PROCLASS

A ***plus*** in quality: Vacuklav®+



Quality – made in Germany

MELAG
competence in hygiene

THE SUCCESS OF A FAMILY-RUN COMPANY
THROUGH INNOVATION AND QUALITY

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 development team of specialist engineers and IT experts to maintain and develop our product range at its current world-class standards.

Our focus on quality, innovation and the highest of safety standards has established MELAG as the world's leading manufacturer in the "hygiene products for the medical practice" field, selling over 490,000 devices to date. Our entire product range is produced exclusively in Germany (Berlin). Over 300 employees work on premises of c. 22,000 m^2.

We have consistently rejected outsourcing to low-wage third countries, as we did not want to risk a reduction in our world-beating quality. We have also ruled out emulating the trend towards expanding our product range to 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 quality requires consistent specialization on a narrow range of high-quality 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 area of instrument treatment and hygiene.

The MELAG management and team.



THE**PRO**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

MORE**TIME**FOR**PATIENTS**

Only practices which relieve their medical assistance staff from unnecessary tasks can save personnel costs. The goal is to avoid unnecessary waiting or work time in the preparation and sterilization process, so that there's more time for the patients. In developing the Pro Class, our engineers therefore paid special attention to short operating times and simple operation of the autoclaves.
After activating the mains switch, all programs can be selected with the program key. The desired program is then started by pressing the Start/Stop key. The entire sterilization procedure, including drying, then proceeds fully automatically.



Easily adjustable special functions

Special options such as switching over to an external feed water supply via a water treatment system connected to the autoclave, or the automatic prewarming of the vessel, as well as a good deal more can be easily self-adjusted by the autoclave operator.
It is just as simple to select an output medium for the documentation, e.g. printer, MELA*flash* CF-Card Printer or practice computer system.
That also saves time in operating the autoclave.



Quick sterilization programs

The Pro Class autoclaves are not high-speed devices such as the autoclaves of the MELAG Premium Class. But nevertheless as a rule they are considerably faster than other devices on the market. In the quick program, unwrapped instruments can already be removed after only 20 minutes, including fractionated pre-vacuum and vacuum-quick drying. Depending on the total load of the autoclave, wrapped instruments are again available for use after 26 to 50 minutes.



Two systems

1. "Stand-alone" devices

Vacuklav® 31 B+ and
Vacuklav® 23 B+

These units feature an integrated water storage tank and a patented air cooling system. They work with the extremely high-performance membrane pump technology which has proven its worth for decades. As a result of continued development work, the Vacuklav® 31 B+ and Vacuklav® 23 B+ represent two extremely high-performance autoclaves whose design simultaneously features the particularly economical use of resources. Both autoclaves require practically no installation work in your practice whatsoever, and can be operated independent of location. The noise suppression feature has also been improved.

- absolutely independent of location,
- only a power supply is needed
- minimum installation effort

2. Devices with tap water connection

Vacuklav® 30 B+ and Vacuklav® 24 B+

These autoclaves are prepared for fixed installation and are connected to a water feed and drain via the water treatment systems MELA*dem*® 40 or MELA*dem*® 47. A part of the tap water is prepared and employed to generate steam, and another part is directly employed to cool the high-performance vacuum pump. The low-maintenance water ring pumps of the Vacuklav® 30 B+ and Vacuklav® 24 B+ autoclaves permit longer service intervals and are characterized by extremely slight heat emission.

- higher performance vacuum technology
- resulting in much faster program runs
- work and time saving due to automation of the water supply

THE**PRO**CLASS

QUICKINNOVATIVE**FLEXIBLE**

Automate!

The practice-friendly system: Automatic feed water supply with MELA*dem*®40 / MELA*dem*®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:

- **MELA*dem*®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 MELA*dem*®40 guarantees an optimal utilization of the mixed-bed-resin pellets. The MELA*dem*®40 can be mounted directly on the autoclave, on the wall or in a sub cabinet.

- **MELA*dem*®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.



MELA*dem*®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 Pro Class 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.



MELA*dem*®40
mounted on the Vacuklav® 31 B+



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 Vacuklav® 31 B+ and Vacuklav® 23 B+. Alternatively, both autoclaves could be fed the required water supply from any external reserve container 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 Vacuklav® 31 B+ and Vacuklav® 23 B+ autoclaves. If the installation conditions permit, it is also recommended to connect the stand-alone 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

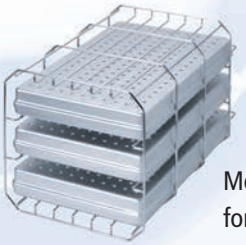
The autoclaves are always delivered with a mounting for trays or cassettes, included in the price. The delivery contains Mount >A< (for 5 trays or 3 standard tray cassettes) by default. Please indicate in your order if you would alternatively at no extra charge prefer Mount >B< for 4 standard tray cassettes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



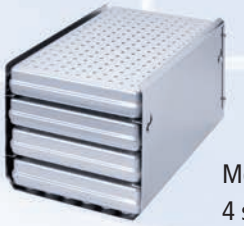
foil holder



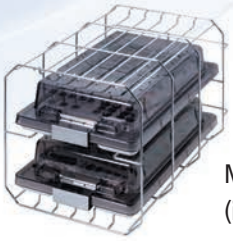
Mount >A<
for 5 trays



Mount >A< (rotated)
for 3 standard tray cassettes



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



Mount >D< for 2 high cassettes
(i.e. implantology trays)



Sterilization containers

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



DOCUMENTATIONAND**BATCH**CONTROL

The documentation with the Pro 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.

Batch control with MELA*control*®

The EN 867-5:2001 and EN 13060 define the so-called Helix. This is a test specimen for "class B" autoclaves which simulates the most difficult demands for the sterilization of instruments with hollows. MELAG offers 2 systems for this.



