

Dreamlike Performance

# The Premium Class



**MELAG**

Evidence Based Sterilization

## Competence spells success

There are over 100 manufacturers of sterilizers world-wide for use in medical and dental practices. But MELAG is the only producer on the international scene who concentrates exclusively on one single product line alone: sterilizers. This concept of core competence is the foundation of our international success, a success which must be continually tested and proven. Every MELAG employee works towards this end with the greatest commitment, knowing that when "his" autoclaves aren't successful, then neither is the company. And that affects every single employee.

The MELAG recipe for success:

**Conscious concentration to one core competency.**



## Quality and innovation

Manufacturers who produce autoclaves as one of many products can perhaps afford to go through a business slump in this field. But those who concentrate on only one product line do not enjoy that luxury. Such a one-product company has to be continually better and less expensive than the competition.

The success of our worldwide sales proves that our autoclaves are not only better because of their quality. Innovation also makes them the best. As first manufacturer we have introduced and produced our autoclaves suited for medical and dental practices which demonstrate trend-setting technology and design, in series production. A few examples: the one-way water system, the automatic water feed, documentation via PC in the practice or over the network, the fractionated pre-vacuum and post vacuum for autoclaves, and much more.

We would only be able to offer our products at lower prices if we could save on the purchase of components and materials. And if we would have our products manufactured in low cost foreign countries, instead of in Germany with its highly trained and quality-conscious workforce. Innovations are only worth while if they can increase customer benefits! That also applies to innovations of the premium class, since they provide top-of-the-line autoclaves with their improved **speed, comfort, and design.**

# The Premium Class

SPEED COMFORT DESIGN

## New dimensions

**More speed**, because many practicing physicians buy lesser quantities of expensive instruments to save costs, but these have to be ready for use again in shorter periods of time.

**More comfort**, because the autoclaves should be easy to operate and function reliably.

**More design**, because fulfilling top safety criteria should also be visible to the eye.

Our premium class autoclaves come in two different sizes (length of the sterilization chamber) and in two different systems.

## Two systems

### **Vacuklav®41-B and Vacuklav®43-B**

These are "stand alone" units with integrated storage rack and patented air cooling system.

### **Vacuklav®40-B and Vacuklav®44-B**

These are connected to the water supply and drainage over a water treatment unit MELAdem®40/47. Part of the tap water is treated and then used to generate steam, another part to cool the vacuum pump. The heat emission of these units is therefore kept at minimal levels.

All four units are "Class B" autoclaves.



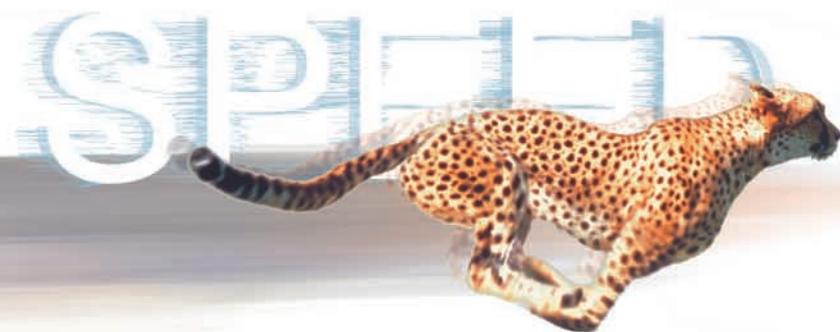
# The Premium Class

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## Save up to 20 minutes per sterilization procedure !

Instrument management involves matching the financial framework for instruments to the required need. Safeguarding practice hygiene may not be endangered by manual or functional errors in preparing the instruments for use. Many autoclaves offer quick programs without a vacuum which are able to rapidly sterilize unwrapped instruments but without fractionated pre-vacuum sterilization. The new premium class autoclaves have two quick programs with 2-fold or 3-fold fractionated pre-vacuum, which prepares unwrapped instruments for use in only 8 minutes (without drying). The entire sterilization time for 6 kg of wrapped instruments is a mere 20 minutes (without drying). That means 20 minutes of saved time compared to many conventional autoclaves!

