







# The next generation of lavage systems

The BlueLavage® is a completely new sterile single-use lavage system that is widely used in orthopaedics and trauma surgery.

There are no electronic components in the BlueLavage® handpiece. The system is driven by a separate power device, the so-called "DriveUnit". The DriveUnit is a drive unit that can be reused. After reaching its maximum service life, the DriveUnit is replaced and recycled by us. To charge the DriveUnit, the 4-way charger supplied is used. The DriveUnit has a smart LED operation indicator. The LED operating display is always visible through the transparent housing cover of the BlueLavage® handpiece. A colour code shows the charging and operating status of the DriveUnit and indicates in good time that replacement is imminent.

By eliminating batteries and any metal parts in the BlueLavage® handpiece, tons of hazardous waste are avoided.

In the charging station provided for the DriveUnit, up to 4 DriveUnits can be charged at the same time, always within reach. The self-explanatory design makes handling the BlueLavage® safe, quick and easy.



# **Our mission**

"In the development of the product, the focus was on not using e-waste and batteries, as well as climate-neutral production, in order to take a responsible and environmentally friendly approach."

-Olaf Thiessies-





# **Sustainable**

The BlueLavage® is CO<sub>2</sub>-neutral and our drive unit is always recycled.



# Quality

The BlueLavage® a high quality medical product.



# **Inexpensive**

The BlueLavage® is Inexpensive and produced under fair conditions.



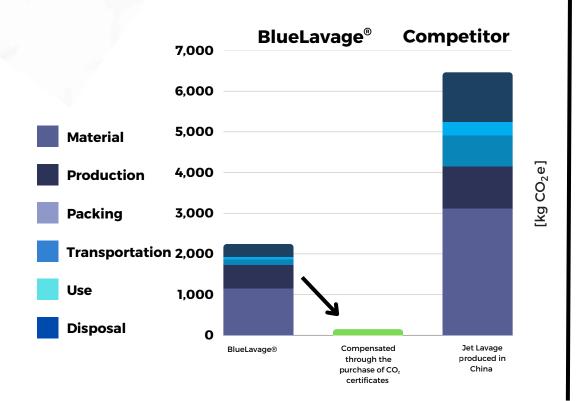
# **Available for delivery**

The BlueLavage® is always ready for delivery!

# BlueLavage®...climate-neutral and unobtrusive sound

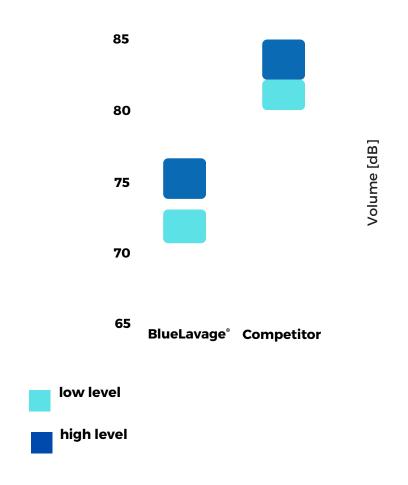
# Climate neutrality is no coincidence.

BlueLavage® system produces 65% less harmful CO<sub>2</sub> than comparable products\*.



# Volume measured with small and large rinse step.

Very good performance without noise pollution The BlueLavage® system convinces with a sonorous sound that is clearly quieter than comparable products\*.



<sup>\*</sup> Source: Manufacturer UTK-Solution GmbH Lüdenscheid

# The environmentally friendly, innovative and powerful BlueLavage® rinsing system

## **Powerful**

- Two rinse levels selectable
- HighSpeed level (Flow rate over 1,200 ml/min)
- LowSpeed level (Flow rate of 600 ml/min)
- Constant flushing pressure of 1 bar (15 psi)
- Drive unit (DriveUnit) with 500 recharge cycles

