



Precision Sterilization for Every Medical Specialty





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Setting the Benchmark in Medical Sterilization

German-Engineered B-Class Autoclaves for Uncompromised Infection Control

Sterilization is the backbone of safe medical practice, ensuring every procedure is conducted with the highest standards of hygiene and infection control. From gynecology, ophthalmology, ENT, and surgical centers to dental clinics, sterilization technology must be fast, reliable, and compliant with international medical regulations.

At **Unicorn Denmart**, we bring you **Melag's world-renowned B-Class Autoclaves** - the industry standard for superior sterilization. Designed and manufactured in Germany, these autoclaves are built to deliver precision, efficiency, and uncompromised safety for every medical specialty.

Why Choose a B-Class Autoclave Over Standard Sterilizers?

B-Class autoclaves represent the most advanced sterilization technology, meeting the strictest European (EN 13060) and US FDA sterilization standards. Unlike traditional sterilizers, B-Class autoclaves use fractionated pre-vacuum technology, ensuring:

- → 100% Steam Penetration Eliminates all air pockets, effectively sterilizing even the most complex and hollow instruments.
- **→ Elimination of Bacteria, Viruses & Spores** Provides a Sterility Assurance Level (SAL) of 10-6, ensuring complete sterilization with 99.9999% microbial kill rate.
- → Faster & More Efficient Cycles Reduces turnaround time for instrument reusability, optimizing clinical workflows.
- **→ Versatility Across Specialties** Sterilizes solid, hollow, wrapped, and porous instruments with consistent, verifiable results.

Designed for Multiple Medical Specialties.

Available in 7L, 23L, and 45L capacities, Melag B-Class Autoclaves are tailored to meet the unique sterilization needs of various medical professionals:

- + ENT & Ophthalmology Clinics Precision sterilization for fine surgical instruments and delicate medical tools.
- + Gynecology & IVF Centers Ensures sterility of forceps, speculums, and surgical instruments critical for procedures.
- + Multispecialty & Surgical Clinics Supports high-volume sterilization with rapid turnaround and full compliance.
- + **Dental Practices** Effective sterilization of handpieces, implant kits, and rotary instruments.









Ophthalmology

ENT

Cosmetic Surgeons

Hospitals





Built for Performance & Ease of Use

- + Intelligent Touchscreen Interface Designed for quick, user-friendly operation.
- + Automated Sterilization Tracking Digital documentation ensures full compliance with medical and regulatory guidelines.
- + Energy-Efficient & Cost-Effective Optimized cycle efficiency reduces power consumption



Powerful class B vacuum procedure

for reliable sterilization according to EN 13060



High loading capacities

Sterilization of up to 6 kg on 5 trays in only 15 to 31 minutes



Intuitive operating concept

due to the Smart-Touch Display with LED status



Connectivity and data logging

of the sterilisation protocols via USB stick or network



Stand-alone device concept

With integrated water tanks for maximum flexibility



Energy saving mode Power Save

for top energy efficiency in daily practice



Quality made in Germany

developed, designed and produced in Berlin

Standard Features:

- → Triple Vacuum Cycle
- → Double Door Lock System Mechanical Lock with Air Lock
- → Steam Generation Cleaning Program for Improved durability
- ★ Exhaust steam is cooled down by condenser and collected in the waste water tank that keeps the room steam free
- → Six Layer new structure chamber using the special shaping finish drawing technology
- → The trays rack can rotate 900
- → Five trays can be used for placing instruments
- → CE & ISO Certified





Vacuclave® 550



Great for the environment. Great for you.







More space. More benefits. More WOW.

For big jobs. With little effort.

MELAG shows what it means to reinvent sterilization over and over again: Thanks to the extra-large chamber and pioneering innovations, you'll be ready for all tasks with Vacuclave® 550. Discover the advantages of our new 50 liter autoclave for energy-efficient, time- and cost-saving sterilization of your instruments:

Options? Unlimited!

Your instruments deserve greatness: The new XL chamber design, record cycle times and high loading capacities offer maximum versatility - and even more space for instruments up to 25 kg & 16



Loves your instruments. And the environment.

