

## BRIEF INSTRUCTIONS

### CLEANING AND DISINFECTION OF DELTASTREAM HC

#### Valid for:

ME DPHC 0001 deltastream HC, 230V  
ME DPHC 0002 deltastream HC, 115V

#### Safety instructions:

##### Attention



**Read the safety instructions below before starting to clean the unit:**

- This system is a closed circuit. The water line should not be disconnected in the operating area. Do not perform water changes and disinfection in the operating area.
- Carry out water changes and disinfection only in hygienically clean surroundings.
- Pay attention to hygienically clean work processes. (Disposable gloves, protective mask, hood).
- Make sure you and your staff are aware of mycobacteria and their effects.
- Regularly check the system for microbiological contamination. We recommend to test the water quality once a month, nevertheless the system is in use or stored.
- Disconnect the mains plug before starting to clean and disinfect the unit.
- For all surfaces and parts use only disinfectants based on aldehydes, ammonium components or alcohols that do not attack ABS plastic, PVC or PU. As far as possible, do not use disinfectants based on phenol derivatives because they shorten the life of plastics. A list of suitable disinfectants can be found on Page 2 of these Brief Instructions as well as on Page 26 of the IFU.
- Make sure no liquid enters the unit (e.g. through the ventilation slots).
- Only switch on the device if neither the surface is wetted nor if liquid is inside the device outside the tank.
- Only use sterile water for disinfecting the device!
- Fill sterile water into the tank only with auxiliaries that have been previously disinfected.

#### Surface

##### Surface cleaning and disinfection

- After each water change, carry out a surface disinfection (device housing, hose set and connectors).
- If the device is contaminated by contact with body fluids, disinfect the surface and, if necessary, the water-carrying parts.
- Make sure that after surface disinfection no residues of the cleaning agent are left on the surface and the housing resp. interior of the device is dry before use.
- For disinfecting the surface of the device, please, note the list of approved surface disinfectants on Page 2 of this Quick Guide or Page 26 of the IFU. When using the disinfectant, observe the manufacturer's instructions.
- Also clean and disinfect the screw thread of the filler neck.
- Do not switch the unit on again until the disinfectant has evaporated fully.
- For more information, please see the deltastream HC IFU in chapter 7 from page 25 and following.

#### Ventilation slots

Check the ventilation slots on the sides of the unit for dirt regularly, but at least every six months. Do not open the device yourself.

Dust deposits in the unit will reduce the efficiency of the system. Have any inside dirt removed by an authorized service technician.

These cleaning instruction only apply in connection with the currently valid instruction for use of the above mentioned devices and does not replace it!

#### CAUTION



**During the water change or the disinfection, no oxygenator may be connected to the water circuit.**

Pay attention to hygienic handling when cleaning the device!

## BRIEF INSTRUCTIONS

### CLEANING AND DISINFECTION OF DELTASTREAM HC

Company	Product name	Active substance
	Isopropanol	Isopropanol (70%)
Bode Chemie GmbH	Kohrsolin <sup>TM</sup> Sterilium <sup>TM</sup> Bacilol Plus <sup>TM</sup>	Aldehyde Propanol Propanol
Ecolab Healthcare GmbH	Incidin Schaum <sup>TM</sup> Incidin Spray Liquid <sup>TM</sup>	Propanol/Ethanol Propanol/Ethanol
B.Braun Melsungen AG	Meliseptol <sup>TM</sup>	Propanol
Clorox Company USA	Clorox Healthcare Bleach Germicidal Wipes <sup>TM</sup>	Hypochlorid
Schülke&Mayr	Mikrozid Liquid AF	Propanol/Ethanol
Metrex	Cavi Wipes	Isopropanol/Butoxyethanol
PDI	Super Sani Cloth	Isopropanol

Table1: List of approved surface disinfectants\*

\*Maybe some of the listed products are not available in your country. Take care about the availability!

### Changing water and disinfection the water circuit

We recommend changing the water with the subsequent disinfection of the water cycle as follows in order to kill water-borne pathogens (including non-tuberculous mycobacteria) and other germs:

- After each therapy,
- As part of the initial commissioning,
- at latest 30 days after the start of therapy,
- in case of storage and / or prolonged non-use
- Generally after 30 days, also with stored devices
- every 12 months as part of the safety inspection.
- Replace hose set and couplings every 12 months.

### Filling the device during initial operation and recommissioning:

- Fill approximately 1 liter of sterile water, e.g. with the help of a disinfected funnel into the water tank of the device.
- Make sure that no foreign objects enter the water tank.
- Observe the water level indicator during filling. The water level should be slightly below the MAX mark after filling.
- After filling, screw the screw cap of the water filler neck back in until the screw cap seals.
- Check the microbial contamination regularly. We recommend to test the water quality once a month, nevertheless the system is in use or stored.

### Emptying the device:

- Disconnect the device from the mains.
- Place a container (bucket, bowl, etc.) under the device or place it on a drain (e.g. sink).
- Unscrew the cap of the water filler neck in sterile condition.
- Drain the tank contents into the collector via the connected hoses. To do this, remove the adapter between the Hansen couplings. Make sure that the hoses are also completely emptied afterwards.

# XENIOS

## BRIEF INSTRUCTIONS CLEANING AND DISINFECTION OF DELTASTREAM HC

### Disinfection

- Empty the system as described.
- Insert the adapter between the Hansen couplings.
- Fill the device again with the chosen H<sub>2</sub>O<sub>2</sub> solution until the tank is completely filled.
- Leave the fuel cap open during the cleaning process, as overpressure may occur.
- Switch on the device and allow the disinfectant solution to circulate at 35 °C. Ventilate the hose set.
- Complete this process after a total of 30 minutes and drain the used disinfectant solution from the water circuit as described.
- Refill with sterile water
- Take the device for 5 min. in operation and then drain the water from the water cycle. Repeat this procedure several times with fresh sterile water.
- The water cycle must be flushed until a suitable detection medium (e.g. test strips "Sanosil and pH test") no longer detects disinfectant residues.
- If the device continues to operate, refill it with sterile water until it is slightly below the MAX mark on the level gauge.
- Stored devices must be disinfected every 30 days to prevent the formation of a biofilm.
- If a biofilm has formed, all water-bearing parts must be replaced.
- Liquids should never penetrate the inside of the device outside of water-bearing parts. Medos Medizintechnik AG recommends removing devices whose internal parts have come into contact with foreign fluids from the surgical area and to disinfect them afterwards. Contaminated devices may only be used again once disinfection and maintenance have taken place. For more information, please take a look at the deltastream HC IFU in chapter 7 starting on page 25.

For the disinfection of the water cycle a H<sub>2</sub>O<sub>2</sub> - containing solution is recommended. Concentration of H<sub>2</sub>O<sub>2</sub> should be between 3% - 7.5%.

⇒ For a 3% H<sub>2</sub>O<sub>2</sub> solution of Sanosil™ S015 mix 400 ml of Sanosil™ S015 with 600 ml of sterile water.

Sanosil™ S015 is not available in every region! Please make sure that a suitable product is approved in your region! (e.g., Amity™ 75).

#### DISTRIBUTOR

Xenios AG  
Im Zukunftspark 1  
74076 Heilbronn  
Germany  
Phone +49 7131 2706-0  
Fax +49 7131 2706-299  
info@xenios-ag.com  
www.xenios-ag.com

#### MANUFACTURER

medos Medizintechnik AG  
Obere Steinfurt 8-10  
52222 Stolberg  
Germany  
Phone +49 7131 2706-300  
Fax +49 7131 2706-498  
info@xenios-ag.com  
www.xenios-ag.com