This time saving translates into money saving. A shorter operating time means managing an efficient practice with fewer instruments. And this saves time for the doctor's assistant as well.



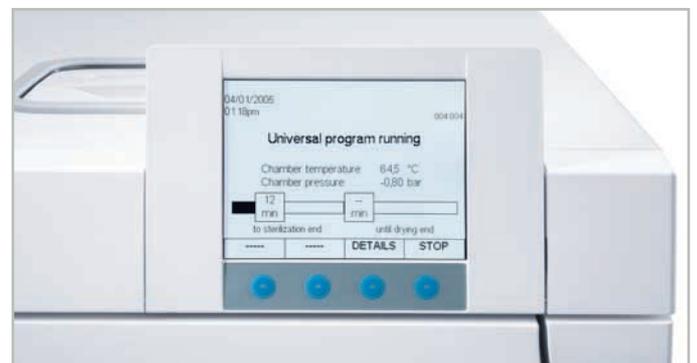
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## Operation – it was never easier

Making it easier to operate a device and avoid errors means lowering the learning costs. The premium class units have an extremely intuitive operation. The autoclave is turned on and communicates with the operator without the necessity of consulting long and complex operating instructions. Unintended errors in operation are eliminated from the start. The very large high-quality display shows all the operating functions and status information on a clear and well-organized screen. A great deal of more detailed information for extended operation and instrument preparation can be called up over special menus.



COMFORT

# The Premium Class

**SPEED** **COMFORT** **DESIGN**

## Sterilizing instruments can be a pleasure

The autoclaves of the premium class are efficient and operator-friendly. These are features that save both time and costs. With such advantages, is the exterior design of the unit an important issue at all? We believe it is, since a modern high-tech autoclave purchased today is intended for as long a useful work life as possible. The design of the premium class units encourages a positive attitude on the part of the assisting medical or dental team in operating the autoclave and professionally preparing instruments for use. Design should make the units not only visually more attractive, but also promote ease of operation.

The automatic door lock functions simply with a light pressure on the autoclave door. The machine takes over the rest automatically and reliably all by itself. This saves time and guarantees a safely sealed closure.

In other words, maintaining and sterilizing the instruments not only becomes easier, it also becomes a pleasure!



# DESIGN

# Quick, innovative, and flexible

## MELAdem<sup>®</sup> 40 and Vacuklav<sup>®</sup> – a system which ensures quality and saves time

MELAdem<sup>®</sup>40 allows you to produce your own demineralized water in your medical or dental practice. This saves time and work otherwise expended for procuring, transporting, storing, and disposing of the plastic containers with aqua dem / aqua dest, as well as filling and emptying the storage tank of the autoclaves.

The two autoclaves with tap water connection – Vacuklav<sup>®</sup>40-B and 44-B – function perfectly with MELAdem<sup>®</sup>40.

Here the entire water throughput runs fully automatically: from the water pipe through MELAdem<sup>®</sup>40 and then into the autoclaves and subsequently into the wastewater system.

But the "stand-alone" autoclaves – Vacuklav<sup>®</sup>41-B and 43-B – designed for the manual filling of the storage tank, can also be connected to MELAdem<sup>®</sup>40.

MELAdem<sup>®</sup>40 can also be mounted on the wall. The spray pistol MELAJet<sup>®</sup> rinses off the residues from the instruments after disinfecting and cleaning before sterilization.



# The Premium Class

## The optimal use of the interior space – four options to choose from

The autoclaves are always delivered with a mounting for trays or cassettes, included in the price, with the standard combined mounting "C" (for 6 trays or 3 standard tray cassettes).

Please indicate in your order if instead of the standard mounting "C" you would prefer the mounting "B" for 4 standard tray cassettes or mounting "D" for two high cassettes, at no extra charge.

The large sterilization chamber of the premium class can also hold MELAG sterilization containers which come in 6 different lengths. They are furnished with closures and cover seals and comply to EN 868.



mounting "C"  
for 6 trays



mounting "C" (rotated)  
for 3 standard tray cassettes



mounting "B"  
for 4 standard tray cassettes  
(or for 4 trays)



mounting "D"  
for 2 high cassettes  
(i.e. implantology trays)



## Sterilization containers

The MELAG sterilization containers provide another alternative for sterilizing and subsequent storage under sterile conditions. These have holes punched into the covers and bottoms and are furnished with filtercloth inlays.