## **Environmentally friendly**

- The BlueLavage® system produces<sup>2</sup> no electronic waste, no battery waste and it is the only CO neutral medical product in the world.
- · Replacement and recycling of the drive unit by UTK Solution
- Tubing system without harmful or banned plasticisers · Only recyclable and biocompatible plastics are used, which are tested according to DIN EN 10993-5

## **Awarded**

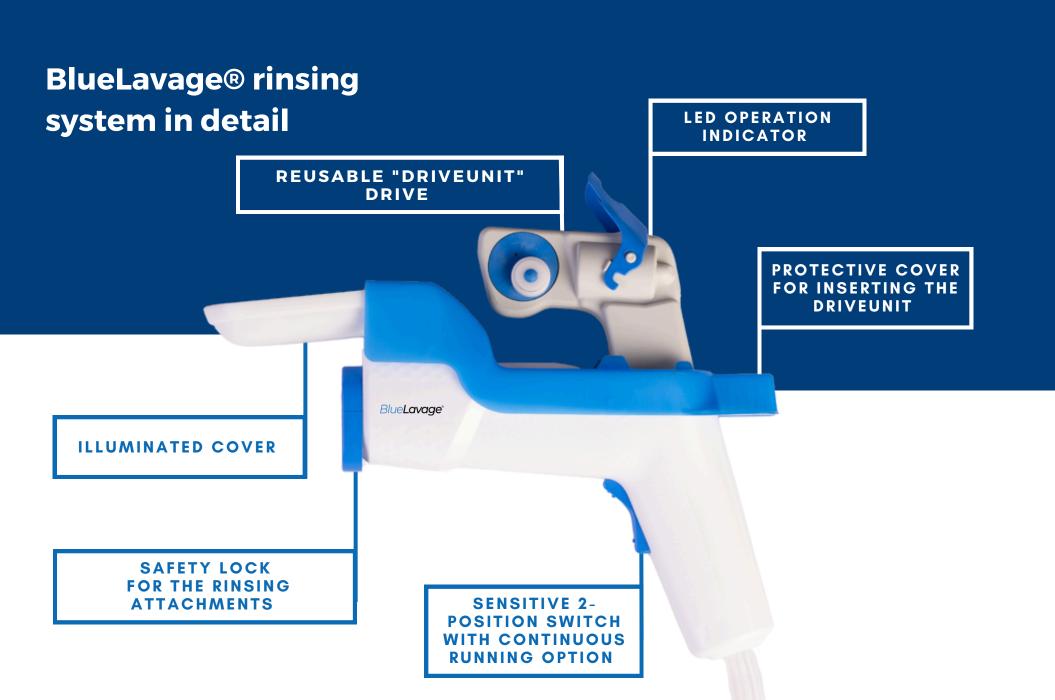
 Our manufacturer, UTK-Solution GmbH from Lüdenscheid, was awarded the "NRW Efficiency Prize" in 2019 for the development of the BlueLavage® system.

## **Innovative**

- Operated by a reversible driver
- Electronically controlled engines
- Reduced noise development
- Sensitive 2-stuff switch with delayed start option
- During operation, the smart LED light informs you of the action. LED light informs you of the current operating state during operation.
- Sensor-based monitoring of the most important parameters
- Patent-protected locking of the drive unit in the BlueLavage® housing

## **User-friendly**

- Thanks to the new double Tyvek® packaging, the BlueLavage® is easy to open and to take, even under sterile conditions.
- Easy Top Loading of the drive unit (DriveUnit)
- Easy and safe changing of the different irrigation attachments
- Perfect handling due to the very low weight and the absence of disturbing electric cables or compressed air hoses
- Quiet and low-vibration operation
- With the BlueLavage® you are independent of the CSSD and there are no costs for reprocessing and sterilisation



