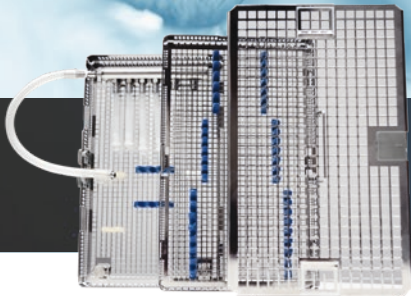


# Instrument reprocessing in ophthalmology

## The MELAG system solution in focus



**NEW: MELAstore Trays & Boxes**  
for more efficiency and sustainability in ophthalmology

# MELAG as a key partner for ophthalmology practices and clinics

We ensure the highest level of patient and instrument protection - with innovative technologies, everything in ophthalmology practices and clinics is properly coordinated. We have been pursuing this clear goal since MELAG was founded in 1951. Because as an owner-managed family business, we don't just want to offer outstanding autoclaves and washer-disinfectors. We want more. With passion, innovative strength and attention to detail, we want to systematically harmonize the entire reprocessing process - and thus make the complicated uncomplicated.



**We love hygiene. Since 1951.**  
Specialized system provider for ophthalmology for over 70 years



**Unique MELAG quality.**  
100 % made in Germany



**Pioneering innovations.**  
Innovative strength with over 500 specialized employees in Berlin



**A global leader.**  
Global market leader with over 700,000 satisfied customers



**The magic of the system solution.**  
Maximum safety and efficiency with coordinated hygiene workflows



Take a look behind the scenes: In our new image video, we give you exclusive insights into the research, development and manufacturing process at our Berlin company site.

# The MELAG system solution

For your safety: everything from a single source.

With our coordinated washer-disinfectors, sealing devices, wash tray systems, autoclaves and software solutions, we turn your idea of a time-, space- and cost-saving hygiene workflow into reality.

- 1 Cleaning and disinfection** of surgical hollow body instruments, such as phaco handpieces or Sauter cannulas, must be conducted with a washer-disinfector in accordance with international guidelines.
- 2 The individual instruments are packed** using a sealing device or standardized surgical cataract sets with MELAstore Trays and Boxes.
- 3 Sterilization** using a fractionated vacuum process in a class B autoclave achieves complete inactivation of all microorganisms.
- 4 Documentation and approval** are essential for the complete verification of faultless instrument reprocessing in ophthalmology practices and clinics.



→ Learn how to master the challenges of each process step with the MELAG system solution in our hygiene guide

# The challenges

## Fragile. Time-critical. Demanding.

In ophthalmology practices and clinics, reprocessing must be carried out with the highest care. Not only decontamination plays a role here, but also maintaining the functionality and safety of the fragile, microsurgical instruments. An optimized reprocessing process is therefore crucial for ensuring the quality of patient care and meeting strict hygiene standards.

The reprocessing cycle must be time-saving to minimize the need for additional **expensive cataract surgery sets**.

There must be **no residues of e.g. rinse aid** on the instruments used for eye surgery.

**Complex and narrow-bodied hollow instruments** require safe adaptation in the washer-disinfector.

**Compliance with increased requirements for the reprocessing process**, as the eye is a highly sensitive sensory organ that requires special hygiene measures.

The **fine, microsurgical instruments** must be reprocessed gently in order to maintain their long-term quality.

Efficient workflows in ophthalmology practices and clinics require a **high degree of process standardization**.

# Our solution

## Safe. Efficient. Sustainable.

Optimize instrument reprocessing in your ophthalmology practice or clinic with the new MELAstore Ophthalmology Tray. Specially developed for the demanding requirements of ophthalmology, the MELAstore tray enables maximum efficiency and safety throughout the entire reprocessing process of your cataract surgical sets.