Sustainability through innovation: Due to the patented heat Recovery, DRYtelligence® drying and water-saving Coolify Technology, Vacuclave® 550 is the best solution - for your budget and the environment!



And the best thing: You save money.

Offers more, demands less: Vacuclave® 550 is not only significantly cheaper to buy than two alternative small autoclaves, but also reduces ongoing operating costs for maintenance and validation.













Opens up new possibilities:

More instruments. In shorter time.

Turn 2 into 1 - Compared to two alternative small autoclaves, Vacuclave® 550 ensures significantly more capacity with a 40 % smaller footprint. Discover our product highlights for the sterilization of the maximum number of instruments in the minimum amount of space in record time:



Impressive speed

Record operating times of just 12 minutes (excl. drying) and the highest quality of saturated steam – that's what the Double Jacket Technology stands for. A MELAG patent since 2012.



Uncompromising comfort

Definitely smarter! With the extra-large Smart-Touch Display, operation is as easy as using your smartphone.



Intelligent drying

DRYtelligence® makes for perfect drying results whilst shortening the drying time by up to 80 %.



Traceable documentation

Bye Bye sterilization logbooks! ProControl allows you to document the batch approval directly via the Smart-Touch Display without any extra software.



Outstanding capacity

More space for instruments up to 46 cm long: Sterilize a load of up to 25 kg on 16 trays or up to 10 MELAstore® Boxes.



All round flexibility:

We offer 3 loading options so that every practice or clinic can organize the workflow in the way that suits them best. With our optional slide system, we guarantee the highest level of ergonomics, safety and comfort during loading and unloading.



Mount Basic for up to 16 trays

for the sterilization of the maximum number of unwrapped and wrapped instruments



Loading slide for up to 10 MELAstore® Boxes

for convenient loading and unloading of the autoclave with sterilization containers



Loading slide with Mount Comfort for up to 16 trays

for maximum capacity & ergonomics when reprocessing individual instruments 8





The eco-friendly solution:

Save the planet. And over 10,000 €.

Vacuclave® 550 proves true greatness: The new 50 liter autoclave combines environmental protection with economy. Save electricity, water and thus a lot of money with our future-oriented innovations:



Recovery

The patented system for heat recovery deploys the heat from the used steam to generate new steam. The Recovery Technology not only reduces energy consumption by 15 % per cycle, but also heat dissipation into the decontamination room.

DRYtelligence®

Rely on perfect results: DRYtelligence® optimally adapts the drying process to your load. The intelligent algorithm reduces the drying time by up to 80 % – and thus saves a lot of time, money and energy.





Coolify

100 % reliability with 0 % cooling water – the patented Coolify Technology combines highly efficient air cooling with smart temperature monitoring. This allows you to enjoy your autoclave and the environment for a long time to come!

Power Safe

Vacuclave® 550 convinces with top energy efficiency during sterilization and in stand-by mode! Power Safe puts the heating and display into an energy-saving mode between sterilization cycles.













For your safety: Everything from one source.

The MELAG System Solution.

Your decontamination room – the place where you ensure patient safety!

Our washer-disinfectors, sealing devices, autoclaves and software solutions turn your dreams of optimized workflows into reality. The perfect interplay of MELAG System Solutions allow you to achieve greater time and cost-savings in instrument reprocessing.



Vacuclave® 550 – Unique as a product, unbeatable in a system:







Steam sterilization with Vacuclave® 550







Personal:

One central contact to answer all your instrument reprocessing questions



Efficiency:

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



Process-optimized:

Coordinated operating concept to avoid malfunctions in everyday practice















Accessories for Vacuclave® 550

As versatile as your needs.

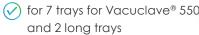
A variety of accessories enables you to assemble the configuration which best suits your needs. Ideally aligned to your workflow, Vacuclave® 550 maximizes safety and efficiency in infection control!

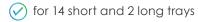


Loading

To make the best use of the sterilization chamber, we offer ideal loading systems for all application scenarios.