MELA*control*®



MELA*control*® PRO



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



Documentation via Network

The MELA*net* Box connects the autoclaves of the Pro Class to the practice network. The cycle data can be transfered automatically to the practice server and be stored permanently.



Perfection with MELA*trace*®

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.



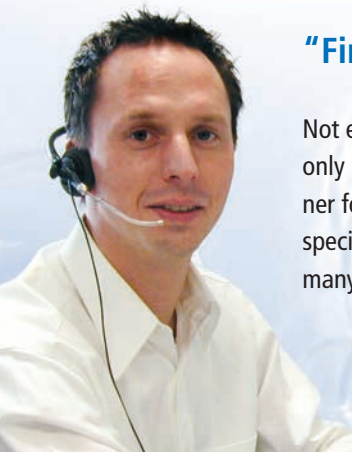
Why a "class B" autoclave?



The European workgroup appointed by the EU Commission has passed the European Standard EN 13060 in the course of the harmonization of different national sterilization standards. The standard divides autoclaves into the classes "B", "S" and "N". "Class B" is the highest class conforming to the most stringent demands and therefore can be unrestrictedly used for the sterilization of all possible loads used in medical practices (also with hollow bodied instruments, handpieces and turbines) and for all kinds of sterilization packaging. A "class B" autoclave must in any case pass a Helix test with a test specimen as per EN 13060:2001. According to expert opinion, that can only be achieved with a fractionated pre-vacuum procedure. The autoclaves of the profi class conform to "class B" requirements and are therefore absolutely future-safe.

Technical data:

	Vacuklav®30 B+	Vacuklav®31 B+	Vacuklav®24 B+	Vacuklav®23 B+
	tap water connection	"stand-alone"	tap water connection	"stand-alone"
chamber size	35 cm long x ø 25 cm dia		45 cm long x ø 25 cm dia	
chamber volume	17 Litres		22 Litres	
loading quantity	5 kg instruments 2 kg textiles	5 kg instruments 1.8 kg textiles	7 kg instruments 2.5 kg textiles	5 kg instruments 1.8 kg textiles
dimensions (w x h x d)	42.5 cm x 48.5 cm x 63 cm feet of the unit fit on 50 cm tabletop		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 75 cm
weight	45 kg	45 kg	48 kg	50 kg
power supply	230 V; 50/60 Hz		230 V; 50/60 Hz	
power consumption	2.100 Watt		2.100 Watt	

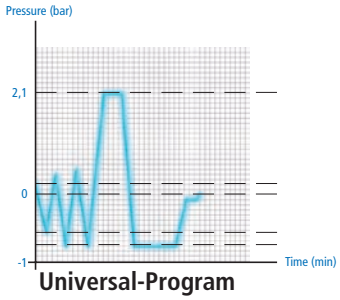


"First aid" from the MELAG Service Center

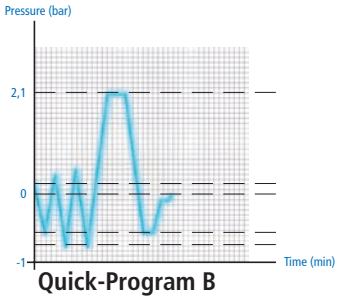
Not every unexpected message on the display of the autoclave indicates a technical defect. Often the problem only reflects an operating error or insufficient supply of operating resources, such as feed water. As contact partner for such problems which you can easily rectify yourself, you can consult 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.

PROGRAMSANDTIMES

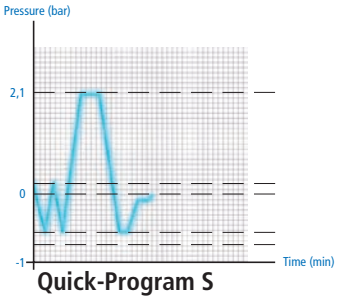
All autoclaves of the Pro Class offer five sterilization programs and two test programs. The test programs can check and document the function of the autoclave in the dental and medical practice at any time. After selecting and starting the desired program, the modern microprocessor controls and monitors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



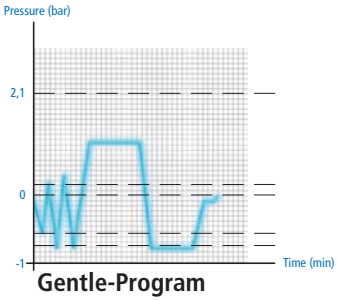
Universal-Program



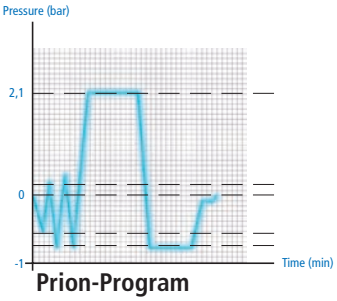
Quick-Program B



Quick-Program S



Gentle-Program



Prion-Program

Programs:

	Universal-Program	Quick-Program B*	Quick-Program S*	Gentle-Program	Prion-Program
	wrapped, 134°C, hold time: 5.5 Min.	instruments wrapped/ unwrapped, 134°C hold time: 5.5 Min.	instruments wrapped/ unwrapped, 134°C hold time: 3.5 Min..	wrapped, 121°C hold time: 20.5 Min.	wrapped, 134°C hold time: 20.5 Min.
Vacuklav®23 B+ Vacuklav®31 B+	30	30	15	45	45
Vacuklav®24 B+ Vacuklav®30 B+	30	28	15	40	45
Drying period	20	10	5	20	20

All times in minutes

*max. 1.5 kg wrapped or max. load unwrapped

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)



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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

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