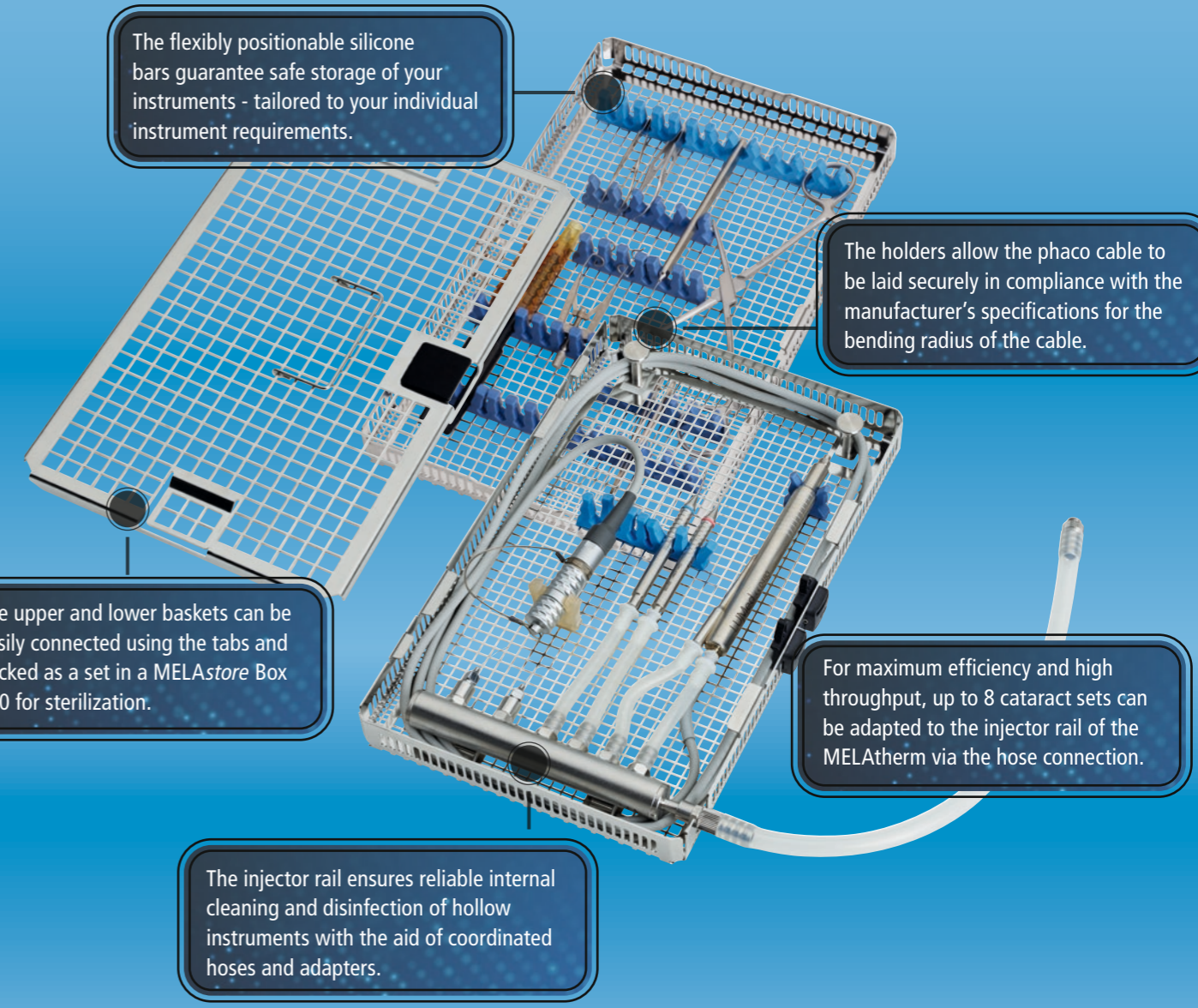
The flexibly positionable silicone bars guarantee safe storage of your instruments - tailored to your individual instrument requirements.

The holders allow the phaco cable to be laid securely in compliance with the manufacturer's specifications for the bending radius of the cable.

The upper and lower baskets can be easily connected using the tabs and packed as a set in a MELAstore Box 200 for sterilization.

For maximum efficiency and high throughput, up to 8 cataract sets can be adapted to the injector rail of the MELAtherm via the hose connection.

The injector rail ensures reliable internal cleaning and disinfection of hollow instruments with the aid of coordinated hoses and adapters.