Loading slide for up to 10 MELAstore® Boxes

- for 10x MELAstore® Box 100
- for 7x MELAstore® Box 200 and 1x MELAstore® Box 100



Loading Slide with Mount Comfort for up to 16 trays

- for 7 trays for Vacuclave®
 550 and 2 long trays
- for 14 short and 2 long trays



Documentation

Vacuclave® 550 guarantees legally compliant documentation and approval with integrated USB and network interfaces.

MELAtrace®

ensures professional documentation, approval and traceability of the entire decontamination process.



MELAprint® 80

prints barcode labels for optimal instrument marking & traceability.



USB Stick

documents all Vacuclave® 550 sterilization logs quickly and easily on a digital storage device.









More capacity?

Our Cliniclave® 45 series ensures maximum flexibility with a capacity of one or two sterilization units (StU) as well as one or two door device version.



Water treatment

MELAdem® water treatment systems deliver high-quality demineralized water to protect both your autoclave and your instruments.



is a powerful reverse osmosis system to supply Vacuclave® 550 with demineralized water.



MELAdem® 53

is a water treatment system with a very high capacity for Vacuclave® 550, MELAtherm® and up to two further devices.



Filling Pump

for water supply from an external tank with demineralized water





Further accessories

Our optional accessories enable a safe and time-saving sterilization and optimal care of your autoclave.

Chamber Protect

for careful cleaning of stainless-steel surfaces. The chamber cleaning set includes a powerful cleaner, 50 lint-free cloths and 1 microfibre cloth.



MELAcontrol® Helix

With 250 indicator strips provides reliable proof of your sterilization results.



MELAstore®

guarantees a packaging process with huge time savings through standardization as well as a reduction in material costs and practice waste.







Facts and figures at a glance

Technical specifications

Vacuclave® 550 guarantees fast sterilization of large quantities of instruments with a wide range of programs:

| Programs* | | Operating times (with minimum to maximum load) ** | Drying | |
|-------------|-----------------------------------|---|--------------------|-----------------|
| | | | DRYtelligence® *** | Time-controlled |
| Universal-B | 134 °C, Holding time: 5,5 min | 13 – 43 min | > 4 min | 13 min |
| Quick-\$ | 134 °C, Holding time: 3,5 min | 12 – 33 min | > 4 min | 13 min |
| Gentle-B | 121 °C, Holding time: 20,5 min | 25 – 62 min | > 4 min | 13 min |
| Prion-B | 134 °C, Holding time: 20,5 min | 28 – 58 min | > 4 min | 13 min |

^{*} The programme parameters may differ due to country-specific regulatory requirements. Please refer to the user documentation.

Vacuclave® 550 can be installed quickly and easily as a table top autoclave in any decontamination room. The following list gives you an overview of the installation requirements:

| | 15 amp operation | 13 amp operation |
|----------------------------------|---|---|
| Order no. | ME10550 | |
| Chamber size | ø 38 cm x 45 cm long | |
| Chamber volume | 53 liters | |
| Loading quantity | 25 kg unpacked, 11 kg packed, 17.5 kg with MELAstore®, 3.5 kg textiles | 17,5 kg unpacked, 9 kg packed, 14 kg with MELAstore®, 2 kg textiles |
| Device dimensions (W x H x D) | 63,6 x 59,0 x 71,5 cm height incl. display 65 cm device fits on a 60 cm table top | |
| Weight | 98 kg (operating weight up to 127 kg) | |
| Power supply | 220 – 230 V / 50 – 60 Hz | |
| Power consumption | 3.400 Watts 2.700 Watts | |
| Documentation interfaces | USB, Network | |

^{**} The times in 13-amp operation can be extended by up to 10 minutes

^{***} DRYtelligence® automatically adapts the drying process to your load. Thanks to intelligent drying, optimal drying results are achieved at all times.





