

SycoTec SMARTcare

Cleaning and maintenance devices

Instructions for Use

EN



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All the technical data, information and properties of the product described in these instructions for use were correct at the time of printing.

The product may be modified or improved as a result of technical developments.

This does not give entitlement to have already existing products upgraded.

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1 User information



Before using this product for the first time, please read the user manual carefully and keep them in a safe place for future reference

Congratulations on purchasing a SMARTcare. We are convinced that you have acquired the best product of its kind. The SMARTcare is a compact cleaning and maintenance system that can satisfy all your needs and expectations regarding the cleaning and maintenance of instruments thanks to its diverse programs and capabilities.

This instruction manual contains all details on the installation, operation and maintenance of your SMARTcare. In order to guarantee many years of safe and problem-free operation, you should read the instructions prior to commissioning the device and store them for future reference.

The instructions for the operation, maintenance and replacement of replacement parts must be followed so that the device can function properly. The content of this instruction manual may change without notice in order to reflect changes and improvements to the SMARTcare.

1.1 Type description

The SMARTcare is manufactured in 3 different versions:

Type 1: is equipped with a DIN EN ISO 3964 coupling, which is operated by a motor as well as 2 neutral couplings that can be individually equipped with the required turbine adapters (see Chapter 9 Accessories and spare parts).

Type 2: is equipped with two DIN EN ISO 3964 couplings, which are operated by a motor as well as 1 neutral coupling that can be individually equipped with the required turbine adapter (see Chapter 9 Accessories and spare parts).

Type 3: is equipped with three DIN EN ISO 3964 couplings, which are operated by a motor.

1.2 Scope of delivery

- Base SMARTcare unit
- Power supply connection cable
- Instructions for use
- Absorption pad (set)
- Compressed air hose
- SycoTec "Dental Oil" (250 ml)
- SycoTec "Cleaner" (500 ml)
- O-ring set
- 2x transport locks (red) for media container
- USB stick (2 GB)

1.3 Applied symbols

In the instructions for use / on the product / on the packaging

	Important information		Transport upright		MET test mark
	CE label		Disposal information		LED "Ready to operate"
	Manufacturer and date of manufacture		Health industry bar code		Program selection / selection up
	Handle with care		Unique device identification		Start program / selection down
	Keep dry		Refer to the instructions for use		Menu / select / save
	Stacking limitation		Packaging unit		Collet care / back
	Atmospheric pressure limitation		Serial number		USB port
	Humidity limitation		Reference number		Fuse
	Temperature limitation		VDE test mark		Wear medical gloves

1.4 General

ATTENTION

The SMARTcare has been developed and manufactured in accordance with the most recent quality and safety standards. However, some precautions should be taken during installation and operation.

- ▶ Disconnect the SMARTcare from the power supply when leaving the practice for a longer period of time.
- ▶ Protect the SMARTcare from temperatures above 50°C.
- ▶ Any changes or modifications made by a third party will invalidate the warranty as well as operating certification.
- ▶ Only use original replacement parts for operation or repair, as these have been tested extensively for safety, function and specific suitability.

SycoTec therefore also assumes any product responsibility for these parts and components.

- ▶ Observe all warnings on the device and in the instructions for use.
- ▶ The device may only be supplied with the voltage indicated on the type plate.
- ▶ The power cable must not be replaced by a weak or underpowered power cable.
- ▶ Operators are not allowed to perform maintenance on the unit in other respects than those stated in the instruction manual.
- ▶ Medical gloves have to be worn during commissioning, operation and maintenance of the device.
- ▶ The device may only be operated with original SycoTec "Cleaner", SycoTec "Dental Oil" and accessories.
- ▶ Prior to transport or before prolonged periods of standstill (> 30 days), the containers for cleaner and dental oil must be emptied.
- ▶ The operator must make sure that the device is in the proper operating condition prior to using the device as well as confirm its functional safety.
- ▶ A damaged device or a device with a damaged power cable has to be disconnected from the mains immediately. Operating the device is not permitted in this case.
- ▶ The device may only be operated inside buildings and areas that are not subject to explosive hazards.
- ▶ Never open the protective housing of the device or insert objects through the openings of the protective housing.

1.5 Intended use

- The SMARTcare is a cleaning and maintenance system used for the machine-based treatment (internal cleaning and maintenance) of dental turbines as well as regular and contra-angle handpieces.
- Refer to the manufacturer instructions for further information on the suitability of certain instruments for cleaning and maintenance purposes.

ATTENTION

- ▶ The SMARTcare treatment is restricted to the internal cleaning of the instruments.
- ▶ The outer surfaces of the instruments have to be cleaned manually or using machines prior to any internal cleaning.
- ▶ Following treatment with the cleaning and maintenance system, continue treating the instrument immediately afterwards and in accordance with the manufacturer's instructions.
- ▶ The accessories and device may be decontaminated only by the valid national directives.



For all preceding and subsequent reprocessing steps, the national required standards need to be followed as well as the Medical Device Regulation MDR 2017/745 must be observed.

⚠ WARNING Misuse

All applications not listed as part of the intended use constitute a case of misuse and may lead to damage to the device and the medical products to be reprocessed and/or a potential danger to the operator himself. SycoTec shall accept no liability in such an event.

1.6 Disposal



Disposal of devices and accessories at the end of their service life

Based on EU Directive (WEEE 2012/19/EU) on waste electrical and electronic equipment we hereby inform you that this product is subject to the aforementioned directive and must be disposed of through special channels. Contact the manufacturer or dental supply shop for further information.

This product must be disposed of or recycled without presenting a danger to human beings or the environment while existing national regulations must also be observed in this regard.

Consumables:

Any waste resulting from use of the device have to be disposed of or recycled without presenting a danger to human beings or the environment while existing national regulations must also be observed in this regard.

1.7 Qualifications of the operator

- The SMARTcare may only be used by trained personnel, including dentists and their assistants who have been instructed in the use of this product.
- In developing and designing the SMARTcare, we started out from the target group of dentists and their assistants.

1.8 Patient population

Application on patients is not possible.

1.9 Exclusion of liability

Supply of spare parts, service and maintenance may only be carried out by authorized personnel. SycoTec shall assume no liability for accidental, special or consequential damage caused by maintenance or service of the SMARTcare by third parties, or for use of equipment or parts manufactured by third parties, including loss of profit, any commercial loss, economic loss or loss incurred by personal injury.

CAUTION

Never remove the rear panel of the device and never insert any objects through the holes or openings on the housing. Noncompliance may result in damage to the device and/or danger to the operator.

1.10 Before commissioning



The SMARTcare must be properly set up in accordance with the "Installation Qualification" checklist (see enclosed medical products book) before commissioning.

2 Safety

It is the duty of the user to:

- Only use the product as intended
- Not misuse the product in any way
- Only use products that are free from defects and that are in full working order
- Protect themselves, their patients and third parties from danger
- Take suitable protective measures, especially to avoid cross-contamination

The following provisions and instructions must always be followed when using the aerosol suction system:

- The applicable occupational health and safety regulations
- The applicable accident prevention measures
- These instructions for use
- Only qualified users are permitted to use the system

The manufacturer does not accept any liability for damage or harm caused to the product, users, patients or third parties as a result of:

- Failure to observe the operating, repair, installation and/or assembly instructions
- The use of incorrect information
- Misuse or improper use
- Repairs by unauthorized persons
- Changes or manipulations to the product

2.1 Safety notes SycoTec "Dental Oil" and SycoTec "Cleaner"

CAUTION

First-aid measures – Dental oil

General information	▶ Never give any oral medication to unconscious persons or persons suffering from cramps. Move the person to safety
When inhaled	▶ Bring the person to the fresh air and provide unobstructed breathing
Contact with skin	▶ Wash with plenty of water. Immediately changed out of contaminated clothes. Medical treatment required
Contact with eyes	▶ Immediately, carefully and thoroughly rinse with eye-bath or water. Consult an eye specialist in case of eye irritation.
When swallowed	▶ Vomiting may pose a danger of aspiration. Immediately rinse the mouth and drink plenty of water. Induce vomiting if the person is conscious. Medical treatment required.

Fire-fighting measures

The product is not flammable.

⚠ CAUTION First-aid measures – Cleaner

General information	▶ Never give any oral medication to unconscious persons or persons suffering from cramps. Move the person to safety
When inhaled	▶ Provide fresh air.
Contact with skin	▶ Wash with plenty of water. Change out of contaminated clothing.
Contact with eyes	▶ Immediately, carefully and thoroughly rinse with eye-bath or water.
When swallowed	▶ Immediately rinse the mouth and drink plenty of water.

