

# The Premium-Plus-Class

Now even better

Up to  
9 kg of  
instruments!





# The success of a family-led 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<sup>2</sup>.

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.

# Only the best for your practice – innovative products from MELAG



The growing number of infectious diseases in our globalized context poses an ever-increasing threat to people's health. Health authorities and hygiene experts are setting ever-higher standards for all those employed in the health-care sector, which in turn places ever-increasing financial burdens on medical and dental practices in a time of reduced income and increased competition. We

see it as our task to provide efficient, cost-saving devices which satisfy these increased standards. The autoclaves of the Premium-Plus-Class save time in the treatment of instruments and performing the various documentation and traceability operations. Not just this – they revolutionize the mood in the treatment room. See for yourself.

# Touch me

## The uniqueness of the Premium-Plus-Class

Autoclave operation needs to be simple, error-free and fun. The intuitive operation of the autoclave using an extra-large colour-touch-display enables quick program selection, options settings, individualization of the display colour and much more. This display is unique, providing as it does, the world's largest colour-touch-display to be found in a large-scale production practice autoclave.



The menu for selecting the sterilization programs



The sterilization run is displayed in a clear and easy-to-read fashion.

## Twin Chamber: technology of a special kind

All Premium-Plus-Class autoclaves comes fitted with a high-quality, double-wall sterilization chamber as used in the large hospital-based autoclaves. Whilst the sterilization chambers of conventional practice autoclaves are pre-heated via an electric jacket-heating mechanism, where as the Premium-Plus-Class autoclaves use the sterilization stream for this purpose as well. This effective procedure brings considerable advantages for practice operation, saving time and optimizing energy efficiency, all with the best-possible sterilization results.

## High-quality sterilization

Our high-quality sterilization is the result of the combination of a high-performance vacuum system and best-quality steam. The twin chamber technology used in the Premium-Plus-Class enables quick air evacuation from the sterilization chamber, sterilization packaging and instrument cavities. At the same time, the air is evacuated from the steam very effectively. This saves further time and extends the life-expectancy of your vacuum pump.



## Operation with the external Flex-Display

If the clearance between wall cupboards and the work surface supporting the autoclave is less than 56 cm, the autoclave display could obstruct the cupboard doors. This can be remedied using the Flex-Display, with an elegant bracket for wall or work-surface mounting.



You can choose between 2 quick programmes

## The Speed

Waiting for instruments is a thing of the past

The record sterilization times established by our models need to be seen to be believed: 19 minutes in Quick-Program "B" for the sterilization of wrapped instruments. 10 minutes in Quick-Program "S" for the sterilization of unwrapped instruments. Both times include fractionated pre-vacuum and drying. A load of up to 7 kg of instruments can also be sterilized in the Universal-Program within 30 minutes. For higher loads of up to 9 kg, the additional drying can be activated optionally. These operating times stand up to any comparison.

# The Premium-Plus-Class

Choose between four designs!

The four autoclaves of the Premium-Plus-Class are extremely similar. Their only visible difference consists in the name on the door, the different chamber depths and an opening to the water container.



## **Vacuklav 40 B+ and Vacuklav 44 B+ Especially high-performance all-rounders.**

The robust water ring pump brings especially high-performance, fast processing times. Ideal if the autoclave is located in close proximity to a water supply and outflow and needs to perform many sterilization cycles in a short time. With its deep interior, the Vacuklav 44 B+ presents a larger chamber volume.

## **Vacuklav 41 B+ and Vacuklav 43 B+ “plug and play” technology at its best.**

These practical stand-alone autoclaves do not need a water connection, as their membrane pump is cooled by a patented air-cooling system. Just as with the Vacuklav 40 B+ and Vacuklav 44 B+, you can connect a water treatment unit to provide automatic water feed. The internal water container also allows manual refilling of the autoclave with demineralized water.



Did you know: to protect your instruments, all of our autoclaves are equipped not only with high-performance temperature sensors, but an integrated water-quality measurement system which issues warnings before poor-quality water is used.



## Vacuklav and MELAdem: protecting instruments while saving time and money

Save time and money – no need to purchase, transport, store and fill distilled water. Instead, just attach your Vacuklav to the water treatment unit MELAdem 40 or MELAdem 47. If your autoclave is located close to a water supply and outflow, you can take advantage not only of automatic filling and dosage, but also automatic demineralized water

outflow. MELAdem 40 works according the ion exchange principle; MELAdem 47 employs the reverse osmosis principle. MELAdem 47 is especially suited to operations requiring large quantities of demineralized water, e.g. a high number of sterilization procedures in a single day.