# BlueLavage® DriveUnit and Dockingstation

# **Electronic key figures DriveUnit**

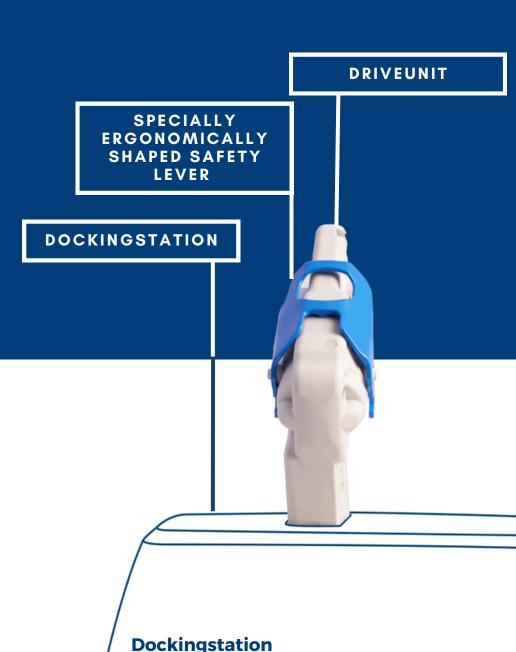
- Lithium-polymer battery
- Electronically regulated motor control
- During operation, there is permanent electronic monitoring of important parameters by sensors
- High capacity of the DriveUnit for an optimum cleaning result
- The DriveUnit is exchanged and recycled

# **Electronic key figures docking station**

- Charging cradle for simultaneous charging of 4 DriveUnits
- Power supply 100 to 250 V AC
- Dimensions: Width 165 mm, height 55 mm, depth 146 mm

## Safety Information BlueLavage® Docking Station - DriveUnit

- The BlueLavage® Dockingstation and DriveUnit are marketed non-sterile and must not be sterilised.
- The responsibility for proper cleaning/disinfection of the BlueLavage® DockingStation and DriveUnit lies with the operator and product user.
- A mechanical reprocessing procedure (cleaning, disinfection, etc.) must not be used; only wipe disinfection\* is permitted.

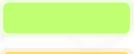


(4-compartment charging ports)

\*Disinfect the docking station/DriveUnit using non-acidic, alkaline hygienic cleaners in accordance with the chapter Repro- cessing in the instructions for use.

# **Meaning of the LED signals**

## DriveUnit light signals during usage



#### Steady green light

The lithium polymer battery is 100% charged.



#### Steady yellow light

After 1 minute, the LED light signal switches from a permanent green light to a permanent yellow light. The yellow continuous light signals that the DriveUnit is still ready for use, but that it should be fully recharged before the next operational use.



#### Flashing yellow quickly

The lithium polymer battery is completely discharged and not ready for use.



#### Steady red light

The DriveUnit has reached the end of its service life or is defective. Contact us for replacement.

## Light signals when loading the DriveUnit



#### Steady green light

The lithium polymer battery is 100% charged.



#### Slowly flashing yellow light

Charging process active.



#### Flashing blue light

Charging process active, but the DriveUnit needs to be renewed soon.



#### Steady red light

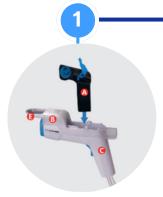
The DriveUnit has reached the end of its service life or is defective. Contact us for replacement.



#### No light signal

The Dockingstation is without power supply or the Dockingstation or DriveUnit are defective.

# Inserting the DriveUnit and rinsing attachments



### Inserting the DriveUnit

The non-sterile DriveUnit (A) is inserted into the BlueLavage the DU protective cover (B) is inserted into the BlueLavage® handpiece (C) from above. The DU protective cover prevents accidental contact with the sterile BlueLavage® handpiece and is removed from the OR jumper.



### **Saving the DriveUnit**

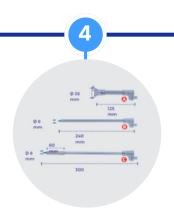
As soon as the DriveUnit is completely inserted in the BlueLavage® handpiece, the safety lever (D) must be pushed down by the surgical jumper, so that the DriveUnit is securely locked in place.



### Removing the protective cover

After the DriveUnit has been locked in the housing with the safety lever, the DU protective cover (B) is removed and the closing lid (E) is closed. The closing lid is securely fixed in its closed position by internal locking clips.