Fire-fighting measures

The product is not flammable.

2.2 Reporting obligation

Users and/or patients must report any serious incidents that arise in relation to the product to the manufacturer and the competent authorities in the country in which the user and/or patient is resident.

2.3 Warning signs

Structure of warning sign

HAZARD SYMBOL Nature or source of hazard

Description of the nature or source of hazard and its possible consequences.

▶ Measures to avoid the hazard

Risk levels

**WARNING** Warning

Indicates a hazardous situation that could lead to serious or fatal injuries.

**CAUTION** Caution

Indicates a hazardous situation that could lead to minor or moderate injuries.

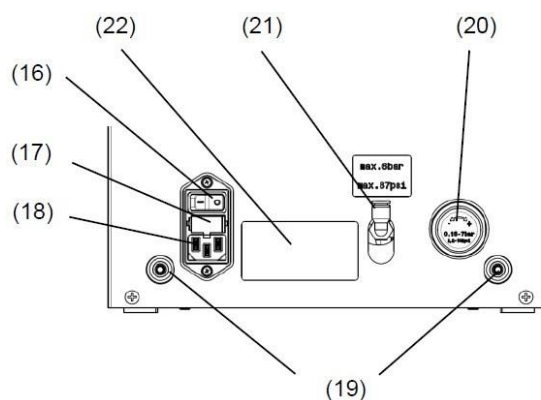
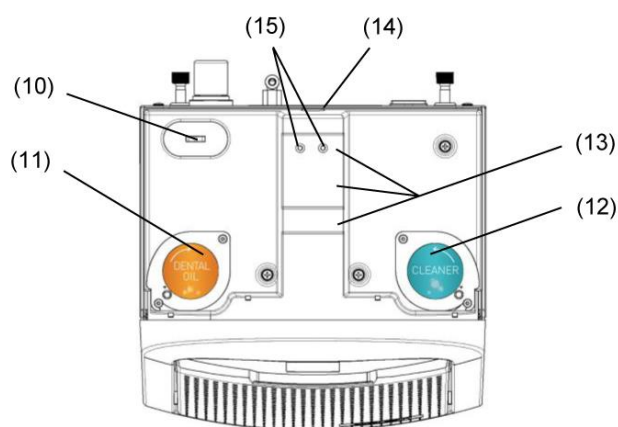
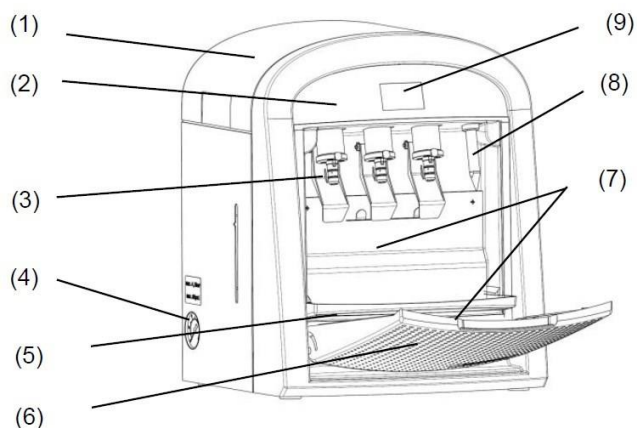
**ATTENTION** Attention

Indicates a hazardous situation that could lead to property damage.

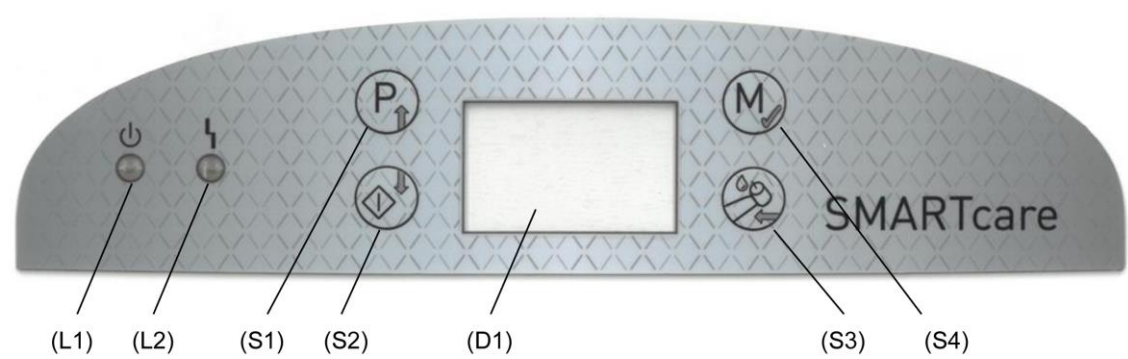
3 Product description

3.1 Device overview

- | | |
|------|--|
| (1) | Top cover |
| (2) | Membrane keypad |
| (3) | Plug-in position for turbine adapter
(2x Type 1 / 1x Type 2) or
INTRAmatic ISO 3964 maintenance couplings
(3x Type 3 / 2x Type 2 / 1x Type 1) |
| (4) | Pressure indicator |
| (5) | Collecting tray |
| (6) | Front door |
| (7) | Absorption pad (2x) |
| (8) | Collet care nozzle |
| (9) | Display |
| (10) | USB stick |
| (11) | Filling opening for dental oil |
| (12) | Filling opening for cleaner |
| (13) | Holding bracket for testing adapter |
| (14) | USB port |
| (15) | Media aeration |
| (16) | Power switch |
| (17) | Mains fuse drawer |
| (18) | Power line input |
| (19) | Drain hose for dental oil and cleaner |
| (20) | Pressure setting |
| (21) | Compressed air input |
| (22) | Type plate |



3.2 Membrane keypad



(L1) LED stand-by

(L2) LED error

(S1) Program selection / selection up

(S2) **Start program** / selection down

(D1) Display

(S3) Collet care / back

(S4) Menu / select / save

3.3 Display



1

Slot number

2

Slot is finished

3

Slot is occupied

3

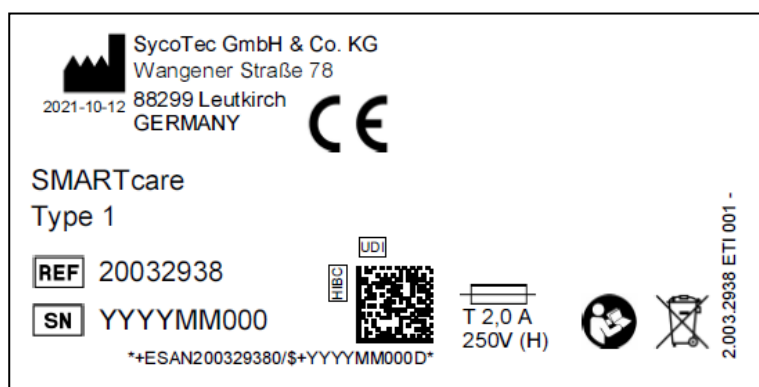
Frame is flashing:
Slot is being processed