# Documentation can be so easy

Many practice workers see documentation as a necessary but unpleasant task. The new operating concept and the large colour-touch-display enable a documentation procedure which saves time and is fun to use.



View the log on the display



A Menu to select individual or multiple logs



Individual and multiple output media can be selected very easily

Premium-Plus-Class autoclaves represent a modern system catering for the needs of every practice, including documentation via your practice network, the Ethernet system interface and barcode label printing up to log issue on the CF card or the MELAprint 42 log printer.



# Effective use of energy

The contribution of intelligent systems to time saving and environment protection



The settings in the energy-saving mode



Time pre-selection for automatic autoclave start

As a family-owned company taking a long-term perspective, MELAG has a long record of environmental responsibility and resource-conservation. Our development and production operations always aim to conserve energy. Our Premium-Plus-Class autoclaves are all fitted with an

energy-saving mode, enabling automatic reduction of the stand-by temperature in the pause times set by the operator. The pre-selection of the automatic start time (e.g. tomorrow morning) also saves time and energy.

# Safety made easy

## Quality assurance via instrument tracing

Traceability of the instruments used on the patient right back to the sterilization run has yet to become a legal requirement. Nevertheless, it already represents an important feature of practice-based quality assurance. Our Premium-Plus-Class autoclaves enable instrument traceability within a matter of seconds; and that without additional computer technology or special software.



Did you know: You can set individual PINs for each operator in the feature "user administration." You can also determine a series of questions to be asked, e.g. whether an indicator has been successful. Following the end of a sterilization procedure, you can clear the batch and print the required number of labels appropriate to the number of sterilization packages. During patient treatment, scan the labels with a hand scanner and connect the treatment with the instrument used. It is so simple!



Individual operator PINs



Selecting the number of labels and maximum storage period

# Accessories for every application!

Autoclaves need not just to be quick, but also economical. Autoclaves of the Premium-Plus-Class can sterilize up to 6 standard trays or 4 MELAstore-Boxes 100 simultaneously. We provide a number of mounts for this purpose. The autoclave scope of delivery includes one mount. The mount >C< is especially versatile as it can be used both for trays as well as MELAstore-Boxes 100 (upon rotating the mount 90°).



Mount >C< for 6 trays



Mount >C< (rotated) for 3 MELAstore-Boxes 100



Mount >B< for 4 standard tray cassettes



Mount >D< for 2 MELAstore-Boxes 200



MELAstore-Box 100 and 200

## Programs, times and technical data

Program cycle times	Universal-Program Holding time: 5,5 min	Quick-Program B* Holding time: 5,5 min	Quick-Program S** Holding time: 3,5 min	Gentle-Program Holding time: 20,5 min	Prion-Program Holding time: 20,5 min
Vacuklav 40 B+					
Up to 6 kg instruments	15 – 23	-	8 – 11	29 – 40	30 – 38
Up to 2 kg textiles	22	13 – 14	-	37	37
Vacuklav 41 B+					
Up to 6 kg instruments	15 – 26	-	8 – 12	20 – 41	30 – 40
Up to 2 kg textiles	26	14 – 19	-	39	40
Vacuklav 43 B+					
Up to 7 kg instruments	18 – 27	-	8 – 13	30 – 45	31 – 43
Up to 2.5 kg textiles	27	23	-	43	43
Vacuklav 44 B+					
Up to 7 kg instruments	15 – 24	-	8 – 13	30 – 43	31 – 42
Up to 2.5 kg textiles	26	22	-	41	42
Drying time	12	6	2	12	12

For higher loads of up to 9 kg, the additional drying can be activated optionally.

