Sanosil Q-Jet CT20

Operating Manual

SANOSIL
DISINFECTANTS FOR LIFE

SANOSIL AG • CH-8634 Hombrechtikon • Switzerland
E-mail: service@sanosil.com

www.**sanosil**.com

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1. Use of symbols

The following symbols are used in this manual or on the device:

	**DANGER**	High risk! Non-compliance can lead to death or serious injury!
	**ATTENTION**	Medium risk! Non-compliance can lead to serious injury!
	**CAUTION**	Low risk! Non-compliance can lead to moderate or minor injuries!
	**NOTE**	Non-compliance may damage the device. Offers advice on how to operate the device correctly.

2 Safety

DANGER

For all users of the device, provide comprehensive instructions on proper operation, the intended use and the associated risks. Make sure that this manual has been read and understood by all users of the device. Make sure that this manual is always available to the users of the device.

2.1 Intended use

The device is a nebuliser for indoor applications using exclusively Sanosil disinfectants with a maximum hydrogen peroxide content of 7.5%. Its purpose is to transform the disinfecting liquid used into minute particles and to nebulise them in a room, which then results in uniform disinfection of all uncovered surfaces in the room (3D disinfection).

The device is intended for use in hospitals, clinics and on public transport, etc. as well as in residential, commercial and industrial areas. This type of disinfection is an additional measure after regular cleaning and disinfection of room surfaces. In each case, the pre-cleaning protocol is defined by the respective healthcare organisations. Make sure the surfaces are dry before nebulising to maximise the effect.

ATTENTION

Risk of damage!
This device nebulises chemical substances! The area to be disinfected must only contain items necessary for operation of the device. Objects consisting of sensitive organic materials, especially antiques, paintings and valuable artefacts must be removed.

2.2 Improper use

Always and only use Sanosil disinfectants with a maximum hydrogen peroxide content of 7.5%. The use of any other disinfectants or accessories that have not been expressly approved by Sanosil Ltd. violates the rules described in this manual and may result in serious injury as well as damage to the device. The device is not intended for use as the only disinfection procedure. Instead, it is intended as a supplement to regular cleaning and disinfection.

DANGER

Risk of explosion! / Risk of injury!
No flammable liquids may be nebulised!
Only Sanosil disinfectants may be nebulised.

2.3 Dangers and warnings

The device must be used in full compliance with this operating and maintenance manual.

- It is strictly forbidden to use the device in an explosive or flammable atmosphere, in dusty areas or in the presence of people or animals. Prevent people from intentionally or accidentally entering the room during the fogging process or during the waiting time afterwards.
- There is a risk of injury if unauthorised accessories are used!
- For this reason, only use original accessories from Sanosil Ltd.
- Place the unit on a stable, level, dust-free, non-slip, horizontal surface with a load-bearing capacity suitable for its weight.
- Always disconnect the device from the power supply before removing the rear panel.
- Carefully read all the information provided on the label of the Sanosil disinfectant.

2.4 Safety instructions for the aerosol and device:

Nebulised disinfectant/aerosol:

- When using the Sanosil Q-Jet and Sanosil disinfectant, high concentrations of hydrogen peroxide are produced in the air. These can be detrimental or hazardous to health. Only operate the device in rooms that have been prepared for disinfection and are sealed off. Prevent people or animals from entering rooms where active aerosol disinfection is present. Prevent aerosols containing peroxide from escaping into parts of the room with unprotected persons during and for some time after disinfection.
- Once the fogging process using the Sanosil Q-Jet has been completed, the air will be full of fogged Sanosil disinfectant. DO NOT ENTER the treated room FOR AT LEAST 120 MINUTES AFTER TREATMENT. The waiting time of 120 minutes must be observed. This does not mean, however, that the room can be safely re-entered after this time. The maximum limit for hydrogen peroxide in the air without any protective equipment is 1 ppm.
- If someone needs to enter the treated room before the end of the waiting time or if the hydrogen peroxide content must be measured, the individuals concerned must use personal protective equipment. This includes a full-face, sealed respirator (filter class ABEK P3) and gloves if necessary.
- The device is intended for use with Sanosil disinfectant (S010 / S015). Do not use any other disinfection products or liquids.
- ONLY use Sanosil disinfectant to ensure maximum safety and effectiveness. The use of any other cleaning agent or disinfectant may cause serious injury and environmental damage.
- No one may be permitted to enter rooms while the equipment is in use. Warning signs must be placed at the entrances.

ATTENTION

Health risk / material damage

This device nebulises chemical substances! Hydrogen peroxide concentrations in the air above 1 ppm may irritate eyes and respiratory tract / adversely affect health.

The use of chemicals other than those intended or the incorrect positioning and use of the device may be harmful to health and/or result in property damage.

Sanosil Q-Jet CT-20 (device)

- Keep the device out of the reach of children.
- Read the operating manual and safety instructions carefully before using the device for the first time.
- Only use the device as specified.
- Although the device is easy to operate, it must only be used by trained personnel.
- Caution: Electric shock! Do not connect the device to the power supply when parts of it are still wet.
- Only use the power cable supplied by Sanosil AG.
- No liquids must be allowed to enter the device. If this nevertheless occurs, disconnect the device from the mains immediately, let the device dry completely and then test all its functions.
- Do not overfill the tank or tip the device.
- Disconnect the device from the power circuit before moving it or opening it to connect a bidon.
- Position the device on a firm surface so that it does not roll or move.
- Do not tip the device on its side until the tank has been removed, the pipes have been blown out and the device is completely dry.
- Protect the device from sharp impacts and shocks.
- Risk of burns! The device may heat up during use.
- Observe specific warnings on the label of the disinfectant.
- Place the unit on a stable, level, dust-free, non-slip, horizontal surface with a load-bearing capacity suitable for its weight.
- Store the device upright in a safe, dry place. Do not store any objects on the device.

DANGER

Risk of injury/electric shock
This device operates with electric current of potentially lethal voltage/amperage. Always observe the usual safety regulations when handling electrical equipment.
Sanosil Ltd is not responsible for any injury or damage caused by improper use of the device.

2.5 Authorised personnel

The device must only be used by adults who have been carefully instructed in how to operate it and who are well informed about the potential dangers and risks when using the device. Users must always have a copy of the user manual available while operating the device and must have read and understood all specific information on the label of the Sanosil disinfectant used.

2.6 Liability disclaimer

Sanosil accepts no liability for damages or warranty claims if:

- The product is used for a purpose other than that specified in this user manual.
- Regulations, standards or instructions in this user manual are not observed.
- The product is modified or altered in any way.
- The product is not repaired by an authorised dealer and is operated with spare parts that are not genuine Sanosil Ltd. parts.
- The product is used despite obvious safety defects or identifiable damage.
- The product has been subjected to mechanical shocks or dropped.
- Accessories are used that are not included in the scope of delivery or expressly approved by Sanosil Ltd.