3.4 Technical specifications

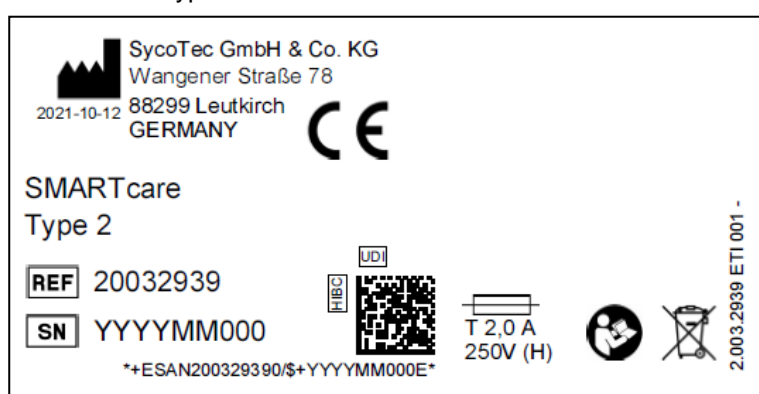
Device dimensions	Width:	300 mm (11.8 inches)
	Depth:	280 mm (11.0 inches)
	Height:	345 mm (13.6 inches)
Weight:		7.3 kg (15.8 lbs)
Power ratings	Rated voltage:	100 – 230 V \pm 10%
	Rated frequency:	50 / 60 Hz
	Rated power:	45 VA max.
Protection class:		I
Protection:		covered
Installation category:		Cat. II
Contamination level:		P 2
Ambient temperature:		5 – 35°C (41 – 95°F)
Noise level:		60 (65) dB(A)
Relative air humidity:		85% max.
Max. operating altitude above sea level:		2,000 m
Operating location:		only indoors
Compressed air:		4.5 – 6 bar (65 – 87 psi)
Air consumption:		40 NI/min
Compressed air quality	Residual oil content:	max. 0.1 mg/m ³
	Residual dust:	max. 1 μ m; max. 1 mg/m ³
	Residual water:	max. 0.1 g/m ³ at -40°C (-40°F)
Power fuses	Rated current:	2 A
	Rated voltage:	250 V
	Triggering characteristic:	Large (T)
	Breaking capacity:	H
Number of ISO 3964 integrated couplings	Type 1:	1
	Type 2:	2
	Type 3:	3
Device		
Ambient temperature	Transport:	-30 – 50°C (-22 – 122°F)
	Storage:	5 – 35°C (41 – 95°F)
Relative air humidity:		5 – 95%
Compressed air:		700 – 1,060 hPa
Empty the media containers prior to transport! (see Chapter 6.13)		
Media		
Ambient temperature – "Dental Oil"	Transport:	-30 – 50°C (-22 – 122°F)
	Storage:	5 – 50°C (41 – 122°F)
Ambient temperature – "Cleaner"	Transport:	-30 – 50°C (-22 – 122°F)
	Storage:	5 – 35°C (41 – 95°F)
Relative air humidity:		5 – 95%
Compressed air:		800 – 2,500 hPa

3.5 Type labels

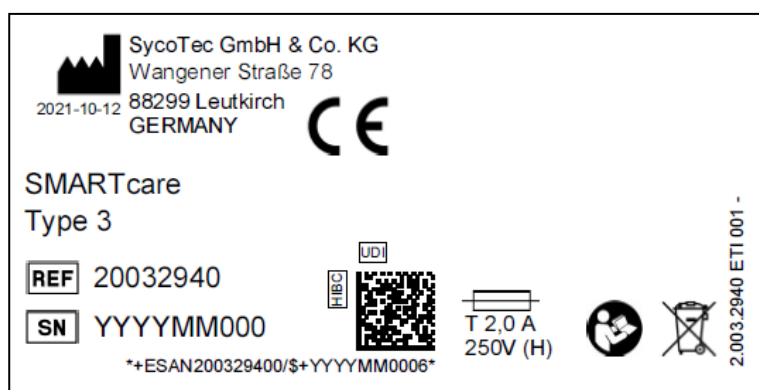
SMARTcare Type 1



SMARTcare Type 2



SMARTcare Type 3



The symbols used are described in Chapter 1 User information

4 Commissioning

4.1 Environmental conditions

There are a number of factors that can influence the performance of your SMARTcare system. Please consider these factors carefully and choose a suitable location for installing the device.

- **Temperature and air humidity**
Do not set up your SMARTcare system at a location where it is exposed to direct sunlight or a heat source (for example a heater). The recommended operating temperature lies between 5°C and 35°C with air humidity between 25 and 85%.
- **Environment**
The SMARTcare should be operated in a clean, dust-free and well-ventilated environment.
- **Work surface**
The SMARTcare should be installed on a flat, level and water-resistant as well as oil-resistant surface. Do not install or operate your unit on a sloped surface.
- **Electromagnetic environment**
The SMARTcare has been tested for electromagnetic emissions and meets the decisive standards. While the product itself emits no radiation, it can be influenced by other radiating devices. We therefore recommend that you keep the device away from potential sources of interference.

4.2 Electrical Requirements

⚠ WARNING Mortal danger with improper handling of power sources! Danger of electrical shock!

- ▶ For connection to the mains, use a properly grounded and secure socket providing the stated voltage (see type plate on the back of the SMARTcare).
- ▶ Avoid using multiple sockets. When using power bars with surge protection, always connect only a single device.
- ▶ The mains input connector on the back of the device is to be used as a separator from the power supply.

4.3 Media connections

- Plug the mains plug into the socket.
- Attach the compressed air hose to the coupling and tighten.
- The set pressure should be between **4.5 bar** and 4.3 bar!
In the event of a deviating display, pull out the grip for regulating pressure and turn it to the right or the left until the manometer shows 4.5 bar.
- Push the grip back into the pressure regulator and fixate it.

ATTENTION

In order to ensure a safe and trouble-free operation, only use compressed air in accordance with the information in the Chapter 3.4 Technical specifications.

4.4 Commissioning

ATTENTION

- ▶ Turn on the mains switch.
- ▶ Select the desired language with the arrow keys next to the display (see Chapter 4.6).
- ▶ Set the date and time (see Chapter 4.7).
- ▶ "WARNING Fill with dental oil" and/or "WARNING Fill with cleaner" will be displayed.
- ▶ Pull off top cover with both hands approx. 15 mm (overcome magnetic resistance) and pull off upwards.



Refill the media containers (see Chapter 6.6.)

ATTENTION

Observe the color code on the media container

Orange = dental oil

Blue = cleaner

Only use original SycoTec "Dental Oil" and SycoTec "Cleaner".





⚠ CAUTION

Use of other media may put patients and users at risk and damage the device and the instruments.








- ▶ Turn the metal flaps to the back in order to open the media container.
- ▶ Fill up the container to the filling level marking. Upon exceeding the minimum filling level, a 1-second beep will sound. If the container is full, a 2-second beep will sound 2 times. The beep is always followed by a visual sign on the container.
- ▶ Close the media container.
- ▶ Attach the top cover and close until it stops.
- ▶ Turn the device off using the power switch and then back on again.
- ▶ The message "Fill media system" will be displayed after filling the dental oil and cleaner containers. The device will automatically start this function and run for about 3 minutes.

4.5 Filling the media system









This is only necessary if the function did not start automatically or if a container has been completely empty for more than 3 days. The containers must be filled already for this function.

- ▶ Turn on the device
- ▶ Press the  button. "Export log data" will appear on the display.
- ▶ Press the  button once until "Fill media system" is highlighted in black on the display.
- ▶ Using the  button, the "Fill media system" menu is selected.
The media system will be filled automatically. During this time, a clock will run backwards until "00:00".
- ▶ Press the  button to return to the "Cleaning + Maintenance" main menu

4.6 Setting the language

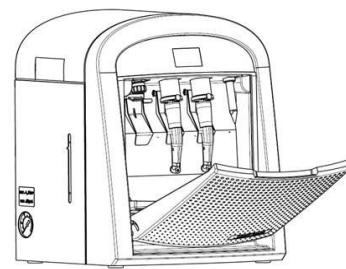
- ▶ Turn on the device
- ▶ Press the  button. "Export log data" will appear on the display.
- ▶ Press the  button 4x until "Language setting" is highlighted in black on the display.
- ▶ The "Language setting" menu is selected using the  button.
- ▶ The desired language is selected using the  button.
- ▶ Save the language selection using the  button.
- ▶ Return to the "Language setting" menu using the  button.
- ▶ Press the  button to return to the "Cleaning + Maintenance" main menu.

4.7 Setting the date/time

- ▶ Turn on the device
- ▶ Press the  button. "Export log data" will appear on the display.
- ▶ Press the  button 3x until "Date/time" is highlighted in black on the display.
- ▶ The "Date/time" menu is selected using the  button.
- ▶ Set the desired value using the  and  buttons
- ▶ Using the  button, the cursor is moved to the next possible setting. The values are set in the following order: Year, month, day, hour, minute.
- ▶ After final actuation using the  button, the program jumps back again.
- ▶ Press the  button to return to the "Cleaning + Maintenance" main menu.

4.8 Assemble and check the adapter



- ▶ Assemble the adapter, if required.
- ▶ Check the MULTIflex receptacle (and/or other turbine adapter) for firm seating.
 - ➔ The clamping nut must be tight.
 - Retighten clamping nut, if required.
- ▶ Check the output quantity on all cleaning slots using a testing adapter intended for the coupling.

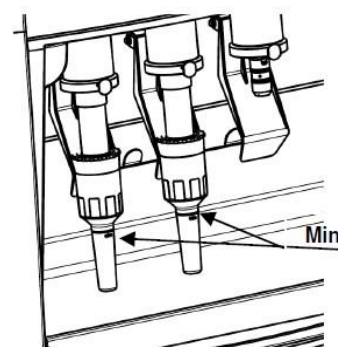


ATTENTION

Please note that only white SMARTcare can be used.