Pro Line

A Legend Reborn







Pro Line

TIME FOR A NEW ERA

Do you already know the Pro-Class autoclaves? Then you will love the new generation of MELAG devices - from their functions to their price! The all-new Pro autoclaves impress across the line: Astonishing performance, smart functions as well as a modern and extremely sturdy design open up new possibilities. We make no compromises when it comes to reliability and develop under the highest quality requirements at our headquarters in Berlin – since we know, an autoclave should never fail.



Made in

Germany



MELAG

Made in Germany. Made for You.

Future needs heritage: We have been developing, producing and optimizing our system solutions for instrument reprocessing at our headquarters in Berlin for over 70 years. MELAG stands for the art of engineering and production "made in Germany" with the highest levels of quality.







- Quality made in Germany
 for maximum reliability in everyday practice
- | Impressive speed | in accordance to EN 13060 for time-saving workflows
- Optimal drying results
 for protection against re-contamination and corrosion
- Uncompromising comfort for easy and safe handling
- + Smart documentation concept for complete and legally compliant proof
- + Eco-friendly innovations
 for massive savings of electricity and water

UM AFFORDABLE





We love infection control. And the environment.

The Pro and Prime Line combine environmental protection with economic efficiency. Thanks to the groundbreaking stand-alone concept, Power Save energy-saving function and DRYtelligence drying (included in the Prime Line), our autoclaves are the best solution - for your budget and the environment.





A great deal to love

Offer more. Need less.

Whether loading, sterilization or documentation - the compact MELAG class B and S autoclaves offer a price-performance ratio that stands up to any comparison. So you not only sterilize more instruments in less time, but also save money. And all this in the MELAG quality you know and appreciate from the proven predecessor models of the Pro-Class.





Quick Fact: Do you need an autoclave for sterilizing even larger loads in record time?

Then take advantage of our Premium-Class Evolution with worldwide unique product highlights.

^{*} Compared to the predecessor models of the Pro-Class.

^{**}Compared to the predecessor models of the Pro-Class with fixed water connection.





As versatile as you are.

In order to meet individual needs, the all-new MELAG autoclaves is available in 23 liter sizes and with different scopes of features.

Vacuclave 123

Our entry-level models: The Pro Line class B or S autoclaves offers everything you need for a safe, convenient and resource-saving sterilization.



Powerful class B or S vacuum procedure: Reliable sterilization of up to 6 kg on 5 trays in only 15 to 28 minutes (plus drying) - made in Germany.



Smart-Touch Display with LED status: Touchscreen with intuitive user interface for simple operation like your smartphone - even with medical gloves.





Connectivity & data logging: Compliance with legal requirements by saving the sterilization parameters via USB or network or log printout via MELAprint 80.



Stand-alone device concept: Integrated water tanks & highly effective air cooling for site-independent operation without cooling water.



Power Save energy saving mode: Heater and display go into standby mode between sterilizations for top energy efficiency.



EasyCare routine concept:
User-friendly optimizations for efficient filter replacement, tank cleaning and water supply.







Facts and figures at a glance

Technical specifications

The Pro and Prime Line guarantee fast sterilization tailored to your needs with a wide range of programs:

| | Programs of Pro Line (Class B autoclaves) | Vacuclave 123 operating times (at minimum to maximum load) * | Drying (time controlled) |
|-------------|--|--|-----------------------------|
| Universal B | 134 °C, holding time: 5.5 min | 24 – 31 min | 20 min |
| Quick \$ | 134 °C, holding time: 3.5 min | 16 – 20 min | 5 min |
| Quick B | 134 °C, holding time: 5.5 min | 24 – 27 min | 10 min |
| Gentle B | 121 °C, holding time: 20.5 min | 39 – 47 min | 20 min |
| Prion B | 134 °C, holding time: 20.5 min | 37 – 48 min | 20 min |

^{*} Times for Type-B programs for single wrapped load and Quick-S for unpacked load. Times may vary depending on the type and quantity of load.