3. CT20: Technology

3.1 Product description

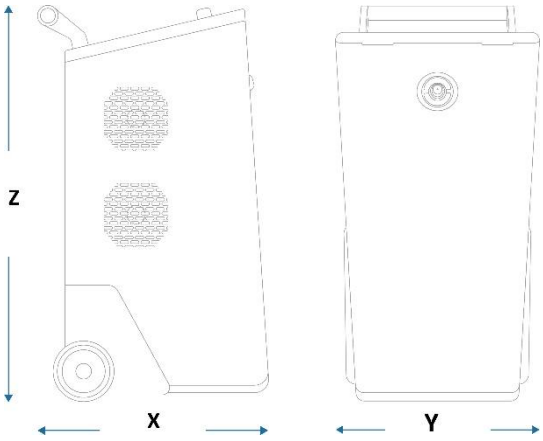
The CT20 incorporates more than 20 years of experience in aerosol disinfection. Its key feature is the well-proven compressor/fine mist nozzle technology, which generates a fine, dry disinfection mist. The flow rate can be adjusted, allowing fog to be produced just 2 metres away from the wall. This presents a major advantage, which nearly no other device with a similar output can match.

A powerful turbine can, however, be switched on if the CT20 is required for a larger room. Its air jet functions as a booster and provides the disinfectant droplets with a considerably wider trajectory. What's more, this also ensures optimum distribution in the room. Thanks to the 5-litre active-substance tank, a room of up to 600 m3 can be fogged at a dosage of 8 ml/m3.

The device features 2 different operating modes as standard. In **Auto mode**, the room is automatically flooded with disinfectant mist up to the air saturation limit. Once this limit is reached, the device automatically switches off and only continues to operate when the humidity has decreased again. This prevents condensation and consequently ensures that the mist is uniformly distributed in the room. In **Expert mode**, the desired amount of disinfectant can be distributed manually via up to 4 cycles of a configurable length as well as 3 customisable intermediate pauses.

The device is operated using a touchscreen and features a logging function. This makes it possible to save each disinfection process and export it via a USB stick.

3.2 Technical device information



Dimensions:

X: 450 mm

Y: 400 mm

Z: 850 mm

CT20 data	
Dimensions	450 x 400 x 850 mm
Weight	Approx. 30 kg
Tank volumes	1 x 5-litre bidon
Connection	220-240 V, 50/60 Hz
Fogging technology	Compressor, nozzle & turbine
Min. - max. mist output	10 ml/min - 50 ml/min
Min./max. noise level	60-85 db
Aerosol droplet size	5-15 µm
Visible mist cone	2-5 m (min.-max. power)
For room sizes	6 - 600 m^3

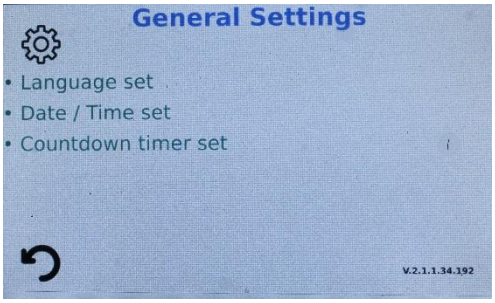
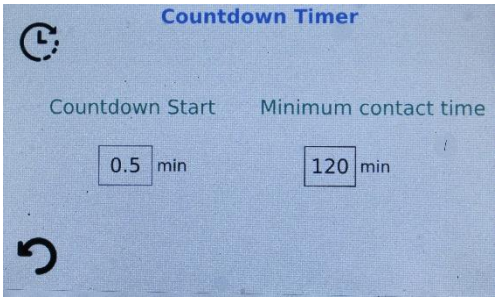
3.3 Overview

A	Handle
B	Moisture meter
C	Touchscreen
D	Main switch
E	Optical warning signal/status display
F	Mist nozzle
G	Turbine opening
H	Ventilation openings
I	Chassis

4. User manual

4.1 General Settings

Under General Settings, basic information, such as language, time, date and owner information, etc. can be selected and adjusted.

• Connect the device to the mains and actuate the main switch (D) Let the device start up • Wait until the General Settings screen appears • Select "Settings"	
• The "General settings" menu opens	
• "Select language" allows you to select the menu language	
• "Date/time set" allows you to set the date and time	
• "Countdown timer set" allows you to set the countdown timer, i.e. how much time elapses after the program is started and the fogging process is started • The "Minimum contact time" controls how long the device continues to issue a warning message after the spraying process has ended	

4.2 Disinfection mode

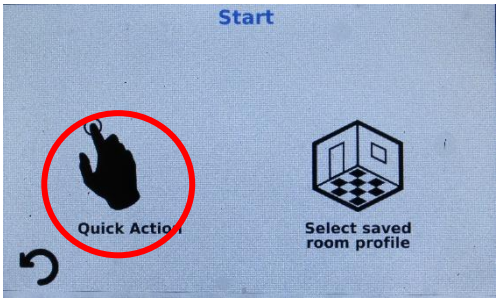
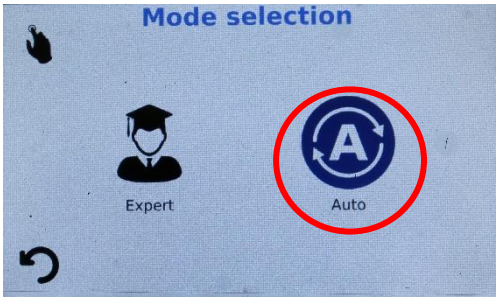
The CT 20 features two different operating modes: "Auto" and "Expert". The difference is how the disinfectant is delivered into the room.

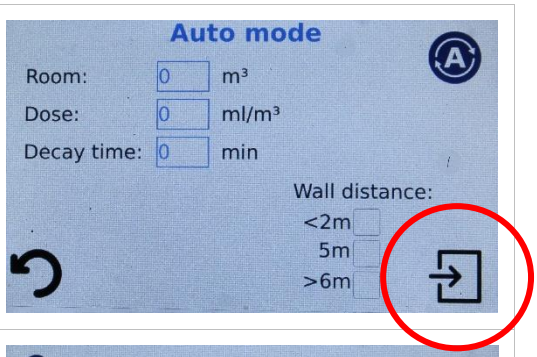
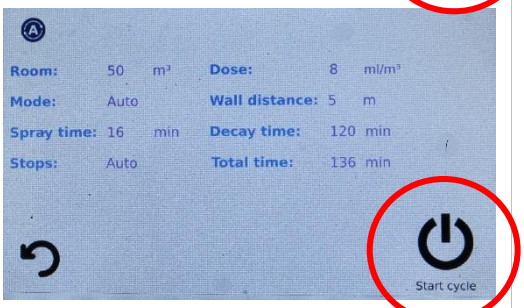
4.2.1 Auto mode

Auto mode is designed to deliver any amount of disinfectant into the room such that condensation is avoided as much as possible. Condensation means that the air is saturated with moisture and the liquid starts to settle on the coldest surfaces. This allows drops to form there. Condensation has an adverse effect on the disinfection result, since it prevents the disinfectant from being distributed as evenly as possible in the room and from covering all surfaces evenly as a relatively dry mist.