## Documentation and batch control –for your safety You have the choice

The Medical Devices Operator Ordinance and other guidelines demand that the operator documents the instrument sterilization. This practice secures evidence in case of presumed infection in the medical or dental practice or clinic. 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 doctor's assistant after sterilization.

### Batch control with MELAcontrol®

The EN 867-5:2001 defines a test body for "class B" autoclaves which simulates the most difficult demands for the sterilization of instruments with hollows. The MELAcontrol® system consists of a test body ("Helix") containing an indicator. This must be dated after completion of the sterilization and archived as evidence.



MELAcontrol® Helix



### Networked at last

The autoclaves of the premium class are furnished with one Ethernet connection on the front of the unit, as well as two on the back. The autoclaves can be directly networked without any conversion, adapter, or special administration program.



### Mobile with CF Card

The autoclaves of the premium class also have a CF card slot. All sterilization data are automatically written on the CF card and can be directly read into any PC (for instance over the card reader MELAflash®) and stored electronically.



### Black on white

The MELAprint®42 connection via the Ethernet adapter allows for the traditional documentation of periodic data on a paper printout.

# The Premium Class

## Why a "class B" autoclave ?

The European workgroup appointed by the EU Commission has passed the Europe 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 or dental practices (also with hollow instruments, handpieces and turbines) and for all kinds of sterilization packaging.

A "class B" autoclave must in any case pass a Helix test as per EN 13060 by a test body per EN 867-5:2001. According to expert opinion, that can only be achieved with a fractionated pre-vacuum procedure.

The autoclaves of the premium class conform to "class B" requirements and are therefore absolutely future-safe.



## Technical data

	<b>Vacuklav®40-B</b> tap water connection	<b>Vacuklav®41-B</b> „stand alone“	<b>Vacuklav®43-B</b> „stand alone“	<b>Vacuklav®44-B</b> tap water connection
chamber size	35 cm long x 25 cm dia		45 cm long x 25 cm dia	
chamber volume	18.6 Litres		22.6 litres	
loading quantity	6 kg instruments 2 kg textiles		7 kg instruments 2.5 kg textiles	
dimensions (w x h x d)	45 cm x 50 cm x 55 cm height including display 56 cm Feet of the unit fit on 50 cm tabletop		45 cm x 50 cm x 68 cm height including display 56 cm Feet of the unit fit on 60 cm tabletop	
weight	56 kg	58 kg	57 kg	59 kg
power supply	230V, 50Hz		230V, 50Hz	
power consumption	3400 W		3400 W	

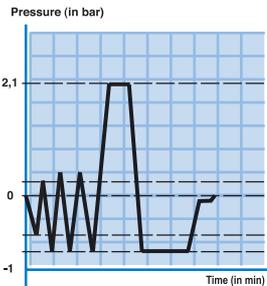
## “First aid” from the MELAG Service Center

What should be done when service is required? Experience has shown that the usual reason is only an inadvertent action on the part of the doctor's assistant, or bad feed water, but very rarely a truly technical defect. In this case the MELAG Service Center can help out at once.

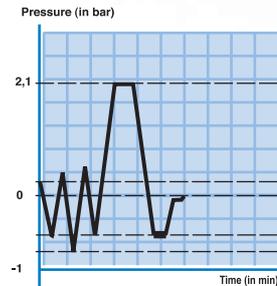


## Programs for all needs

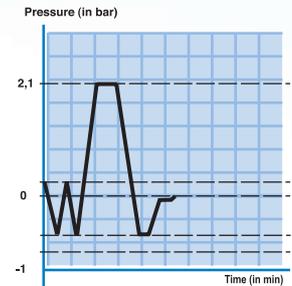
All autoclaves of the premium class offer five sterilization programs and two test programs. The test programs can check and document the function of the autoclave in the medical or dental practice at any time. After selecting and starting the desired program, the modern microprocessor controls and monitors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