The Pro and Prime Line can be installed quickly and easily as table top autoclaves in any reprocessing room. Get an overview of the technical data:

| | Pro Line - Vacuclave 123 |
|-------------------------------|---|
| Order no. | ME10123 |
| Device type | Stand-alone class B autoclave (Compatible with additional water treatment unit) |
| Autoclave class | Class B |
| Chamber size | ø 25 cm x 45 cm long |
| Chamber volume | 23 litres |
| Load quantity | max. 6 kg instruments / 2 kg textiles |
| Device dimensions (W x H x D) | 47 x 50 x 64 cm (device fits on a 60 cm table top) |
| Weight | 49 kg |
| Power supply | 220 – 230 V / 50 – 60 Hz |
| Power consumption | 2.100 Watts |
| Documentation interfaces | USB, network |





Vacuclave 105

The fastest autoclaves of their class.



Record sterilization from 6.5 min. (plus flexDRY drying)*

Quality – made in Germany

(€/€ EU/EN ISO 13485:2016





Vacuclave 105

Not big. But great.

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 have been developed down to the smallest detail for a great performance!

Ahead of the times: In all programs.

Buckle up and sterilize instruments on up to 2 trays in record times from 6.5 minutes (plus drying).





Big on the inside, small on the outside: Special all around.

The compact powerhouse with a device width of just 30 cm saves up to 60 % space compared to conventional practice autoclaves.

Magically simple: Simply magical.

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.



MELAG



Made in Germany: Made for You.

We make no compromises when it comes to quality: We develop and produce to the highest quality standards in Berlin - 100% made in Germany. Because we know an autoclave must never fail.

Vacuclave®







Small autoclaves. Great performance.

Fast has never been this fast before.

Bye bye waiting times, hello sterilization in record time. Vacuclave 105 enable up to 6 times faster workflows than conventional practice autoclaves. What does that mean in concrete terms? More productivity, more flexibility, more time for your patients.

rom

6.5 min*

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



shorter cycle times for sterilization



less space required in the decontamination room



less weight than a practice autoclave

Compact powerhouses for your practice

With a width of only 30 cm, the lightning-fast autoclaves fit perfectly into any reprocessing line: As an addition to your practice autoclave or as a stand-alone unit. Discover the versatility of our innovative device concept.









Loading concepts for up to 22 dental contra-angle handpieces per batch



Loading concept for an ophthalmic cataract set



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

Application area #1

The perfect match

Every practice needs to sterilize - but how long is up to you: By supplementing your practice autoclave, you can quickly sterilize cost-intensive instruments between treatments.

Reduce the number of instrument sets required.



Application area #2

The one and only

Small autoclaves for big dreams: Vacuclave 105 is faithful and efficient companions for practices with few instruments.



Meet the requirements for compliant reprocessing in the smallest space.





More power. More flexibility. More wow.

Our small autoclaves for big dreams.

Who says you can't expect big features from a small autoclave? Benefit from a magical operating concept, impressive power and smart features that save you time, money, and space in instrument reprocessing:

Vacualave 105 (Pro Line)

Our entry-level model: With class B and S programs, the Pro Line compact autoclave offers everything you need for safe, convenient and resource-saving sterilization.



Powerful class B vacuum process

Reliable sterilization of up to 2 kg on 2 trays in just 6.5 to 16 minutes (plus drying) - Made in Germany.



Smart-Touch Display with LED status

Touchscreen with intuitive menu structure for easy operation like your smartphone - even with gloves.



Connectivity and data logging

requirements through logging of sterilization parameters via USB and network or log printout via MELAprint 80.



FlexDRY drying

Freely programmable drying time from 1 to 60 minutes, individually tailored to your workflow and load.



Power Save energysaving mode

Heating and display standby mode between sterilizations for top energy efficiency.



Plug & Play installation concept

Lightning-fast commissioning with the aid of external water tanks.



Record cycle times

for sterilisation from 6.5 minutes (plus drying)



flexDRY drying

for a customised drying process from 1 - 60 min



Powerful vacuum process

Class B for reliable sterilisation in accordance with EN 13060



Intuitive operating concept

thanks to the Smart-Touch display with LED status



Connectivity and data logging

of sterilisation protocols via USB stick or network



Plug and play installation

concept for lightning-fast commissioning at any desired location



Power Save energy -saving mode

for top energy efficiency in everyday practice work



Quality made in Germany

developed, designed and produced in Berlin







Plug & Play installation concept

Quickly installed, sterilized anywhere.