In addition, condensation on sensitive surfaces can result in unwanted effects. Auto mode prevents condensation and activates a humidity sensor that constantly measures the relative humidity. As soon as there is a risk of condensation forming, Auto mode stops the aerosol input and waits until the air humidity has dropped again to such an extent that the air can absorb more liquid.

The program then continues until the entire desired dose has been supplied to the room without condensation. Auto mode is ideal for straightforward and uncomplicated maintenance disinfection, e.g. in hotel rooms, gyms, restaurants and laboratories, etc.

• Press "Run" to treat a new room or to load a saved room profile.	
• Press "Quick Action" to treat a new room	
• In "Mode selection" chose an operating mode • Select "Auto".	

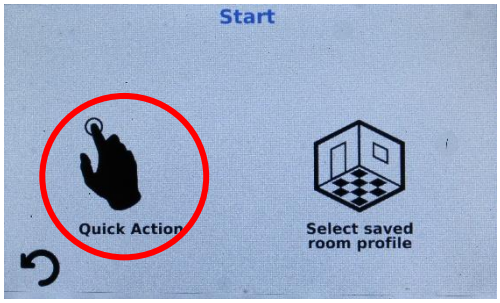
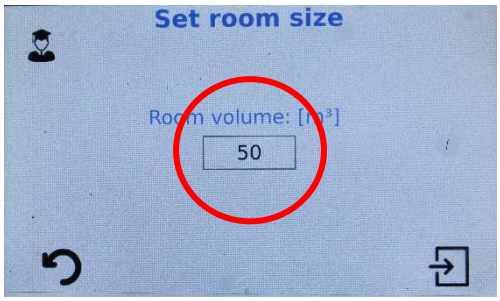
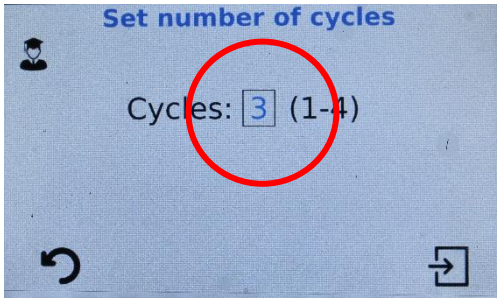
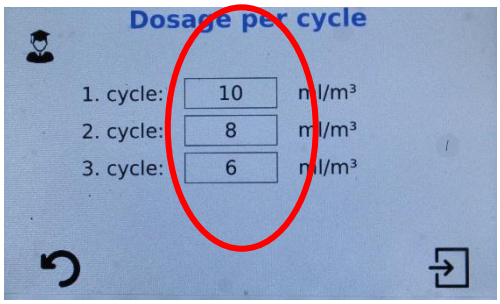
• Define the room size in m^3 • Select the desired dose per m^3 • Select the distance from the nozzle to the walls and ceiling. (If the distance is specified incorrectly, the disinfectant may be dosed too quickly and cannot be distributed in the best possible way.) • Then go to "Next"	
• Check the specifications • Then tap "Start Cycle" to start the disinfection process	
• Leave the room and wait until the disinfection program has finished	

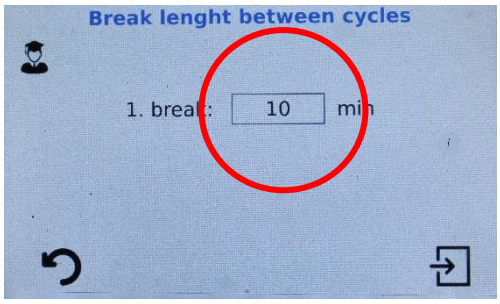
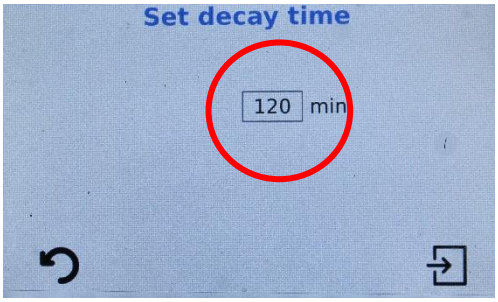
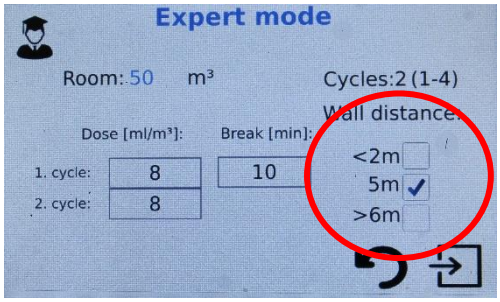
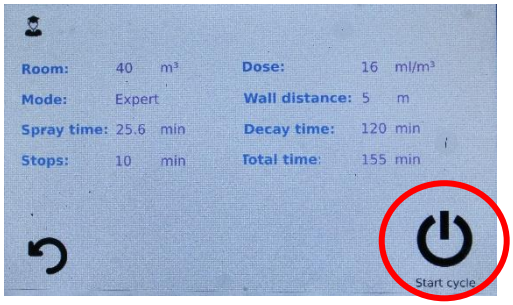
4.2.2 Expert mode

Expert mode enables defined, reproducible disinfection results and disinfection cycles that are precisely customised for individual rooms. Expert mode thus makes it possible to achieve disinfection results that comply with the conditions of use set out in DIN EN 17272.

The desired quantity of disinfectant can be distributed manually via up to 4 cycles of a configurable length as well as 3 customisable intermediate pauses. This enables the best possible disinfection results, but also requires a certain understanding of aerosol mechanics and how the dosage, cycle and pause length interact depending on the room to be treated. Otherwise, unwanted condensation may form.