# Cleaning and disinfection with genuine benefits

## With the MELAtherm 10 series

In the highly specialized world of ophthalmology, careful and efficient reprocessing with an equally highly specialized washer-disinfector is essential. MELAtherm is optimally adapted to the special requirements of reprocessing cataract sets. This is because all instruments in the surgical set are inserted into the corresponding holders using the wash trays and adapted with tube extensions for reliable rinsing of the hollow body instruments.

The Ophthalmo program enables the cleaning and disinfection of up to six cataract sets in just 42 minutes (plus drying). To ensure that no process media or other particles remain on the instruments, the final rinse is carried out without the addition of rinse aid and exclusively with demineralized water. At the end of the process, the instruments are immediately ready for further sterilization thanks to the integrated drying system.

A washer-disinfector and the use of correct reprocessing procedures are therefore crucial to ensure the functionality and longevity of high precision ophthalmic instruments and to maximize patient safety.



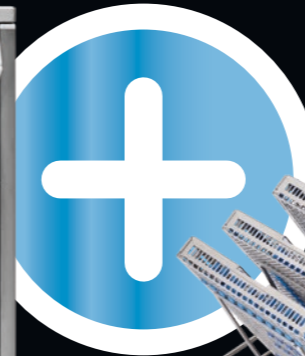
Watch out when buying a washer-disinfector: Our checklist will help you find the ideal washer-disinfector for your ophthalmology practice or clinic.



# 6 cataract sets in just 42 minutes

\*plus drying

MELAtherm 10 Evolution in combination with the ophthalmology loading pattern not only enables time-saving but also space-saving reprocessing. This is because all the key components for documenting, drying and dosing the process media are already integrated in the device at no extra cost.



### Loading pattern for ophthalmology:

- 1x Basic basket with injector rail and plastic central filter (Order no. ME80440)
- 2x Universal Flex 3 holder (Order no. ME80136)
- 6x MELAstore Tray ophthalmology (Order no. ME01189)

Optional: further adapters and screw plugs available

NEW

## Packaging with a system

### The new MELAstore Tray and Box system for ophthalmology

Instrument reprocessing with the coordinated system of MELAstore Tray and MELAstore Box saves a lot of time and money: specially developed for ophthalmology practices and clinics, the MELAstore system enables an ideal instrument workflow from patient treatment to reprocessing and storage.

#### ✓ Save time and money:

Packing and handling of individual instruments is time-consuming. By safely combining all the required instruments in a cataract set, you minimize the preparation and reprocessing times of your practice team.

#### ✓ Protect your instruments:

The secure fixation with adjustable silicone bars not only protects the practice team from puncture injuries, but also protects your highly sensitive instruments such as phaco needles from damage.

#### ✓ Protect the environment:

By employing containers, you reduce the use of disposable sterilization packaging and thus practice waste and material costs.