4.9 Functional testing of flow rate using the testing adapter

- ▶ Turn on the mains switch.
- ▶ LED  (Stand-by) lights up green. "Cleaning + Maintenance" will appear on the display.
- ▶ Open the front door.
- ▶ Attach the matching testing adapter to the corresponding instrument couplings (such as INTRAMatic, DIN ISO EN coupling).
- ▶ Close the front door.
- ▶ Push the START button .
- ▶ After completion of the program, check the filling quantity in each of the testing adapters.
 - ➔ The fluid must be above the mark ("Min.")!
 - If the filling quantity is below the mark, please consult the SycoTec customer service.



ATTENTION

Please note that only SMARTcare testing adapters can be used.

After this process has completed, the SMARTcare system is operational.



5 Operation and control

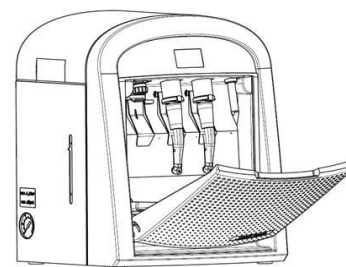
5.1 Manual pre-cleaning of instruments

ATTENTION

- ▶ Clean the instrument primarily in the head area with a medium-hard toothbrush for 20 sec. under running water (no strong water jet) until the instrument looks fully clean. (drinking water, temperature $30^{\circ}\text{C} \pm 5^{\circ}\text{C}$).
- ▶ Leave the instrument for 5 minutes.

5.2 "Cleaning + Maintenance" program – for regular and contra-angle handpieces and turbines

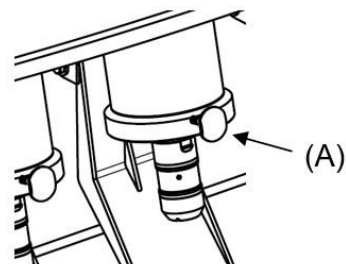
- ▶ Turn on the mains switch.
- LED  (Stand-by) lights up green. "Cleaning + Maintenance" will appear on the display.
- ▶ Open the front door.
- ▶ Place regular and contra-angle handpieces and turbines on the adapters provided for this purpose (instruments must snap into place). A frame will appear on the display around the station number per occupied slot.
- ▶ Close the front door.
- ▶ Push the START button .
 - Program runs automatically. During the "Cleaning + Maintenance" program, a clock will count backwards until "00:00" on the display.



All attached regular and contra-angle handpieces and turbines are cleaned and maintained for inside in turn.

After a successful process, the program slots will be displayed inversely.
The display shows: "Cleaning + Maintenance successful".



- ▶ Open the front door.
- ▶ Remove regular and contra-angle handpieces and turbines by pressing the locking button (A).
- ▶ Pull off turbines downwards (press support lever down).
The frame around the slot number will disappear from the display.

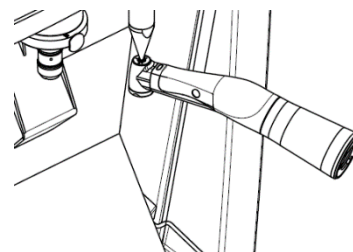


ATTENTION

- ▶ Wipe off the instruments using a damp cloth soaked with disinfectant. For Germany we recommend using disinfectants listed by the VAH (such as SciCan OPTIM BLUE).
- ▶ Immediately following this treatment, the instrument must be treated further in accordance with the manufacturer's instructions on reprocessing (such as disinfection/sterilization in the STATIM).
- ▶ Always perform a function test before using the instruments on patients. Some liquid may come out..

5.3 "Collet care" program

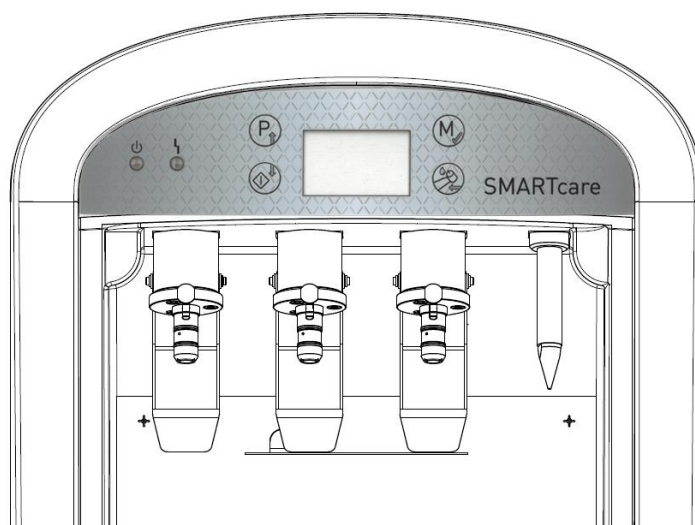
- ▶ Turn on the mains switch.
LED  (Stand-by) lights up green. "Cleaning + Maintenance" will appear on the display.
- ▶ Open the front door.
- ▶ Push instrument with chuck opening into the collet care nozzle.
- ▶ Activate  (Collet care) key.
Program runs automatically. A clock on the display runs backwards until "00:00".
The display shows: "Collet care measure successful".
- ▶ Remove instrument from the nozzle.






ATTENTION

- ▶ Wipe off the instruments using a damp cloth soaked with disinfectant. For Germany we recommend using disinfectants listed by the VAH (such as SciCan OPTIM BLUE).
- ▶ Immediately following this treatment, the instrument must be treated further in accordance with the manufacturer's instructions on reprocessing (such as disinfection/sterilization in the STATIM).
- ▶ Always perform a function test before using the instruments on patients. Some liquid may come out..

5.4 "Maintenance only" program – for regular and contra-angle handpieces and turbines






The processes "Maintenance only" and "Clean only" can also be carried out individually.

- ▶ Turn on the mains switch.
LED  (Stand-by) lights up green. "Cleaning + Maintenance" will appear on the display.
- ▶ Open the front door.
- ▶ Place regular and contra-angle handpieces and turbines on the adapters provided for this purpose (instruments must snap into place). A frame will appear on the display around the station number per occupied slot.
- ▶ Close the front door.
- ▶ Press the  button 1x. "Maintenance only" will appear on the display.
- ▶ Push the START button .
Program runs automatically. During the maintenance program, a clock will count backwards until "00:00" on the display.
All attached regular and contra-angle handpieces and turbines are maintained for inside in turn.
After a successful process, the program slots will be displayed inversely.
The display shows: "Maintenance successful".
- ▶ Open the front door.
- ▶ Remove regular and contra-angle handpieces and turbines by pressing the locking button.
- ▶ Pull off turbines downwards (press support lever).
The frame around the maintenance slot number will disappear from the display.

ATTENTION

- ▶ Wipe off the instruments using a damp cloth soaked with disinfectant. For Germany we recommend using disinfectants listed by the VAH (such as SciCan OPTIM BLUE).
- ▶ Immediately following this treatment, the instrument must be treated further in accordance with the manufacturer's instructions on reprocessing (such as disinfection/sterilization in the STATIM).
- ▶ Always perform a function test before using the instruments on patients. Some liquid may come out..

5.5 "Clean only" program – for regular and contra-angle handpieces and turbines




- ▶ Turn on the mains switch.
LED  (Stand-by) lights up green. "Cleaning + Maintenance" will appear on the display.
- ▶ Open the front door.
- ▶ Place regular and contra-angle handpieces and turbines on the adapters provided for this purpose (instruments must snap into place). A frame will appear on the display around the station number per occupied slot.
- ▶ Close the front door.
- ▶ Press the  button 2x. "Clean only" will appear on the display.
- ▶ Push the START button .
Program runs automatically. During the cleaning program, a clock will count backwards until "00:00" on the display.
All attached regular and contra-angle handpieces and turbines are cleaned inside in turn.
After a successful process, the program slots will be displayed inversely. The display shows: "Cleaning successful".
- ▶ Open the front door.
- ▶ Remove regular and contra-angle handpieces by pressing the locking button.
- ▶ Pull off turbines downwards (press support lever).
The frame around the maintenance slot number will disappear from the display.

ATTENTION

- ▶ Wipe off the instruments using a damp cloth soaked with disinfectant. For Germany we recommend using disinfectants listed by the VAH (such as SciCan OPTIM BLUE).
- ▶ Immediately following this treatment, the instrument must be treated further in accordance with the manufacturer's instructions on reprocessing (such as disinfection/sterilization in the STATIM).
- ▶ Always perform a function test before using the instruments on patients. Some liquid may come out..