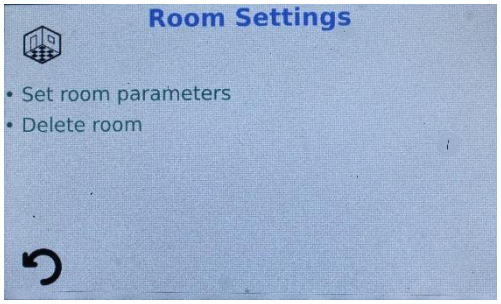
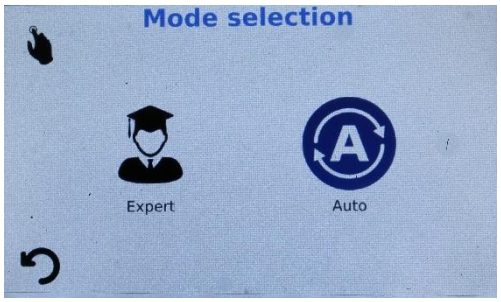
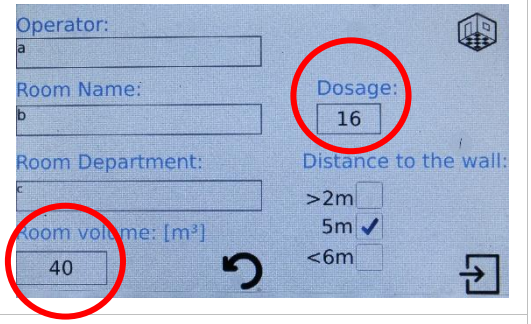
• Press "Run" to select an operating mode:	

• Press "Quick Action" to select an operating mode:	5 
• Select "Expert"	
• Define the room size in m^3 and press "Next" at the bottom right	
• Select the desired number of disinfection cycles	
• Select the desired dosage per m^3 and cycle. (Make sure that the desired amount of disinfectant per cycle is max. 12 ml, for tiled walls of the room max. 10 ml.)	

• Select the pause length between the individual cycles. Just like Auto mode, the pauses ensure that the air humidity drops after each spraying process, reducing the risk of condensation and increasing the contact time with the micro-organisms. Pauses of between 20 and 30 minutes are a good rule of thumb. Important: two cycles = 1 pause, three cycles = 2 pauses, 4 cycles = 3 pauses	
• Set the minimum decay time. This is at least 120 minutes. The decay time is the exposure time of the aerosol. At the same time, it is also the time for the peroxide to decompose into water and oxygen. (Important: the complete decay of the peroxide depends on a number of factors and must always be remeasured in case of any doubt. (Limit value: 1 ppm H_2O_2 /m^3 air.)	
• Select the distance from the nozzle to the walls and ceiling. (If the distance is specified incorrectly, the disinfectant may be dosed too quickly and cannot be distributed in the best possible way.) The "wall distance" setting also influences the speed of the dosage pump and turbine blow. • Then go to "Next" at the bottom right	
• Check all the specifications. Make sure that there is enough liquid in the tank for the desired program. Otherwise, a corresponding warning field appears • Start the cycle	
• Leave the room and wait until the disinfection program has finished	

4.3 Creating room profiles

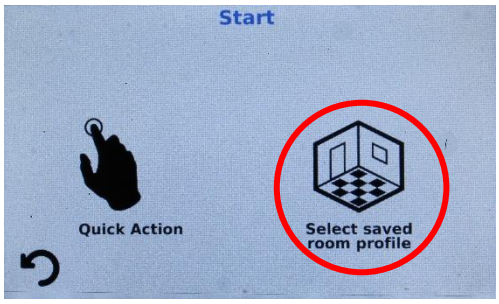
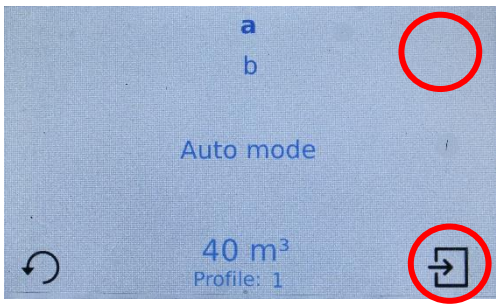
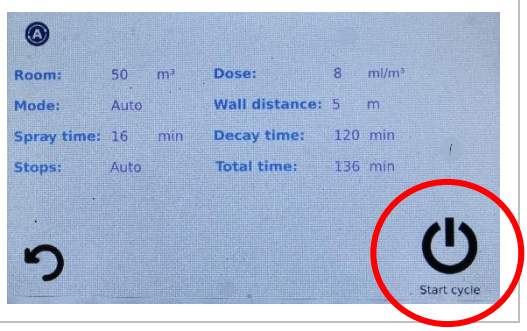
You can create different room profiles and edit them under Room Settings. This is particularly useful if the same rooms with different characteristics will be disinfected with the same device at regular intervals. The idea behind this is that an expert can define the appropriate settings and then simply leave the actual operation of the device to instructed assistants.

• Wait until the General Settings screen appears • Select "Room Settings"	
• Enter the password to get access. Password:= "**agent007**"	
• "Set room" allows you to create the room profile • "Delete Room" allows you to delete previously saved room profiles	
• Select the Auto or Expert operating mode (for details on the operating modes, see section 4.2 .1 or 4.2.2)	
• Select the name of the operator, the room name, the room department (e.g. floor number), the room cubature and the distance of the nozzle to walls/ceiling and equipment. (Attention: once a wall distance has been selected, it must be removed by pressing it again to select another distance.)	
• **Optional:** If you have selected expert mode, you must also define the number of spray cycles, breaks and decay time	(See Screenshots 4.2.2)

• The room is then saved	

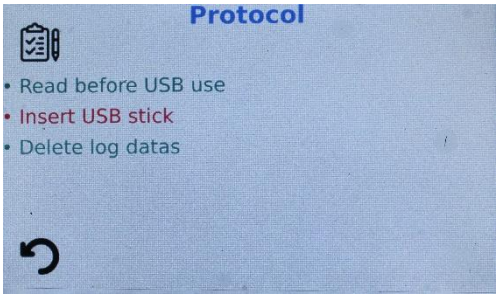
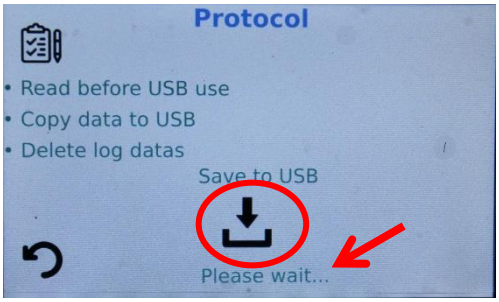
After programming a room profile, the profile can be activated and started immediately by pressing "OK". Alternatively, you can use "Back" to create and save additional room profiles.

4.4 Loading and activating a saved room profile

• Press "Run" to select an operating mode:	
• Press "Select saved room profile" to select a previously saved profile:	
• Select a saved room profile. Press the "arrow key" to browse through stored profiles. (The arrow appears only if more then one profile is saved)	
• Check all the specifications. Make sure that there is enough liquid in the tank for the desired program. Otherwise, a corresponding warning field appears • Start the cycle	

4.5 Protocol

Under Protocol, the logged disinfection data can be copied to a USB stick.