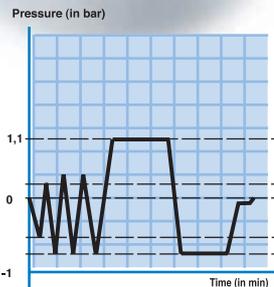
**Universal program**  
134°C / 2 bar



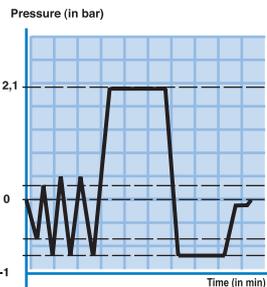
**Quick program "B"**  
134°C / 2 bar



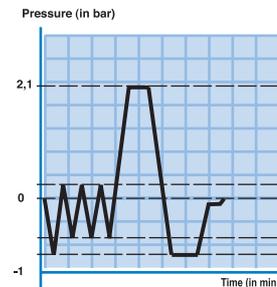
**Quick program "S"**  
134°C / 2 bar



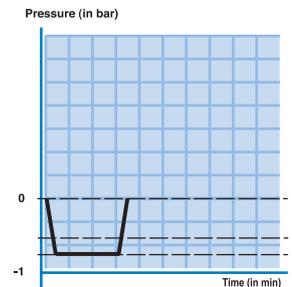
**Gentle program**  
121°C / 1 bar



**Prion program**  
134°C / 2 bar



**Bowie & Dick test**



**Vacuum test**

Programs *	Universal - Pr.	Quick „B“ - Pr. **	Quick „S“ - Pr. **	Gentle - Pr.	Prion - Pr.
<b>Vacuklav®40-B</b>					
Warm start 1 kg instruments	13	12	08	26	30
Warm start 6 kg instruments	20	16	11	35	37
Warm start 2 kg textiles	20	17	–	33	37
<b>Vacuklav®41-B</b>					
Warm start 1 kg instruments	14	12	09	27	31
Warm start 6 kg instruments	22	17	12	36	39
Warm start 2 kg textiles	25	19	–	35	40
<b>Vacuklav®43-B</b>					
Warm start 1 kg instruments	16	14	09	26	33
Warm start 7 kg instruments	25	21	13	40	42
Warm start 2.5 kg textiles	26	21	–	39	43
<b>Vacuklav®44-B</b>					
Warm start 1 kg instruments	15	12	08	27	30
Warm start 7 kg instruments	22	20	13	38	40
Warm start 2.5 kg textiles	24	21	–	36	42

All times given in minutes

\* Plus drying times with vacuum drying

\*\* unwrapped

## We manufacture our autoclaves in conformance with the following guidelines:

93/42/EWG Medical device class IIa (European Guideline for Medical Devices), 97/23/EWG (Guideline for Pressure Devices), EN 13060 (Small Steam Sterilizers), EN 61010-1-2 (Safety Regulations for Electrical Measuring, Controlling and Laboratory Devices - Part 1 and Part 2), EN 50081-1 and EN 50082-1 (Regulations on Electromagnetic Compatibility), EN ISO 9001: 12.2000 and EN ISO 13485/ 11.2000 (Quality Management / Certification), EN 1717 (Protection of Drinking Water from Contamination)



**CE 0124**

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SPEED COMFORT DESIGN



## Quality and Precision

Over fifty years ago, MELAG began in Berlin to specialize in the manufacture of sterilization equipment. Quality consciousness, reliability, and innovative eagerness, plus the highest in safety standards, have made the family-run enterprise MELAG one of the world's leading producers of sterilization equipment. Verification of its success has been the sale of more than 355,000 units. Decades of experience, modern computer-aided

production, employment of highest-quality materials, and experienced and reliable staff all have made MELAG equipment renowned for quality and convenience.

The entire MELAG staff is proud to have made an important contribution to the protection of the health of patients and of medical staff with the equipment and accessories it produces for reliable sterilization and safe storage of sterilized articles.

Quality - made in Germany

**MELAG**

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