#### ✓ Optimize your workflow:

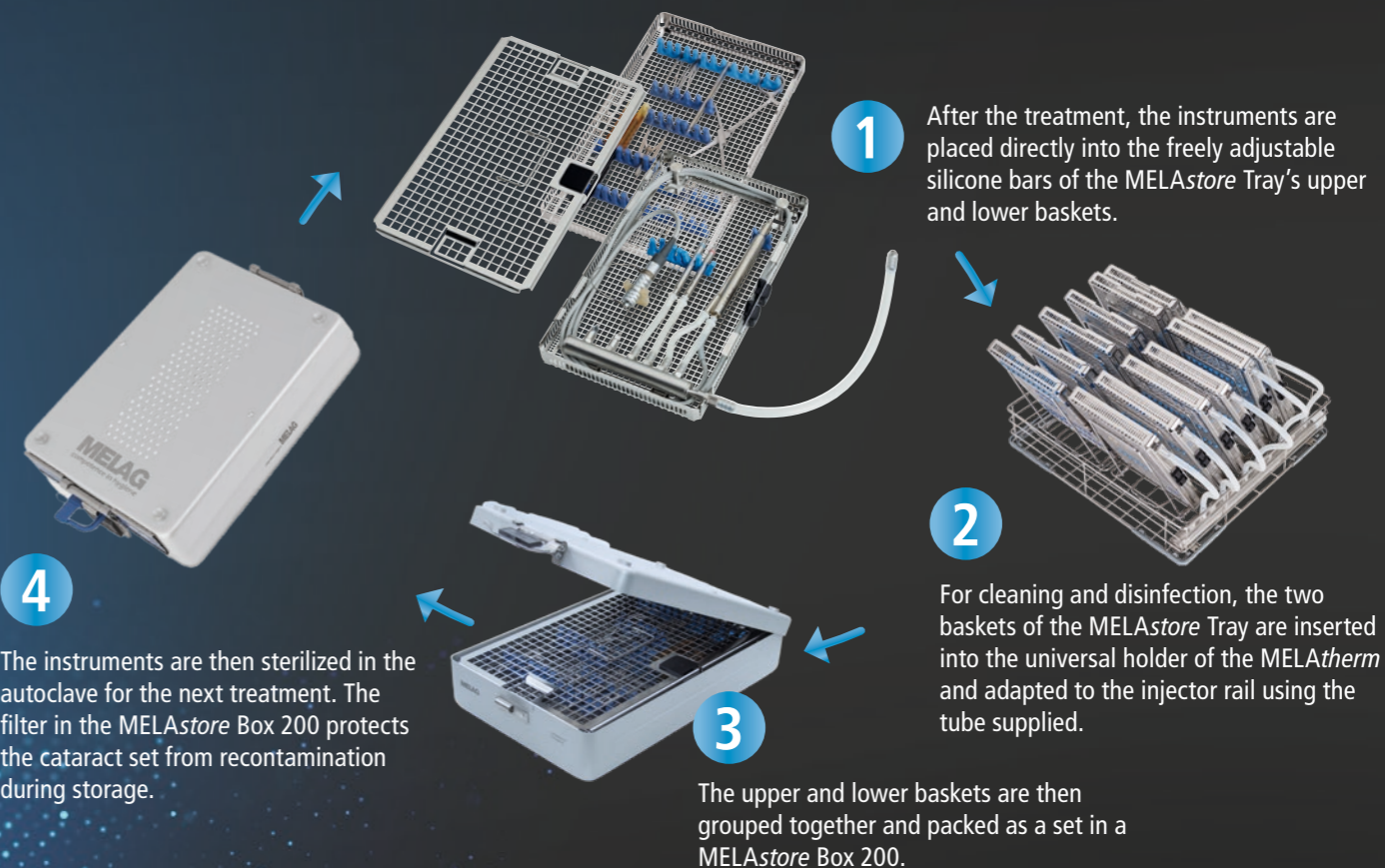
Standardize your processes and increase the quality of your treatments. With the MELAstore system, you always have everything that you require for your cataract surgeries at hand.



## The hygiene cycle

### with MELAstore Tray Ophthalmology:

For an optimum hygiene workflow for your complex cataract sets, the MELAstore Tray Ophthalmology consists of an upper and a lower basket: The upper basket of the wash tray with flexibly positionable silicone bars is used to safely hold both rigid and joint instruments. The lower basket is equipped with an injector rail and versatile ports to ensure reliable cleaning and disinfection of your hollow-body instruments.



**Maximum efficiency in the smallest space:** The compact MELAseal 300 rotary sealing device is the ideal solution for packaging a particularly large number of individual instruments in the shortest possible time!

# The MELAG autoclaves for ophthalmology

Bye bye waiting time. Hello sterilization in record time.

In ophthalmology, the safe and fast sterilization of Critical B microsurgical instruments in cataract sets using a Class B autoclave is of crucial importance. The combination of a fractionated vacuum process and record cycle times ensures that the complex hollow bodies are not only reliably sterilized, but are also available for reuse without long waiting times. To achieve this, our autoclaves rely on patented Double Jacket Technology, DRYtelligence intelligent drying and high loading capacities, among other benefits.



→ According to the DGSV recommendation, steam sterilization at 134 °C with a holding time of at least 5 minutes should be conducted after machine-validated cleaning and disinfection using a cleaning step in an alkaline environment.

**2x  
faster**

## Fast has never been this fast before:

Sterilize up to two MELAstore Boxes 200 in the Universal program of the Premium Class Evolution with patented Double Jacket Technology in record time.