• "Protocol" opens the protocol menu	
• "Read before the use of USB" opens an information menu that provides information on how a USB stick must be formatted in order to automatically download data for further processing in CSV / MS Excel format • "Delete log data deletes stored log data in the device	
• Using USB: format a USB stick (< 8GB, USB 2 protocol) in the format FAT 32 • Create a folder and name it "DT"	
• Insert the USB stick and wait until the display changes to "Save to USB". (This may take up to 30 s). Then tap on the entry. After a few seconds the "please wait" message appears.	
• **Attention**: The copying process takes **2-3 minutes**. The message "Export completed " confirms completion. • The data can then be used as Excel files. • Note: The internal memory of the device is limited to 49 entries. If all memory locations are occupied, the oldest data will be overwritten without warning.	

5. Possible usage profiles for the Q-Jet CT20

A: Overnight disinfection (recommended)

Procedure:
Disinfection procedure in accordance with the manual with a longer, overnight exposure time.

Advantages:
A longer exposure time, maximum disinfection effect, hydrogen peroxide level drops automatically overnight and only needs to be measured once the following day.

Disadvantages:
The room cannot be used and Sanosil Q-Jet CT 20 is not available overnight.

B: Standard disinfection without additional measures

Procedure:
Disinfection procedure according to instructions with standard waiting time.

Advantages:
Time required: 3-8 hours (depending on room size, humidity and the decomposition time of the hydrogen peroxide in the treated room). Sanosil Q-Jet CT20 and the room can be used again sooner.

C: Standard disinfection with forced air exchange

Procedure:
Disinfection procedure in accordance with the manual. After the minimum exposure time, the system does not wait for the product to be completely decomposed. Instead, a forced ventilation/air exchange system is used to remove the hydrogen peroxide residues still remaining in the room.

Advantages:
Time required: 3-5 hours (depending on room size and air exchange rate), Sanosil Q-Jet and the room can be used again sooner.

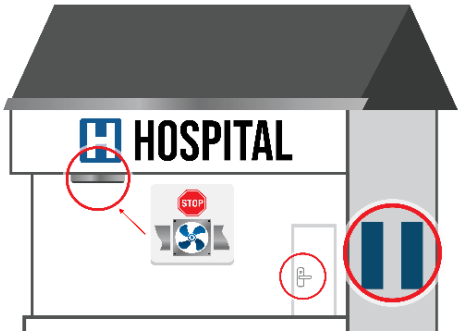
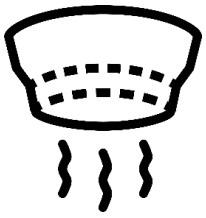
Disadvantages:

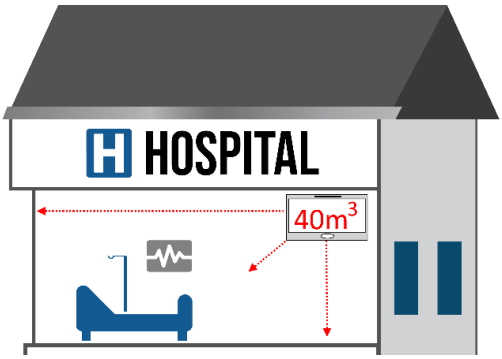
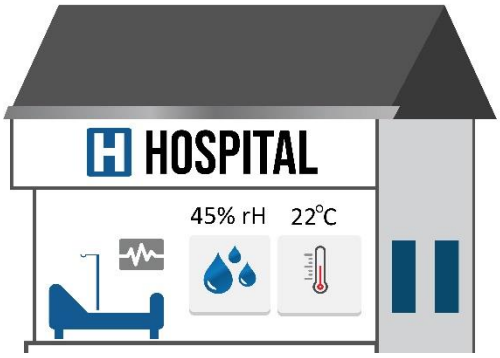
Requires a powerful ventilation system with a separate supply and extract air system and a dedicated control system for each room.

6. Carrying out aerosol disinfection

6.1 Room preparation

Rooms must be thoroughly prepared in order to ensure that aerosol disinfection is carried out safely and reliably. This must be carried out carefully in accordance with the following instructions.

• Make sure that the room to be disinfected is unoccupied and not needed or that no one enters it for a few hours	
• Remove all unnecessary equipment and materials, such as rubbish from the room as best you can • Thoroughly clean the room. Although the disinfectant mist covers all surfaces, it has difficulty penetrating layers of dust or visible dirt	
• Disinfect all previously cleaned sensitive surfaces, e.g. contact points, etc. using the classic spray-wipe disinfection method	
• Close all doors, windows, hatches, maintenance openings and connections to other rooms. If necessary, cover them with telescopic cover plates, etc. • Switch off the ventilation system in the relevant room section	
• Make sure that fog does not trigger a false alarm in your fire alarm system • If necessary, cover individual detectors in the room to be disinfected. Important: never switch off the entire fire alarm system	

• Measure the exact cubature of the room according to the formula length x width x height = Xm^3 • Alternatively, use an electronic laser rangefinder for the calculation. Make a note of the value for subsequently programming the device	
• Check the relative humidity of the room. At a temperature of 20-22 degrees Celsius, the starting humidity must be max. 45–50% and must not exceed 80% during fogging	

NOTE

The electronics installed in the CT-20 are generally functional even at high temperatures. However, the following climate parameters should not be exceeded during operation to ensure an optimum service life:

Room air temperature at the start of the programme:
- Operation with compressor without turbine: max. 45 degrees Celsius
- Compressor & turbine operation: max. 55 degrees Celsius

Air humidity:
- Operation of the appliance in an environment with condensing liquid should be avoided.

6.2. Device preparation

6.2.1 Filling the device with disinfectant

• Disconnect the device from the mains. Put on gloves and safety goggles	
• Open the rear flap on the device	
• Screw the cover coupling onto a full bidon with Sanosil disinfectant	
• Connect the suction hose to the cover coupling	
• Position the bidon in the middle of the scale	

- Check it fits correctly and carefully wipe off any drops
- Fix the bidon on the scale using the retaining strap and close the rear flap

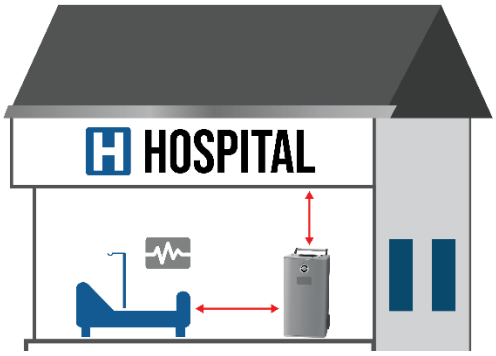
ATTENTION

Health risk / material damage
Sanosil disinfectants for aerosol disinfection contain up to approximately 7.5% hydrogen peroxide. This is irritating to exposed/unprotected skin or eyes. Wear protective equipment and avoid direct skin or eye contact with the liquid.
Wipe up any drops or spilled Sanosil disinfectant immediately and wash the cloth or similar material used for this purpose well with water afterwards.