5.6 "Special instrument" program

Special instruments can be maintained and cleaned using this program (such as prophylaxis). The times require for maintenance and cleaning can be individually adjusted by a service technician.

- ▶ Turn on the mains switch.
LED  (Stand-by) lights up green. "Cleaning + Maintenance" will appear on the display.
- ▶ Open the front door.
- ▶ Place the instruments on the adapters provided for this purpose (instruments must snap into place). A frame will appear on the display around the station number per occupied slot.
- ▶ Close the front door.
- ▶ Press the  button 3x. "Special instrument" will appear on the display.
- ▶ Push the START button .
Program runs automatically. During the "Cleaning" program, a clock will count backwards until "00:00" on the display.
All attached instruments are cleaned and maintained for inside in turn.
After a successful process, the program slots will be displayed inversely. The display shows: "Special instrument successful".
- ▶ Open the front door.
- ▶ Remove regular and contra-angle handpieces by pressing the locking button.
Pull off turbines downwards (press support lever).
The frame around the slot number will disappear from the display.

ATTENTION

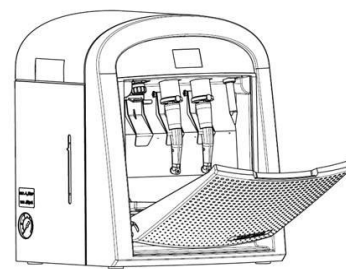
- ▶ Wipe off the instruments using a damp cloth soaked with disinfectant. For Germany we recommend using disinfectants listed by the VAH (such as SciCan OPTIM BLUE).
- ▶ Immediately following this treatment, the instrument must be treated further in accordance with the manufacturer's instructions on reprocessing (such as disinfection/sterilization in the STATIM).
- ▶ Always perform a function test before using the instruments on patients. Some liquid may come out.

6 Care, maintenance and service

6.1 Checking adapter fixation

Recommended:

- After installation
- During operation: 1x week
- ▶ Check the MULTIflex receptacle (and/or other turbine adapter) for firm seating.
 - ➔ The clamping nut must be tight.
Retighten clamping nut, if required.
- ▶ Check the output quantity on all cleaning slots using a testing adapter intended for the coupling.



ATTENTION

Please note that only SMARTcare testing adapters can be used.

ATTENTION

Do not sterilize maintenance couplers / adapters.


6.2 Checking the O-rings

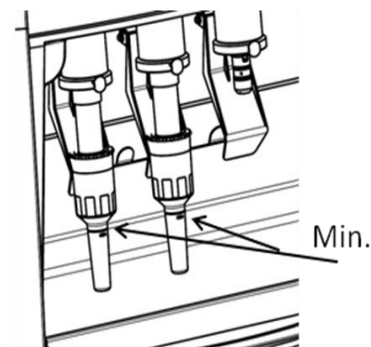
Recommended:

- During operation: 1x week
- ▶ Check all O-rings on the adapters for damage
- ▶ Replace damaged O-rings

6.3 Functional testing of flow rate using the testing adapter

Recommended:

- Upon initial commissioning
- After changing an instrument coupling
- During operation: 1x day before use
- ▶ Attach the matching testing adapter to the corresponding instrument couplings (such as INTRAmatic, DIN ISO EN Coupling).
- ▶ Close the front door.
- ▶ Push the START button .
- ▶ After completion of the program, check the filling quantity in each of the testing adapters.



The fluid must be above the mark ("Min.")!

If the filling quantity is below the mark, please consult the SycoTec customer service.

ATTENTION

Please note that only SMARTcare testing adapters can be used.

6.4 Pressure test

Recommended:

- Upon initial commissioning
- During operation: 1x day, preferably before starting work
- ▶ Read off the "Operating pressure" using the pressure gage.
 - ➔ The pressure should be between **4.5 bar** and 4.3 bar!

6.5 Changing the adapter

- ▶ The loosening of the clamping nut allows for the exchangeable adapter to be removed.
- ▶ Insert the desired adapter and tighten it again using the clamping nut.

ATTENTION

Please note that only white SMARTcare adapters can be used.

- ▶ Check the output quantity on the adapter using a testing adapter intended for the coupling.

ATTENTION

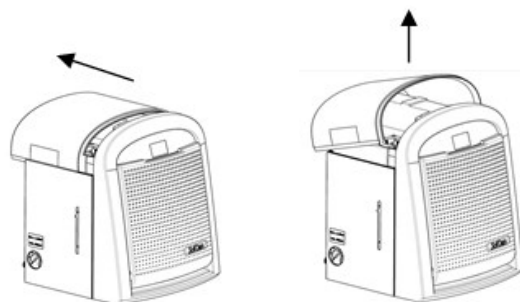
Please note that only SMARTcare testing adapters can be used.

6.6 Refilling of the media containers



Check the filling levels of the containers every day prior to commencing work.

- ▶ Turn on the mains switch.
- ▶ The following will appear on the display:
 - "WARNING Fill Dental Oil" or
 - "WARNING Fill Cleaner".
- ▶ Pull off top cover with both hands approx. 15 mm (overcome magnetic resistance) and pull off upwards.



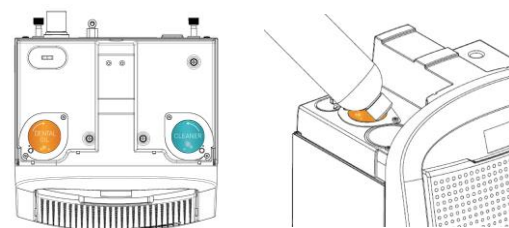
ATTENTION

Observe the color code on the media container

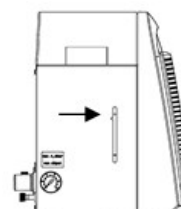
Orange = dental oil

Blue = cleaner

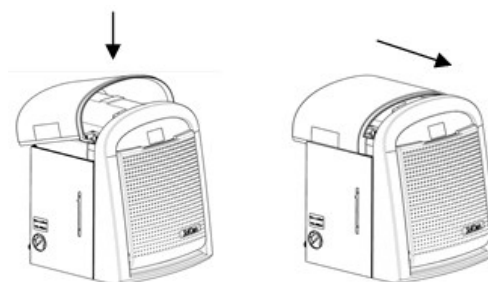
- ▶ Turn the metal flaps to the back in order to open the media container.



- ▶ Fill up the container to the filling level marking.
Upon exceeding the minimum filling level, a 1-second beep will sound.
If the container is full, a 2-second beep will sound 2 times.
The beep is always followed by a visual sign on the container.



- ▶ Attach the top cover and close until it stops.



CAUTION

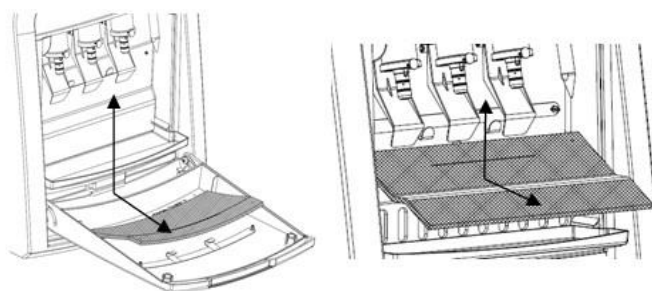
Only use original SycoTec "Dental Oil" and "Cleaner"!

- ▶ Use of other media may put patients and users at risk and damage the device and the instruments.

6.7 Replacing the absorption pads

- i** Replace both pads after 35 instrument cleaning processes or at least 1x week (more often if needed).

- ▶ Open the front door
- ▶ Pull the pads from the pins
- ▶ Remove pads upwards from fastening clips
- ▶ Dispose of pads in household waste
- ▶ Hook new fleeces into the fastening clips
- ▶ Fixate fleeces on the pins
- ▶ Close the front door

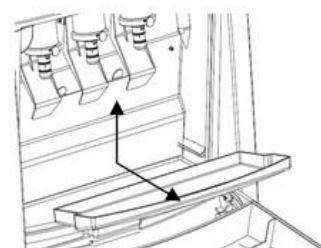


- i** Only use original SycoTec absorption fleeces.

6.8 Empty the collecting tray

- i** Empty the collecting tray every day and clean/disinfect it.

- ▶ Open the front door
- ▶ Pull out tray forwards (horizontal) (overcome slight catch).
- ▶ Empty the tray and clean/disinfect it with a disinfectant wipe.
For Germany we recommend using disinfectants listed by the VAH (such as SciCan OPTIM BLUE).
- ▶ Push tray into the side guides until it locks.
- ▶ Close the front door



ATTENTION

The rear fleece must not be pinched in, but rather has to hang loosely inside the tray.