**16 – 25 min.**

Premium Class Evolution cycle time (plus DRYtelligence drying)

**30 – 45 min.**

Cycle time for standard practice autoclaves without Double Jacket Technology

**2x cataract sets per batch**



*"In ophthalmology, every moment counts: with MELAG, we have a system that not only enables highly efficient hygiene workflows, but one that we can also completely rely on - allowing us to maintain our unrestricted focus on treating our patients."*

 Eye Clinic Opticum, Germany



## For all clinics that want more: The large small autoclave with 50 liters.

Compared to 2 small autoclaves, Vacuclave 550 is not only cheaper to purchase and operate, but also offers significantly more capacity with a 40% smaller footprint. Sterilize up to 7 MELAstore Box 200 in just 13 - 43 min. with Vacuclave 550 (plus DRYtelligence drying).

**7x cataract sets per batch**

## You decide: Big or even bigger.


With 4 models, the Cliniclave series offers groundbreaking performance for the sterilization of up to 24 MELAstore Boxes 200 in just 19 - 50 min (plus DRYtelligence drying). Discover the unique XXL device concept as a one- or two-door version with a chamber size of 100 to 200 L.

**100 liters for 12x cataract sets  
200 liters for 24x cataract sets**


# From HOW to WOW

## The workflow with the MELAG system solution

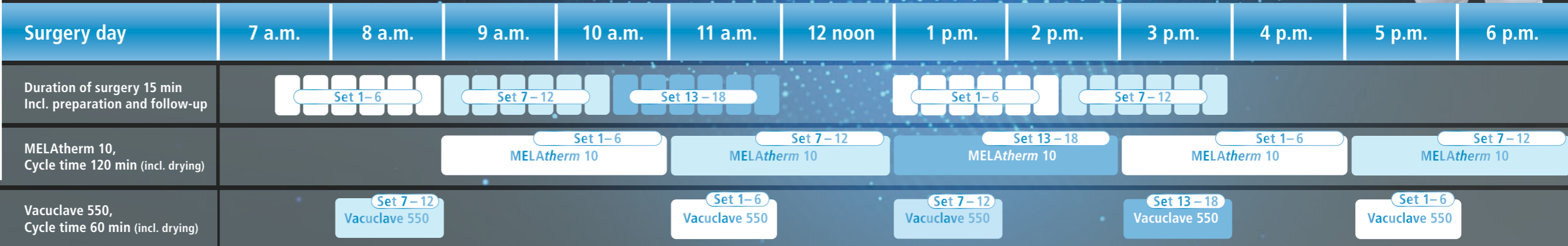
The MELAG system solution provides you with a first-class workflow. With record cycle times and high loading capacities, you can optimize your workflows on the day of surgery and reduce the number of cost-intensive surgical sets. The following illustration gives you an overview of the workflow in everyday practice.

Reprocessing of  
**12 phaco sets**  
for 24 OPs / day  
with MELAtherm 10 and  
2 autoclaves of the  
Premium Class Evolution

Reprocessing of  
**18 phaco sets** for  
30 OPs / day  
with MELAtherm 10 and  
Vacuclave 550



# Sterilization in a blink of single instruments with Vacuclave 105 / 305

To the future, get set, go! With the fastest autoclaves in their class, we are redefining the limits of speed: Because the 5 liter class B autoclaves with 2 trays for your individual instruments have been developed down to the smallest detail for a great performance in ophthalmology clinics!



shorter cycle times  
for sterilization



less space required in the  
decontamination room



less weight than a  
practice autoclave

from  
**6.5 min\***

Cycle time of a conventional practice autoclave: approx. 40 minutes



**Big on the inside, small on the outside: Special all around.**  
The Plug & Play installation concept, the large Smart-Touch Display and the Power Save function make everything easier - from installation and operation to environmental protection.



\* Cycle time with empty chamber and optimum conditions (plus drying).



# Documentation and approval

## Guaranteed safety from start to finish

The reprocessing workflow of the cataract set ends with the documented release. With our MELAtrace Pro and MELAtrace software solutions, you are on the safe side legally and meet the requirement for complete documentation quickly, conveniently and paperlessly.

The MELAG software solutions intuitively link the reprocessing steps of cleaning and disinfection, packaging and sterilization. With just a few clicks, the batches are released and the relevant program logs as well as release decisions are archived in a tamper-proof reprocessing log as a PDF file.