6.3 Positioning the device:

The positioning of the device is essential for ensuring the success of the aerosol disinfection. Make sure that the spray mist can spread as freely as possible in the direction of spraying. Material positioned too close to the spray cone may be damaged by moisture.

- If possible, position the device so that there is as much distance as possible between the nozzle and ceilings, walls and furniture.
- Ideally, the device should be positioned in a corner of the room with the nozzle opening towards the centre of the room.

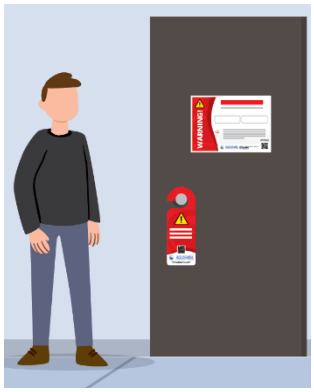


CAUTION

Material damage
The distance to ceilings, walls and furniture must always be as large as possible. Otherwise, any surfaces positioned too close to the spray cone may be damaged by liquid and/or corrosion.

6.4 Starting up the device

Attention: the device must only be started up by instructed and trained personnel. Always observe the safety regulations.

• Program the device as described in section 4.4 with the desired program and dosage (section 6.6) • Start the disinfection process and leave the room to be disinfected immediately • Close the door behind you and seal any cracks using suitable tape	
• Place the warning door hanger and the information sign with information about the current program and the expected end of the program in a clearly visible position on the door	

6.5 After disinfection

• Wait for the necessary disinfection time as well as the minimum decay time for the disinfectant to break down. (See section 5: usage profile) • Do not enter the room during the decay time	
• If you selected usage profile C: after the end of the spray cycle, switch on the supply air and extract air ventilation at the highest level after the minimum decay time of 120 minutes in order to expel any residual H_2O_2	
• As soon as the level of nebulised hydrogen peroxide in the air has decreased below 1 ppm, the room can be used again without any restrictions	

ATTENTION

Health risk
If someone must re-enter the room before the treatment process is completed or if an H_2O_2 measurement must be taken, personal equipment (PES), including a full-face respirator (filter class ABEK P3) and gloves must be worn.

6.6 Disinfectant dosages

Important: the starting humidity in a room to be disinfected must not exceed 45% relative humidity. Otherwise, condensation may occur at dosages of 10 ml/m³ or more. A room humidity of approx. 30% rH at the start also optimises the results.

ATTENTION

We recommend the following dosing times and quantities only for well pre-cleaned rooms and based on many years of experience. The values indicated are not binding, however, since the disinfection effect can be influenced by a number of factors. The binding proof of effectiveness must be confirmed through microbiological tests after disinfection.
For room treatments in accordance with the Afnor T72-281 (2014) standard, higher dosages apply than those recommended under "normal" tried-and-tested conditions.

Consumption (normal / high contamination) – not applicable for AFNOR T72-281

Room size	Dosage for normal contamination (8 ml/m³)				Dosage for high contamination (16ml/m³) Pause length: 30 minutes*			
m³	**Step 1**	**Step 2**	**Step 3**	Total ml:	**Step 1**	**Step 2**	**Step 3**	Total ml:
10	8 ml/m³	-	-	80 ml	8 ml/m³	8 ml/m³	-	160 ml
20	8 ml/m³	-	-	160 ml	8 ml/m³	8 ml/m³	-	330 ml
30	8 ml/m³	-	-	240 ml	8 ml/m³	8 ml/m³	-	480 ml
40	8 ml/m³	-	-	320 ml	8 ml/m³	8 ml/m³	-	640 ml
50	8 ml/m³	-	-	400 ml	8 ml/m³	8 ml/m³	-	800 ml
60	8 ml/m³	-	-	480 ml	8 ml/m³	8 ml/m³	-	960 ml
70	8 ml/m³	-	-	560 ml	8 ml/m³	8 ml/m³	-	1120 ml
80	8 ml/m³	-	-	640 ml	8 ml/m³	8 ml/m³	-	1280 ml
90	8 ml/m³	-	-	720 ml	8 ml/m³	8 ml/m³	-	1440 ml
100	8 ml/m³	-	-	800 ml	8 ml/m³	8 ml/m³	-	1600 ml
150	8 ml/m³	-	-	1200 ml	8 ml/m³	8 ml/m³	-	2400 ml
200	8 ml/m³	-	-	1600 ml	8 ml/m³	8 ml/m³	-	3200 ml
250	8 ml/m³	-	-	2000 ml	8 ml/m³	8 ml/m³	-	4000 ml
300	8 ml/m³	-	-	2400 ml	8 ml/m³	8 ml/m³	-	4800 ml
350	8 ml/m³	-	-	2800 ml	**X**	**X**	**X**	>Max. tank capacity
400	8 ml/m³	-	-	3200 ml	**X**	**X**	**X**	>Max. tank capacity
450	8 ml/m³	-	-	3600 ml	**X**	**X**	**X**	>Max. tank capacity
500	8 ml/m³	-	-	4000 ml	**X**	**X**	**X**	>Max. tank capacity
550	8 ml/m³	-	-	4400 ml	**X**	**X**	**X**	>Max. tank capacity
600	8 ml/m³	-	-	4800 ml	**X**	**X**	**X**	>Max. tank capacity

* the pause length depends on the room's ability to absorb (airborne) moisture. 30 minutes is usually a good value.