6.9 Inside cleaning and disinfection of the maintenance area

Clean the maintenance area and door with disinfectant wipes every day. For Germany we recommend using disinfectants listed by the VAH (such as SciCan OPTIM BLUE).

6.10 Outside cleaning and outside disinfection of the device

The surface and control panel of the SMARTcare system can be cleaned and disinfected using disinfectant wipes. For Germany we recommend using disinfectants listed by the VAH (such as SciCan OPTIM BLUE).

Recommendation



SycoTec recommends an annual maintenance measure to be performed by an authorized dealer or the manufacturer.




For users in countries with a legal validation requirement

- ▶ An annual maintenance by the manufacturer or an authorized specialist company is recommended.
 - ▶ Please observe the national specifications for validation. An authorized specialist company must carry out a first validation with performance qualification (PQ) in accordance with the legal requirements if validation is required. Please observe the validation instructions for the device.
 - ▶ SycoTec recommends that a revalidation be carried out at intervals of one year (acc. to EN ISO 15883-1), unless shorter cycles are required by local authorities or the validator.
- These revalidations should be carried out during or following maintenance work.

6.11 Data backup of the log file

- ▶ Switch off the device
- ▶ Insert the USB stick on the back of the device
- ▶ Turn on the device
- ▶ Press the  button. "Export log data" will appear on the display.
- ▶ Use the  button to start exporting the log files to the USB stick.

When the process is finished, the display shows the following:
"Log data export complete".

- ▶ Use the  button to return to the menu.
- ▶ Switch off the device
- ▶ Remove the USB stick



USB connection
(rear panel of the device)



If the USB port is to be extended using a USB cable, this cable must be equipped with a ferrite core. The cable must be inserted with the ferrite core facing the device side.







- ▶ Please note that the data on the USB stick must be copied to a suitable permanent storage device.
- ▶ Please check that the data on the storage medium can also be read correctly.

6.12 Deletion of the log file on the SMARTcare



Deletion of the log file causes the data to be permanently lost.





- ▶ Please create a backup of the log file first and check whether the data on the USB stick can also be read correctly.

- ▶ Turn on the device
- ▶ Press the  button. "Export log data" will appear on the display.
- ▶ Press the  button 6x until "Delete log file" is highlighted in black on the display.
- ▶ "Deletion" is selected using the  button.
- ▶ Press the  button once more. The deletion of the log data will be performed.
- ▶ Use the  button to return to the menu.
- ▶ Press the  button to return back to the "Cleaning + Maintenance" main menu

6.13 Emptying the media system

This is only required if the system is to be emptied completely - for example for transport purposes or longer standstill periods (>30 days).

First, empty the containers completely using drain hoses. Then, tilt the device to the rear by approx. 45 degrees in order to also empty the residual liquids located at the bottom of the container using the drain hoses. Media can only be re-used again if they have been kept in their original bottles (mind the best before dates on the bottom or on the sides of the original bottles).

- ▶ Turn on the device
- ▶ Press the  button. "Export log data" will appear on the display.
- ▶ Press the  button 2x until "Empty media system" is highlighted in black on the display.
- ▶ Using the  button, the "Empty media system" menu is selected.
The media system will be automatically emptied. During this time, a clock will run backwards until "00:00".
- ▶ Press the  button to return to the "Cleaning + Maintenance" main menu

6.14 Warning message: "Servicing required soon"


This warning message appears if more than 25,000 regular and contra-angle handpieces and turbines have been cleaned and maintained for with the SMARTcare. Please contact the service department. You can clean a further 3,300 regular and contra-angle handpieces and turbines.

6.15 Error message: "Servicing required"

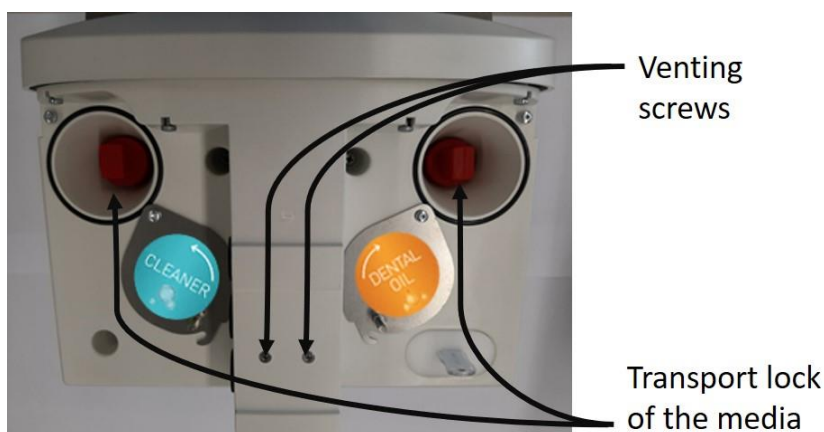
This error message appears if more than 28,300 regular and contra-angle handpieces and turbines have been cleaned and maintained for with the SMARTcare. Please contact the service department.

6.16 Transport

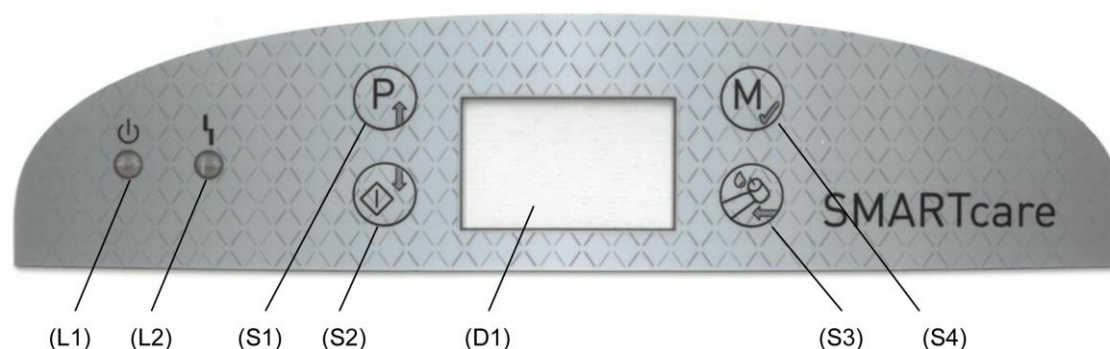
If the device was already filled with dental oil and cleaner, the media must be emptied out fully through the drain hoses.

 Empty the media system (see Chapter 6.13).

- ▶ Unscrew the venting screws of the media aeration and blow compressed air into the valve several times.
- ▶ Tighten the screws again.
- ▶ Open the "Dental Oil" and "Cleaner" flaps.
- ▶ Place the accompanying transport locks in the filling funnel of the media container (see fig.)
- ▶ Close the "Dental Oil" and "Cleaner" flaps.
- ▶ If possible, send in the original box



7 Troubleshooting



Error	Display	Acoustic signal	Cause	Correction
LEDs don't light up	No display	—	No power supply	Activate mains switch Plug in the power supply plug
			Defective fuse	Replace the fuse (see Chapter 7.1)
Compressed air	ATTENTION Compressed air error Fault LED (L2) flashes	Interval beep: 0.5 seconds on, 8 seconds off; 10 times	Compressed air hose not connected	Connect compressed air hose
			Compressed air hose pinched	Remove flow disruption
			Mains supply defective	Create supply
			Pressure reducer defective	Please consult the SycoTec customer service.
			Pressure switch defective	Please consult the SycoTec customer service.
			If available; filter in supply line full	Replace the filter
Top cover open	WARNING Close the top cover Fault LED (L2) flashes	—	Top cover not closed correctly	Close top cover tightly
			Magnet on top cover is missing	Please consult the SycoTec customer service.
Program doesn't start	ATTENTION Close the front door	—	Front door is not correctly closed	Close front door tightly
	ATTENTION No slots occupied	—	No instruments in the device Detection flap does not recognize instrument	Attach the instruments to the couplings Turn the instrument until a frame is displayed around the station number
Process interrupted	ATTENTION Process interrupted	—	Front door is not correctly closed	Close front door tightly
			Instrument is not attached to the coupling correctly	Push the instrument firmly onto the coupling
Undefined fault	ATTENTION Please consult the customer service.	Interval beep: 2 seconds on, 4 seconds off	Internal device fault	Please consult the SycoTec customer service.
Memory full	ATTENTION Not enough memory available	—	Internal memory full	Export log data to USB stick
Cleaner empty	WARNING Fill the cleaner Fault LED (L2) flashes	Beeping sound 2 seconds	Cleaner container empty	Fill the cleaner container with SycoTec "Cleaner"
Oil empty	WARNING Fill in dental oil Fault LED (L2) flashes	Beeping sound 2 seconds	Oil container empty	Fill the oil container with SycoTec "Dental Oil"