# **Inserting the DriveUnit and rinsing attachments**



### The rinsing attachments

For the use of the BlueLavage® 3 different rinsing attachments are available. A) Knee endoprosthetics + wound debridement B) Hip endoprosthetics C) Hip revision arthroplasty



#### Fixing the irrigation attachments

All irrigation attachments are pushed into the BlueLavage® handpiece from the front. To open the locking catch, press down the safety clip (D)



#### Inserting the rinsing attachment

Slide the selected rinsing attachment into the BlueLavage® handpiece from the front. Make sure that the end of the rinsing attachment is fully inserted.



#### Securing the rinsing attachment

As soon as the end of the rinsing attachment has been fully is fully inserted, push the blue locking clip (D) back up. If you feel that the securing clip is difficult to push up, check again that the end of the rinsing attachment is fully pushed in.



## Removing the DriveUnit

To open the locking cover (E), there are highlighted pressure points (F) on both sides of the BlueLavage®. By pressing simultaneously, the cover can be opened and the DriveUnit can be pulled out using the safety lever (D).

#### IMPORTANT NOTES ON STERILITY!

The DriveUnit is non-sterile and should never be touched by the sterile OR-Teammember.

The removal of the protective cover after inserting the DriveUnit may only be removed by the "OR jumper".

Never press the lateral pressure points during operation to prevent the safety cover from accidentally "popping open".

The DriveUnit must be fully recharged after each use before it can be used again.

# Sales

Sustainability shapes not only our products, but also our sales strategy. To ensure you receive first-class customer service, we have dedicated sales teams in your region and country. This is made possible through our collaboration with distributors and sales representatives.

# Are you a hospital and interested in our products?

Visit our website to find the right contact for you. You can contact us, UTK Solution GmbH, directly via our contact form or UTK Solution contact details.

Are you a distributor or working as a sales representative and interested in distributing BlueLavage?

Do not hesitate to contact us. We are always interested in expanding our distribution channel.



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# **Article overview with order numbers**

item number	description	ackaging unit	Scope of delivery	
BL2000.1	BlueLavage® handpiece with	20x	1 x 3 meter inlet hose for rinsing liquid	
	funnel and <u>Funnel-TIP</u>		1 x 3 meter drain hose with clip for vacuum pump	
	Disposable system, sterile		1 x short irrigation attachment with funnel for knee endoprosthetics	
BL2000.2	BlueLavage® handpiece with funnel	20x	1 x 3 meter inlet hose for rinsing liquid	
	and <u>LongBone-TIP</u>		1 x 3 meter drain hose with clip for vacuum pump	
	Disposable system, sterile		1 x long irrigation attachment for hip endoprosthetics	
Optional a	rticles			
BL2006.1	BlueLavage® short funnel irrigation set, sterile length 130 mm, opening Ø 40 mm	, 10x	Packaging with 10 individually, sterile removable	
	Funnel irrigation sets			
BL2004.1	BlueLavage® Femoral Channel Irrigation	20x	Packaging with 20 individually, sterile removable	
	Attachment, sterile, length 240 mm			-
	Femoral Irrigation Attachments			
BL2003.1	BlueLavage® BrushTip, sterile, total length 300	20x	Packaging with 20 individually, sterile removable	
	mm, of which brush 60 mm			
	Femoral Canal Irrigation with Brush Attachme	nts		-17"
BL2005.1	BlueLavage® DU protective cover, sterile, for	5x	Packaging with 5 individually, sterile removable	
	safe insertion of the DriveUnits			
Investmer	nt material			
3L2001.1	BlueLavage® DriveUnit	2x	Packing with 2 single DriveUnits, for continuous use	0 00 0
522001.1	DideLavages DriveOffit			
3L2002.02	BlueLavage® charging station with power supply	1x	1 x Power supply unit with 10 V output	
	and adapter 1 x 4-compartment charging station		1 x Country specific adapter for the power supply unit	The state of the s



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