Consumption determined by room conditions in accordance with AFNOR T27-281

Room size	Quantity according to the AFNOR T72-281 (2014) standard, with Sanosil S015 for: bacteria, yeasts, moulds (26ml/m³) pause length 30 minutes				Consumption according to the Afnor T72-281 (2014) standard, with Sanosil S015 for: bacteria, yeasts, moulds, spores (33 ml/m³) pause length 30 minutes			
m³	**Step 1**	**Step 2**	**Step 3**	**Total ml:**	**Step 1**	**Step 2**	**Step 3**	**Total ml:**
10	10 ml/m³	8 ml/m³	8 ml/m³	260 ml	11 ml/m³	11 ml/m³	11 ml/m³	330 ml
20	10 ml/m³	8 ml/m³	8 ml/m³	520 ml	11 ml/m³	11 ml/m³	11 ml/m³	660 ml
30	10 ml/m³	8 ml/m³	8 ml/m³	780 ml	11 ml/m³	11 ml/m³	11 ml/m³	990 ml
40	10 ml/m³	8 ml/m³	8 ml/m³	1040 ml	11 ml/m³	11 ml/m³	11 ml/m³	1320 ml
50	10 ml/m³	8 ml/m³	8 ml/m³	1300 ml	11 ml/m³	11 ml/m³	11 ml/m³	1650 ml
60	10 ml/m³	8 ml/m³	8 ml/m³	1560 ml	11 ml/m³	11 ml/m³	11 ml/m³	1980 ml
70	10 ml/m³	8 ml/m³	8 ml/m³	1820 ml	11 ml/m³	11 ml/m³	11 ml/m³	2310 ml
80	10 ml/m³	8 ml/m³	8 ml/m³	2080 ml	11 ml/m³	11 ml/m³	11 ml/m³	2640 ml
90	10 ml/m³	8 ml/m³	8 ml/m³	2340 ml	11 ml/m³	11 ml/m³	11 ml/m³	2970 ml
100	10 ml/m³	8 ml/m³	8 ml/m³	2600 ml	11 ml/m³	11 ml/m³	11 ml/m³	3300 ml
150	10 ml/m³	8 ml/m³	8 ml/m³	3900 ml	11 ml/m³	11 ml/m³	11 ml/m³	4950 ml
170	10 ml/m³	8 ml/m³	8 ml/m³	4420 ml	**X**	**X**	**X**	>Max. tank capacity

NOTE

Make sure that the device contains enough liquid for the intended task. If the calculated quantity is higher than the measured tank content, a warning message is triggered.

7. Maintaining and servicing the device

7.1 Mandatory air filter change

The air filter must be serviced and changed regularly to ensure the durability and smooth operation of the device. The air filter prevents clogging and keeps dust out of the air.

A clogged air filter will reduce the air exchange. As a result, both the fogging output and the cooling of the turbine or turbine motor will be reduced.

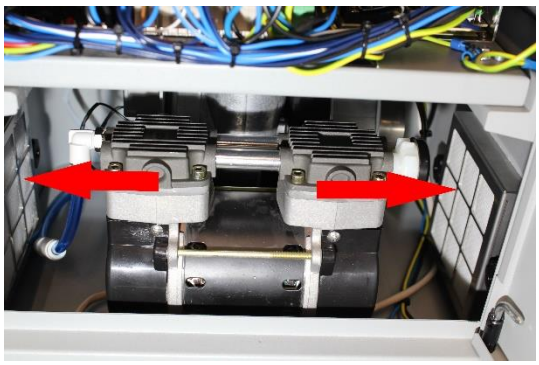
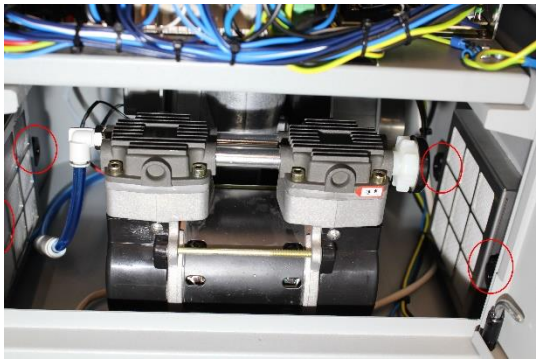
Change the air filter in a **normal** environment:	Every 50 operating hours
Change the air filter in a **dusty** environment:	Every 25operating hours

NOTE

Defects caused by a late filter change or failure to change the air filter are not covered by the warranty services.

CAUTION

Used air filters may contain acid residues or hydrogen peroxide.
Wear gloves and safety goggles for protection when changing the air filter. Dispose of used air filters in a tightly sealed plastic bag.

• Disconnect the device from the mains • Put on gloves and safety goggles • Open the top maintenance flap • The filters are located on the left and right of the housing	
• Slightly loosen the retaining screws at the front and rear of the filter holder. • Lift the filter holder slightly at the rear so that the hook-shaped fixing slides over the screw. • Pull the filter holder towards you so that the fork-shaped fixing at the front comes loose. • Remove the filter holder from the appliance	
• Replace the filters in the filter holder • Secure the filter holder with the new filters again using the retaining screws. To do this, first insert the fork into the front screw and lower the hook over the rear screw. Then tighten the retaining screws again.	

7.2 Cleaning the nozzle

In rare cases, the fog nozzle may become clogged with foreign bodies or debris regardless of all precautions taken. Regularly clean the nozzle every 50 hours of operation to prevent this.

- Put on protective gloves and safety goggles
- Carefully unscrew the nozzle from the socket
- Clean the nozzle using a fine, soft object, e.g. a fine copper wire or a fine brush for interdental care
- Avoid damaging or scratching the stainless steel surfaces in the nozzle channel

7.3. Surface cleaning

Regularly clean the housing to prevent the device from appearing dirty and unattractive. Regularly clean the surface of the device using a soft cloth and mild soapy water. In particular, avoid wetting the surfaces of the equipment with liquid disinfectant. Also avoid wetting the equipment surfaces through contact with contaminated gloves on the handles. Should liquid Sanosil disinfectant nevertheless get onto a surface of the device, immediately wipe it several times with a damp cloth.

7.4. Changing the fuse

The CT20 is equipped with a 5x20 mm 10 A fuse. This can be checked and/or replaced as follows:

1. remove the power cable
2. pull out the fuse drawer / fuse holder
3. push the old fuse downwards out of the fuse holder
4. insert the new fuse into the fuse holder
5. close the drawer

10 A fuse 5x20 mm

fuse holder

fuse holder (open)

inserted fuse

7.5 Visual inspection

Air circuit/device body	**Air filter:** Clean if dirty or replace if damaged	Monthly
	Body: Visual inspection of the condition (Dents, broken parts)	Monthly
Device in general	**Visual inspection:** Check the operability	Daily
	Components: Status of the device components (integrity of the components, fluid loss, seals, closures).	Monthly
	Documentation: Make sure that all documentation for the device is updated and available	Annually
Fluid circuit/tank/lines	**Nozzle:** Visual status check (cracks, fractures, pressure points, blockages, deposits)	Daily