Error	Display	Acoustic signal	Cause	Correction
WARNING Fill dental oil or cleaner, even though the respective container is full	WARNING Fill dental oil or cleaner Fault LED (L2) flashes	Beeping sound 2 seconds	Air in the fill measurement system	Fully empty out the affected container through the drain hose. Tilt the device back 45°. Unscrew the safety screw of the media aeration and blow compressed air into the valve several times. Tighten the screw again and fill the container.
Export data	ATTENTION Storage medium not readable Fault LED (L2) flashes	–	USB stick not recognized	Turn off the device, insert the USB stick, turn on the device
			USB stick not formatted correctly	Perform NTFS formatting. Use another USB stick
Liquids (dental oil and cleaner) have been switched around	–	–		Empty media container: <ul style="list-style-type: none"> ▶ Drain liquids from the container using a drain hose. Draw any residual liquid from the corresponding media container using a 50 ml syringe. ▶ Completely remove residue of the "false" medium from the media container with a highly absorbent textile cloth that is free of fibers. ▶ Turn on the device ▶ Select "Empty media system" on the display (see Chapter 6.13) ▶ Refill dental oil and cleaner (see Chapter 6.6) ▶ Open the front door ▶ Select the "Fill media system" menu item in the display ▶ Close the front door After this process has completed, the device is operational.



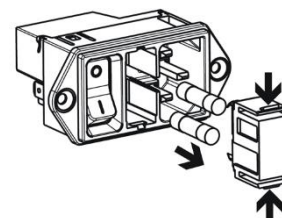
If you are unable to resolve these malfunctions or if you experience other problems, contact an engineer or send the aerosol suction system directly to be serviced.

7.1 Replacing fuses

ATTENTION

Remove the SMARTcare device plug.

- ▶ Remove fuse tray from the power input module (push both tabs on the fuse tray inward).
- ▶ Replace fuses
- ▶ Insert fuse tray again



CAUTION

Only use the fuse type indicated in the Chapter 3.4 Technical specifications.

8 Information on Electromagnetic Compatibility (EMC)

The SMARTcare is designed for operation in an environment as described below. The customer or the user of the SMARTcare should ensure that it is operated in an environment of this kind.			
Electromagnetic interference measurements	Compliance	Electromagnetic environment – guidelines	
HF emissions according to CISPR 11	Group 1	The SMARTcare utilizes HF energy exclusively for its internal function. Its HF emissions are therefore very low and it is unlikely that neighboring electronic devices will be disrupted. The SMARTcare is suitable for usage in all facilities, including those located in living areas and those directly connected to a public power supply also supplying buildings used for residential purposes.	
HF emissions according to CISPR 11	Class B		
Emissions from harmonics according to IEC 61000-3-2	Class A		
Emissions from voltage fluctuations / flickers according to IEC 61000-3-3	Conforms		
Susceptibility tests	IEC 60601 test level	Compliance level	Electromagnetic environment – guidelines
Discharge of static electricity (ESD) according to IEC 61000-4-2	± 6 kV contact discharge ± 8 kV air discharge	± 6 kV contact discharge ± 8 kV air discharge	Flooring should be of wood or concrete or be covered with ceramic tiles. When the floor is covered with synthetic material, the relative air humidity must be at least 30%.
Rapid, transient electrical disturbances/ bursts according to IEC 61000-4-4	± 2 kV for power cables ± 2 kV for input and output lines	± 2 kV, not applicable for power cables Not applicable	The quality of the supply voltage should correspond to that of a typical business or hospital environment.
Surges according to IEC 61000-4-5	± 1 kV normal mode voltage ± 2 kV common mode voltage	± 1 kV normal mode voltage ± 2 kV common mode voltage	The quality of the supply voltage should correspond to that of a typical business or hospital environment.
Voltage drops, short-term interruptions and fluctuations of the supply voltage according to IEC 61000-4-11	0% UT for 0.5 periods 40% UT for 5 periods 70% UT for 25 periods 0% UT for 250 periods	0% UT for 0.5 periods 40% UT for 5 periods 70% UT for 25 periods 0% UT for 250 periods	The quality of the supply voltage should correspond to that of a typical business or hospital environment. When the user of the SMARTcare also requires continuing function with the occurrence of interruptions of the power supply, it is recommended that the SMARTcare draw power from an uninterruptable power supply.
Magnetic field of the supply frequency (50/60 Hz) according to IEC 61000-4-8	3 A/m	Not applicable	Not applicable
Conducted HF disturbance according to IEC 61000-4-6	3 Veff 150 kHz to 80 MHz outside of the ISM bands ^a	10 Veff	Portable and mobile radio devices should be used at a distance from the SMARTcare, including the cable, no less than the recommended protective distance calculated according to the equation applicable to the transmission frequency. Recommended protective distance: $d = 1.17 \sqrt{P}$ $d = 0.35 \sqrt{P}$ for 80 MHz to 800 MHz $d = 0.70 \sqrt{P}$ for 800 MHz to 2.5 GHz with P as the maximum power rating of the transmitter in watts (W) in accordance with the information of the transmitter manufacturer and d as the recommended protective distance in meters (m). ^b The field strength of stationary radio transmitters should be less than the compliance level for all frequencies according to experiments carried out on location. ^d Interference is possible in the vicinity of devices bearing the icon shown below.
Radiated HF disturbances according to IEC 61000-4-3	10 V/m 80 MHz to 2.5 GHz	10 V/m	



NOTE U_T: is the alternating supply voltage prior to application of the test levels.

NOTE 1: The higher frequency range applies for 80 MHz and 800 MHz.

NOTE 2: These guidelines may not be applicable in all cases. The spread of electromagnetic disturbances is influenced by absorption and reflection of the building, objects and people.

^a The ISM frequency bands (for industrial, scientific and medical applications) between 150 kHz and 80 MHz are 6.765 MHz to 6.795 MHz; 13.553 MHz to 13.567 MHz; 26.957 MHz to 27.283 MHz and 40.66 MHz to 40.70 MHz.

^b The compliance levels in the ISM frequency bands between 150 kHz and 80 MHz and in the frequency range between 80 MHz and 2.5 GHz are intended to reduce the probability of mobile/portable communication devices causing any interference whenever they are inadvertently brought into patient areas. For this reason, the additional factor of 10/3 is used for the calculation of the recommended protective distances in these frequency ranges.

^c The field strengths of fixed transmitters, such as base stations for radio telephones and mobile radios, amateur radio stations, AM and FM radio broadcasts as well as TV broadcasts cannot be predicted in a fully accurate manner. In order to determine the electromagnetic environment with respect to the stationary transmitter, a study of the location should be considered. When the measured field strengths at the location at which the SMARTcare is used exceeds the compliance level above, the SMARTcare should be observed in order to demonstrate correct functioning. When unusual performance features are observed, additional measures may be necessary, such as a changed orientation or another location for the SMARTcare.

^d Above the frequency range of 150 kHz to 80 MHz, the field strength should be less than 3 Veff V/m.

Recommended protective distances between portable and mobile HF telecommunications devices and the SMARTcare.

The SMARTcare is designed for operation in an electromagnetic environment in which the HF disturbances are controlled. The customer or the user of the SMARTcare can help avoid electromagnetic disturbances by observing the minimum distance between portable and mobile HF telecommunications devices (transmitters) and the SMARTcare, depending upon the output power of the communications device, as indicated below.

Rated power of the transmitter / W	Protective distance depending upon the transmission frequency in m		
	150 kHz to 80 MHz $d=0.35 \sqrt{P}$	80 MHz to 800 MHz $d=0.35 \sqrt{P}$	800 MHz to 2.5 GHz $d=0.70 \sqrt{P}$
0.01	0.04	0.04	0.07
0.1	0.11	0.11	0.22
1	0.35	0.35	0.70
10	1.11	1.11	2.21
100	3.50	3.50	7.00

For transmitters with a maximum rated power not shown in the table above, the recommended protective distance d can be determined in meters (m) using the equation from the respective column, whereby P is the maximum rated power of the transmitter in watts (W) in accordance with the information provided by the transmitter manufacturer.























NOTE 1: The higher frequency range applies for 80 MHz and 800 MHz.