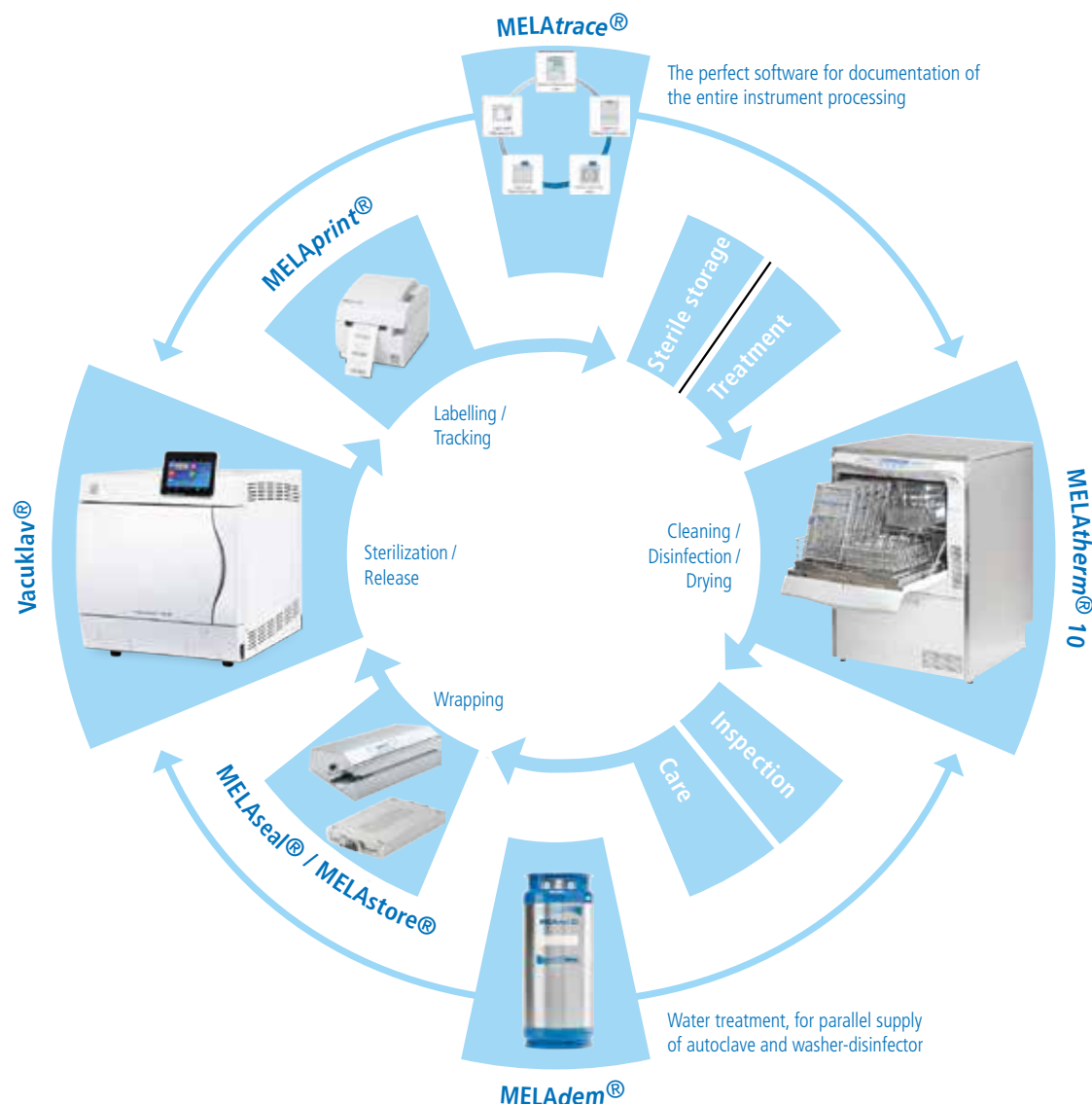
\* max. 1.5 kg wrapped or 6 kg / 7 kg unwrapped | \*\*unwrapped

All times in minutes, depending on the load, power supply and water supply

Technical Data	Vacuklav 40 B+ Tap Water connection	Vacuklav 41 B+ „stand alone“	Vacuklav 43 B+ „stand alone“	Vacuklav 44 B+ Tap Water connection
Chamber size / Volume	Ø 25 cm x 35 cm length / 18 litres		Ø 25 cm x 45 cm length / 23 litres	
Load	max. 9 kg instruments / 2 kg textiles		max. 9 kg instruments / 2.5 kg textiles	
Dimensions (WxHxD)	46 cm x 50 cm x 55 cm Height incl. display: 56 cm Device feet fit on 50 cm table plate		46 cm x 50 cm x 68 cm Height incl. display: 56 cm Device feet fit on 60cm table plate	
Weight	57 kg	59 kg	66 kg	62 kg
Mains supply	220 - 240V / 50 – 60 Hz / 3,400 W			

# Instrument processing cycle

MELAG offers hygiene as system: Ergonomic, safe quick and ergonomical



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) EN 61010-1/-2-040 (Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part 1: General Requirements) EN 61326-1 (Electrical equipment for measurement, control and laboratory use - EMC requirements- Part 1: General requirements) EN 1717 (Protection Against Pollution of Potable Water installations and general requirements of devices to prevent pollution by backflow, for Vacuklav 40 B+ and 44 B+)

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



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**MELAG**  
competence in hygiene