8. Troubleshooting

Anomaly	Possible cause	Remedy
Device does not start up	Power cable not plugged in/not connected correctly	Connect the device to the socket correctly
No mist output, clearly not enough disinfectant consumption	Nozzle clogged	Clean nozzle (section 7.2)
Red warning message: not enough liquid for the program	Not enough liquid in the tank for the intended disinfection task.	Fill the tank or connect a full tank
Strange noises during operation	Mechanical defect of turbine or compressor	Switch off the device, disconnect it from the mains and contact the service technician
Device gets hot, strange smell, smoke emission	Electrical system defect	Immediately switch off the device, disconnect it from the mains and contact the service technician
Touchscreen does not respond 1	Program not loaded properly	Switch the unit off and on again
Touchscreen does not respond 2	Wet fingers, not enough pressure	Use the touchscreen pen
Liquid leaks from the device	Pipe breakage or leakage in the fluid circuit	Pull out the mains plug, call a service technician Wear gloves/eye protection. Absorb leaked liquid and wipe with a wet cloth

9. Appendix

9.1 Declaration of Conformity

DENTAS d.o.o.
Cesta k Tamu 70
2000 Maribor - SLO

Tel: 00386 2 618 56 20
Fax: 00386 2 618 56 21
e-mail: info@dentas.eu
www.dentas.eu

ES-IZJAVA O SKLADNOSTI
EC DECLARATION OF CONFORMITY

Izjavljamo, da spodaj naveden stroj v konceptni ali prodajni različici izpolnjuje vse ustrezne varnostne in zdravstvene normative evropske direktive.
We declare that the following machine meets all applicable safety and health regulations of the European Directive.

Izjava izgubi veljavnost, pri spremembah, ki niso bile potrjene z naše strani.
The statement becomes invalid if the changes have not been confirmed from our side.

Proizvajalec : *Manufacturer*	SANOSIL AG Eichatalstrasse 49 8634 Hombrechtikon Switzerland	Exclusively for Sanosil AG produced by: Dentas, d.o.o., cesta k Tamu 70 2000 Maribor Slovenija
Proizvod: *Article Designation*	Q Jet CT 20	
Vrsta stroja: *Type of machine*	Visoko precizna naprava za aerosolno dezinfekcijo prostorov ***High-precision aerosol disinfection device***	

Ustreza naslednjim evropskim direktivam:
Complies with the following European directives:

2014/35/EU Nizkonapetostna oprema
Directive on low voltage
2014/30/EU Elektromagnetna združljivost
Directive on emc
2006/42/EC Stroji
Machinery directive

Uporabljeni harmonizirani standardi:
The following harmonized standards have been applied:

EN 55014-1:2017 + A11:2020
EN 55014-2:2015,
EN IEC 61000-3-2:2019
EN 61000-3-3:2013 + A1:2019
EN 60335-1:2012+A11+A13+A1+A14+A2

Kraj in datum izdaje:
Place and date of issue:
Maribor, 07. 02. 2022

Acting director
Stanko Šale, dr.dent.med.

Company Dentas, d.o.o. holds ISO 9001 certificate issued and conbtrolled by TÜV Austria

DENTAS d.o.o.
Cesta k Tamu 70
2000 Maribor
SLOVENIJA

Phone: 00386 2 618 56 20
Fax: 00386 2 618 56 21
e-mail: info@dentas.eu
www.dentas.eu

9.2 Warranty conditions

9.2.1 General warranty

The manufacturer provides a warranty for the device and its components against defects in material and workmanship for a period of twelve months from the date of purchase. The manufacturer also guarantees that this product complies with the applicable specifications under normal use.

The manufacturer will repair or replace, at its discretion, any part or whole machine which, in the opinion of the manufacturer, proves to be defective with regard to the materials or workmanship during the warranty period. For all products repaired or replaced under warranty, the warranty shall only continue to be valid for the remaining, unexpired part of the original warranty period. The manufacturer reserves the right to issue a credit note for any product that has been found to be defective under normal use.

9.2.2 Limitations of the warranty

This warranty excludes machines, parts or equipment that have been tampered with, opened, disassembled or modified by anyone other than the manufacturer's personnel, misused, neglected, damaged by accident, used in applications exceeding their specifications or rated values, used outside the environmental specifications for the machine, used with materials other than those tested and recommended by the manufacturer, improperly installed, maintained or otherwise misused, or have not been used in compliance with the information contained in this manual. In particular, a disinfection liquid based on H_2O_2 / Ag produced by Sanosil AG is approved for use in this machine. It is the customer's responsibility to understand and follow the operating instructions in this manual and the specifications before starting operation. Non-compliance may invalidate this warranty. The purchaser must submit a warranty claim in writing no later than 30 days after the claimed defect has been detected. This warranty is only available to the original purchasers and cannot be transferred or assigned and does not apply to parts, equipment or other products not produced by the manufacturer. This does not apply to the limited warranties expressly set out above. The manufacturer expressly rejects any and all other warranties vis-a-vis the purchaser, including without limitation all implied warranties such as freedom from infringement, merchantability and fitness for a particular purpose.

9.2.3 Exclusive legal remedies

The remedies provided herein shall be the sole and exclusive legal remedies available to the purchaser. The manufacturer shall never be liable for any direct, indirect, special, incidental, consequential, exemplary or punitive damages (even if advised of the possibility of such damages) arising from or in connection with the machine (including lost profits), whether based on contract, tort or legal theory. The maximum liability of the manufacturer shall not altogether exceed the total amount paid by the first reseller for the machine.

9.2.4 Procedure in case of a warranty claim

Please proceed as follows if a defect is identified in the device during the warranty period:

1. Fill in the complaint form enclosed with the device or download the complaint form from https://www.sanosil.com/de/sanosil-c-series-devices/ (QR code with this link on the last page). Send the complaint form with the additional information and pictures and videos (if helpful) to "**service@sanosil.com**".
2. Sanosil AG will review the complaint with the manufacturer and decide whether the device must be returned to Switzerland or whether the device can be repaired locally by shipping spare parts via the Sanosil representative or its authorised repair centre.
   Please do not return the device until Sanosil Ltd. has expressly agreed to its return.
3. If the repair must be carried out by the manufacturer here in Switzerland, prepare the return of the device to Sanosil Ltd., along with the completed customer complaint form, the warranty certificate and the dated original invoice from the authorised dealer.

9.3 Disposal and decommissioning

The disposal must be carried out in an environmentally friendly manner and in compliance with local recycling regulations. The device must be disassembled by specialist companies. The device is made of recyclable materials.

9.3.1 Disposal in EU countries

In order to preserve and protect the environment, prevent pollution and improve the recycling of raw materials, a directive has been issued by the European Commission stipulating that all electrical and electronic equipment must be taken back by the manufacturer for proper disposal, or made available for recycling.
Within the European Union, devices marked with this symbol must therefore not be disposed of with unsorted household waste:

Please check with your local authorities about proper disposal.

10. Additional Info (link)

SANOSIL AG • CH-8634 Hombrechtikon • Switzerland
E-mail: service@sanosil.com
www.**sanosil**.com