Finally, MELAprint 80 enables the printing of barcode labels to identify the cataract set. The double-sided adhesive labels are used to link the batch information with the patient data after the surgery. This provides you with complete proof of error-free instrument reprocessing in your ophthalmology practice and clinic.



### Practice advice

for complete proof of error-free instrument reprocessing:



Keep all instrument reprocessing documents for at least 5 years. For liability reasons, a period of 30 years is even recommended.



Due to the long archiving periods, we recommend a digital data carrier for storage.



For traceability, please transfer the label or batch number to the treatment file or practice software after instrument usage.



## MELAdoc System

Alternatively, MELAdoc documentation sheets and label printers allow you to quickly and easily complete the approval process on paper.

# The MELAG system solution

For your security: everything from a single source.

Your reprocessing room - the place where you ensure the safety of your patients. Thanks to the perfect interaction of the MELAG system solution, you can achieve an even more time and cost-saving reprocessing process. Discover the advantages of the ideally matched MELAG washer-disinfectors, sealing devices, autoclaves and software solutions:



### Personal:

One central contact to answer all your instrument reprocessing questions



### Efficient:

Cost optimization by synchronizing the service of all devices in your decontamination room



### Process optimized:

An aligned operating concept to avoid malfunctions in everyday practice



## Unique as a product, unbeatable as a system



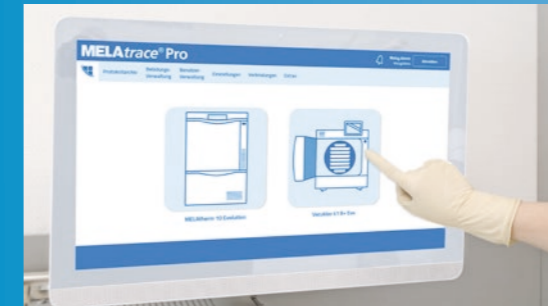
✓ Cleaning & disinfection with MELAtherm



✓ Packaging with MELAstore or MELAseal



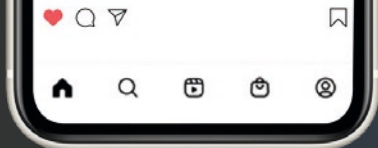
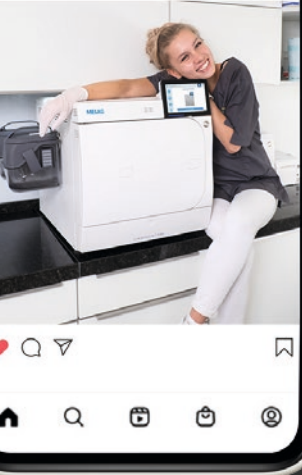
✓ Sterilization with MELAG autoclaves



✓ Documentation & approval with MELAtrace



✓ Labeling with MELAprint 80



**MELAG**  
competence in hygiene



Follow us on Instagram:

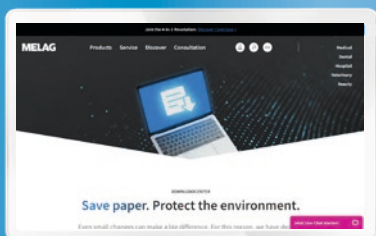
**MELAG\_Medizintechnik**

for updates & news from the world of MELAG Hygiene.

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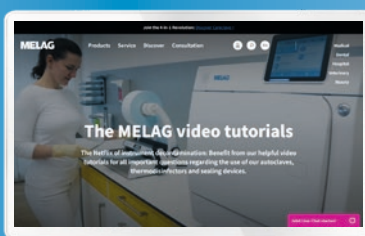
Further information can be found on our website [www.melag.com](http://www.melag.com)!

We look forward to your visit and will be more than happy to answer any further questions you may have!



**Download center:**

Our download area offers you ideal assistance in easily accessing and downloading the documents you need.



**Blog:**

Whether it's attractive offers, the latest news or helpful tips and tricks - you'll find the right content in our new hygiene blog!



**Troubleshooting:**

By entering the error number on your computer, tablet or smartphone, you will receive quick and easy instructions on how to resolve an error.