NOTE 2: These guidelines may not be applicable in all cases. The spread of electromagnetic disturbances is influenced by absorption and reflections of the building, objects and people.

9 Accessories and spare parts



Please order accessories only from your authorized dealer.

Material no.	Description	Material no.	Description
 2.003.2946	Sycotec "Cleaner" (6x 500 ml)	 2.003.2979	USB stick
 2.003.2945	Sycotec "Dental Oil" (2x 500 ml)	 2.003.2980	Chuck tip
 2.003.2954	Absorption pad (set) (10 pieces)	 2.003.2981	Fuse, T 2.0 A (H)
 2.003.2984	MULTiflex* O-ring set	 2.003.2983	Maintenance coupling gasket
 2.003.2957	INTRAmatic O-ring set	 2.003.2955	Front door seal
 2.003.2968	Maintenance coupling MULTiflex*/ CONNEX	 2.003.2972	Testing adapter INTRAmatic DIN EN ISO 3964- coupling
 2.003.2969	Maintenance coupling Sirona T1 turbine	 2.003.2973	Testing adapter MULTiflex*
 2.003.2970	Maintenance coupling NSK turbine	 2.003.2974	Testing adapter Sirona T1 turbine
 2.003.2977	Maintenance coupling W&H turbine	 2.003.2975	Testing adapter NSK turbine
 2.003.2971	Maintenance coupling BienAir turbine	 2.003.2976	Testing adapter W&H turbine
 2.003.2956	Seal plugs	 2.003.2978	Testing adapter BienAir turbine

*MULTiflex is a registered trademark of
Kaltenbach & Voigt

10 Documentation log file

Sycotec SMARTcare : SN xxxxxx : Log-File

11.08.2014 15:56

Device serial number

Software-Version :xxxx

Date and time of the log file

Start time	Program	Intervals cleaning Spray	Intervals cleaning Drive	Intervals lubricating	Operating pressure	Start Place 1	Finish Place 1	Start Place 2	Finish Place 2	Start Place 3	Finish Place 3	Magnetic valve 10	Magnetic valve 11	Frontdoor Start	Frontdoor End	Finish time	Result	SYS-INFO	Valid
07.08.2014 09:36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	07.08.2014 09:36	OK	2	0
07.08.2014 09:41	1	4	4	2	1	1	1	1	1	0	0	1	1	1	1	07.08.2014 09:48	OK	0	1
07.08.2014 12:02	1	4	4	2	1	1	1	1	1	0	0	1	1	1	1	07.08.2014 12:10	OK	0	1
07.08.2014 13:53	1	4	4	2	1	1	1	1	1	0	0	1	1	1	1	07.08.2014 14:00	OK	0	1
07.08.2014 13:54	1	4	4	2	1	1	1	1	1	0	0	1	1	1	1	07.08.2014 14:01	OK	0	1
07.08.2014 13:56	1	4	4	2	1	1	1	1	1	0	0	1	1	1	1	07.08.2014 14:04	OK	0	1
07.08.2014 14:03	1	4	4	2	1	1	1	1	1	0	0	1	1	1	1	07.08.2014 14:10	OK	0	1
07.08.2014 14:16	1	4	4	2	1	1	1	1	1	0	0	1	1	1	1	07.08.2014 14:23	OK	0	1
11.08.2014 15:40	1	4	4	2	1	1	1	1	1	1	1	1	1	1	1	11.08.2014 15:50	OK	0	1*
13.08.2014 08:46	1	4	4	2	1	1	1	1	1	1	1	1	1	1	1	13.08.2014 08:56	OK	0	1
14.08.2014 14:06	1	4	4	2	1	0	0	1	1	1	1	1	1	1	1	14.08.2014 14:13	OK	0	1
14.08.2014 14:49	1	4	4	2	1	0	0	1	1	0	0	1	1	1	1	14.08.2014 14:53	OK	0	1
14.08.2014 14:52	1	4	4	2	1	1	1	1	1	0	0	1	1	1	1	14.08.2014 14:59	OK	0	1
22.09.2014 10:14	1	4	4	2	1	1	0	0	0	1	1	1	1	1	1	22.09.2014 10:21	Fail	0	0
22.09.2014 10:16	1	4	4	2	1	0	0	0	0	1	1	1	1	1	1	22.09.2014 10:19	OK	0	1
22.09.2014 10:58	1	4	4	2	1	0	0	0	0	1	1	1	1	1	1	22.09.2014 11:02	OK	0	1
22.09.2014 12:03	1	4	4	2	1	1	1	1	1	1	1	1	1	1	1	22.09.2014 12:13	OK	0	1
22.09.2014 12:04	2	0	0	2	1	0	0	0	0	1	1	1	1	1	1	22.09.2014 12:08	OK	0	0
22.09.2014 12:05	3	4	4	0	1	0	0	0	0	1	1	1	1	1	1	22.09.2014 12:09	OK	0	0
22.09.2014 12:07	5	0	0	2	1	0	0	0	0	0	0	1	1	0	0	22.09.2014 12:08	OK	0	0
22.09.2014 12:07	4	1	1	1	1	0	0	1	1	0	0	1	1	1	1	22.09.2014 12:09	OK	0	0
22.09.2014 14:47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22.09.2014 14:47	OK	2	0

* Program 1 was started on 08/11/2014 at 3:40 p.m. with 3 instruments and successfully ended at 3:50 p.m. with tested operation data.

Fault in station 1; instrument slipped during operation from the coupling --> Fail

Title	= Explanations regarding the headline	Program no.
Start time	= Starting time DD.MM.YYYY HH:MM	0 Log data deleted
Program	= Program no. (see separate table)	1 Cleaning + Care
Intervals cleaning Spray	= Number of cleaning intervals of the spray channel	2 Care only
Intervals cleaning Drive	= Number of cleaning intervals of the drive channel	3 Clean only
Intervals lubricating	= Number of lubrication intervals	4 Special instrument
Operating pressure	1= Compressed air available; 0= No compressed air	5 Collet care (Chuck)
Start Place 1	1= Slot 1 occupied upon start; 0= Not occupied	6 Continuous operation (Service)
Finish Place 1	1= Slot 1 occupied at the end; 0= Not occupied	7 Filling the media system
Start Place 2	1= Slot 2 occupied upon start; 0= Not occupied	8 Emptying the media system
Finish Place 2	1= Slot 2 occupied at the end; 0= Not occupied	
Start Place 3	1= Slot 3 occupied upon start; 0= Not occupied	
Finish Place 3	1= Slot 3 occupied at the end; 0= Not occupied	
Magnetic valve 10	1= Magnet valve 10 (cleaner) activated; 0= Not activated	
Magnetic valve 11	1= Magnet valve 11 (oil) activated; 0= Not activated	
Frontdoor Start	1= Door closed at the end; 0= Open	
Frontdoor End	1= Door closed at the start; 0= Open	
Finish time	= End time DD.MM.YYYY HH:MM	
Result	OK = Program successfully completed; Fail = faulty program execution	
SYS-INFO	= System information (see separate table)	
Valid	1= Program 1 with tested operating data completed successfully	

SYS-Info
0 Normal line
1 Initialization performed
2 Data deleted (via menu)
3 Reset of log data
4 Reset to factory setting
5 Oil refilled
6 Cleaner refilled
7 Power supply interrupted
8 Cleaner & oil empty
9 Data backup is enforced

11 Manufacturer's warranty

SycoTec manufactures its products with the utmost care. Each product undergoes an extensive quality control process before being shipped.

Therefore, SycoTec gives a warranty for the cleaning and maintenance device of 24 months against material, processing and functional defects from the date of purchase.

In such cases SycoTec will repair or replace the product free of charge.

The warranty does not cover accessories (e.g. couplings), spare parts (e.g. O-rings, seals) or discoloration of plastic parts.

Warranty claims are only valid if all the instructions in the product's instructions for use are followed.

SycoTec does not assume any liability in the event of gross negligence or intentional misuse.

Furthermore, SycoTec is not liable for defects and their consequences caused by improper use, improper reprocessing, care and maintenance, unauthorized repairs, natural wear and tear, or faulty water, air or power connections.

Warranty claims must be sent to SycoTec, the dealer or authorized service partners. Claims must include proof of purchase and the serial number, which must match the number appearing on the product.

The warranty period will not be extended as a result of services rendered under the terms of the warranty.

Other claims of any kind, in particular for damages, are excluded. No further legal remedies are available to the purchaser.

Once the warranty period has expired, all services and obligations relating to this warranty will be deemed to have been completely fulfilled. Any further claims will expire and may no longer be made against SycoTec.