Our plug & play installation concept with external water tanks and highly effective air cooling enable lightning-fast commissioning at any desired location, because Vacuclave 105 and Vacuclave 305 require neither water nor compressed air connection.





Water supply

The water supply via external tanks and the highly efficient air cooling ensure reliable operation.

5 liter waste water tank included in the scope of delivery



With two USB and one network interfaces, there are no additional costs for the documentation of sterilization protocols.

USB stick included in the scope of delivery



MELAG

Power supply

Power is supplied by connecting the Vacuclave 105 to a 200 - 230 V socket.

Mains cable included in the scope of delivery



Figures. Data. Facts.

Technical data

Gain time for your patients: The compact Pro and Prime Line autoclaves offer everything you need for safe, convenient and resource-saving sterilization. In the smallest space and in the shortest time.

| Vac | cuclave 105 programs (Pro Line) | Operating times (with minimum to maximum load) * | Drying (time-controlled) |
|-------------|------------------------------------|--|-----------------------------|
| Universal-B | 134° C, plateau time: 5.5 min | 11 – 16 min | 8 min |
| Quick-S | 134° C, plateau time: 3.5 min | 6,5 – 10 min | 5 min |
| Gentle-B | 121° C, plateau time: 20.5 min | 26 – 32 min | 20 min |
| Prion-B | 134° C, plateau time: 20.5 min | 26 – 32 min | 8 min |

^{*} Data for the Quick-S program for unpacked loads and for all other programs for single-packed loads. Times may vary depending on load type and quantity.

Quickly installed, sterilized everywhere. Our plug & play installation concept with external water tanks enables lightning fast commissioning: Find out more about the technical data of our new compact autoclaves.

| | Vacuclave 105 (Pro Line) |
|---------------------------------|--|
| Art. no. | ME10105 |
| Device type | Stand-alone autoclave (with external containers) |
| Autoclave class | Class B |
| Chamber size (H x W x D) | 8 x 20.3 x 31 cm |
| Chamber volume | 5 liters |
| Load quantity | Max. 2 kg instruments / 0.45 kg textiles |
| Device dimensions (H x W x D) | 30 x 30 x 59 cm |
| Weight | 28 kg |
| Power supply | 200 – 230 V / 50 – 60 Hz |
| Power consumption | 2.100 watts |
| Documentation interfaces | 2 x USB, network |

System solutions, innovation and quality

MELAG is an owner-managed family business that has focused on products for practice hygiene since it was founded in 1951. With over 500 employees, we produce exclusively in Germany on an area of approx. 25,000 m² and are the world market leader in the field of instrument reprocessing.

^{**} DRYtelligence automatically adjusts the drying process to your load. Intelligent drying therefore achieves optimum drying results at all times.





Optional Accessories

MELAseal® 100+





C€ / € C EU / EN ISO 13485:2016

The tried-and-tested concept of MELAseal® 100+ provides a reliable solution for your packaging process. The sealing device combines performance with functionality: Seal transparent sterilization packaging without pause after a pre-heating time of only four minutes. The integrated electronics of the device monitors the sealing temperature and time. The acoustic and visual signal facilitate the evaluation of the seal seam quality. The individually adjustable thermostat permits the flexible use of versatile sterilization packaging. MELAseal® 100+ with a 10 mm seal seam width significantly exceeds the prescribed width of 6 mm required by EN 868-5, thus guaranteeing additional safety

- → Short pre-heating and sealing times guarantee quick sealing processes
- + Compact dimensions take up a minimum amount of space on your worktop
- → Acoustic and visual signals ensure the proper monitoring of the sealing time and temperature
- → Customizable: The lever can be set on the right or left-hand side
- → Maintenance-free operation eliminates service costs





Warranty Ke Saath Bhi Warranty Ke Baad Bhi

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SCAN TO VISIT OUR WEBSITE



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