series, it fulfils the drinking water requirements outlined in EN 1717.

Space-saving fitting of the MELAdem 56 in a floor unit.

The devices of the Cliniclave 45 series can also be connected to a central water treatment unit or an existing ion exchanger.

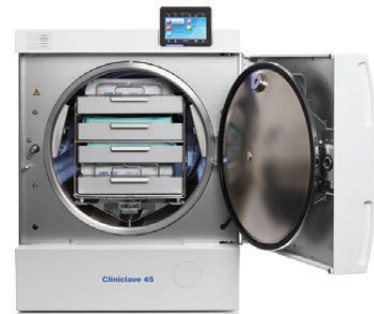
# Cliniclave<sup>®</sup> 45 – Well-conceived solutions for all departments



15 dental containers  
(each 31 x 5 x 19 cm)



24 dental trays  
(each 19 x 2 x 29 cm)



Four trays  
(each 31 x 5 x 59 cm)



A whole sterilization container  
(W x H x D = 30 x 30 x 60 cm)



Two half containers  
½ StE (each 30 x 15 x 60 cm)



An instrument basket  
(W x H x D = 28 x 14 x 57 cm)  
and two trays  
(each 31 x 5 x 59 cm)



Adapted to the needs of the Cliniclave 45 series, we offer a loading system for convenient and effort-saving ergonomics in the loading and unloading of the steam sterilizer.



# Cliniclave® 45 – MELAG quality for investment security and standard conformity

The Cliniclave series is produced in conformity with the following directives and standards:

93/42/EEC class IIb (European Directive for Medical Devices)

97/23/EC (Pressure Equipment Directive)

2006/42/EC (Machinery Directive)

EN 285 (Large Steam Sterilizers)

EN 61010-1/-2-040 (Safety requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Parts 1 and 2)

EN 61326-1 (Electrical Equipment for Measurement, Control and Laboratory Use. EMC requirements – Part 1: General Requirements)

EN 60601-1-2 (General Requirements for Safety Including Important Performance Characteristics – Supplementary Standard: Electromagnetic Compatibility – Requirements and Tests)

EN 1717 (Protection of Drinking Water from Contamination)

ISO 9001 and ISO 13485 (Quality Management / Certification).

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



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