## INSTRUCTIONS FOR USE ENGLISH

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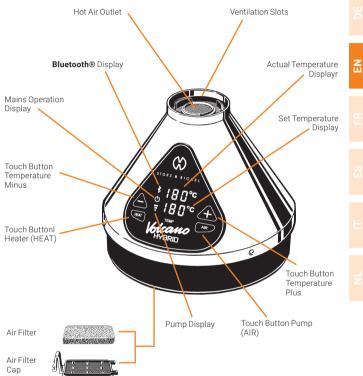
## INSTRUCTIONS FOR USE ENGLISH

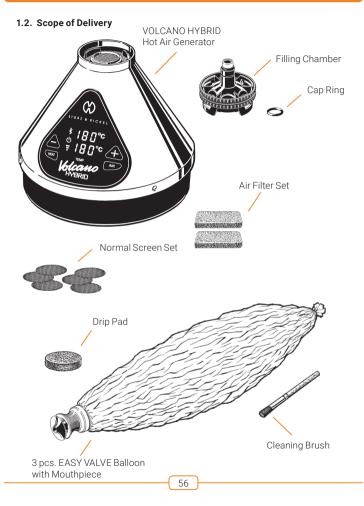
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#### 1.1. Functional Elements







#### 1.3. Service

Please check whether all components have been included. If not, please inform the Storz & Bickel Service Center.

In the case of technical problems, questions about the device, repairs, warranty claims and disposal of the device, customers in the US and Canada should contact the following address:

**Storz & Bickel America, Inc.** 1078 60th Street • Suite A • Oakland • CA 94608

All other customers should contact the following address:

Storz & Bickel GmbH & Co. KG

In Grubenäcker 5-9 • 78532 Tuttlingen • Germany

## 2. EXPLANATION OF SYMBOLS, WARNINGS AND SAFETY RECOMMENDATIONS



Read the following safety recommendations thoroughly and carefully before using the

device.

These Instructions for Use are a significant part of the VOLCANO HYBRID Vaporization System and must be provided to the user.

The instructions given in these Instructions for Use must be strictly observed as they are extremely important to ensure safety during installation, use and maintenance of the VOLCANO HYBRID Vaporization System.

Please keep this brochure in a safe place for future reference.

You may download the current Instructions for Use for the VOLCANO HYBRID Vaporization System on www.storz-bickel.com.



#### 2.1. Explanation of Symbols

Please follow these instructions carefully!



#### EU conformity symbol:

The manufacturer confirms with this symbol the compliance of the product with the applicable European directives and standards.



#### Caution! Hot surfaces!

Do not leave Filling Chamber on VOLCANO HYBRID Hot Air Generator.



#### Warning!

In order to avoid injuries, it is mandatory to observe the instructions marked with this symbol.



#### Safety Recommendation!

In order to avoid damage to the equipment, it is mandatory to observe the instructions marked with this symbol.



#### Note/Tip!

This symbol always gives you technical information or useful tips regarding the VOLCANO HYBRID Vaporization System.



Protect from direct sunlight.



The device was introduced after 13 August 2005. It may not be disposed of in normal household waste. The X on the trash can indicates the necessity of disposing of this device separately.



Protect against moisture and humidity.



Symbol for serial number - followed by the serial number of the product



Safety tested and production monitored by TUEV SUED Product Service GmbH according to EN 60335-1, UL 499 and CAN/CSA-22.2 No. 64-M91.



Safety tested and production monitored by TUEV SUED Product Service GmbH according to EN 60335-1,



Symbol for the manufacturer - the manufacturer's name and address are next to the symbol



Device of safety category II



Federal Communications Commission The device complies with EMC and radio technology requirements in the USA;

this device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

(1) the device must not cause any interference, and

(2) the device must not be affected by incoming interference, including interference that may cause undesired operation.

IC Industry Canada

The device complies with EMC and radio technology requirements in Canada;

the device complies with Industry Canada's RSS regulations



# 2.2. Warnings

- Ê This device may be used by children of 8 years of age and older, and by persons with reduced physical, sensory or mental abilities or lack of experience and knowledge, if they are supervised or instructed in the safe use of the device and understand the possibility of resulting hazards. Do not allow children to play with the device. Cleaning and user maintenance must not be carried out by children without supervision.
- Ê If the Power Cord of the device is damaged, it must be replaced with a special Power Cord available from the manufacturer or its customer service.
- Ê The device has hot surfaces to allow active components to vaporize. These surfaces should not be touched during use.
- É The device may only be used for the vaporization of the recommended herbs and plant parts or their essences. The

use of other substances may cause poisoning or fire.

- É The packaging elements (plastic bags, polystyrene parts, cardboard boxes, etc.) must not be made accessible to children as they pose a potential danger.
- É Ensure that all vapors, e.g. from flammable cleaning agents and disinfectants, have evaporated before switching on the Hot Air Generator.
- Ê Ensure that the Valve Balloon with Mouthpiece, and/or the Tube with Mouthpiece are free from inhalable foreign matter.
- E People who require assistance must be supervised constantly during application. Such persons often underestimate the hazards involved (e.g. strangulation with the Power Cord or Tube), thus resulting in a risk of injury.
- É The device contains small parts which can block the respiratory tract and lead to choking. Therefore, make sure that you always keep the Hot Air Generator and accessories out of the reach of babies and children.
- Ê Do not operate the Hot Air Generator close to flammable objects such as curtains, tablecloths, or paper.

- É The Hot Air Generator may only be repaired by our Service Center.
- E Danger to life when opening the Hot Air Generator as live components and connections are exposed.
- Ê The Hot Air Generator must never be repaired or transported when the power plug is plugged in.
- Ê The ventilation slots as well as the hot air outlet of the Hot Air Generator must not be closed, obstructed, or blocked while the device is being used, nor while it is cooling down.
- E When they are hot do not touch the hot air outlet, the Filling Chamber, or the Tube Flexer when using the Tube, whilst they are hot.
- É The Filling Chamber may only be attached for filling the Valve Balloon or during use of the Tube Kit. After filling the Valve Balloon or after using the Tube Kit, the Filling Chamber must be removed from the Hot Air Generator to avoid excessive heating (danger of burning) of the Filling Chamber.
- Ê Do not put any body parts or objects in the hot air jet. Caution! Hot surface!
- Ê The Hot Air Generator must not be used in damp or wet conditions.
- E Never touch the Hot Air Generator with wet or damp parts of the body.

É Do not use in an atmosphere with risk of explosion or ignition.

The manufacturer is not responsible for any damage or personal injury caused by inappropriate, incorrect or irresponsible use.



#### 2.3. Safety Recommendendations

- Ê Do not use the device if the Power Cord is damaged.
- Ê Check the packaging and the housing of the Hot Air Generator. In case the housing appears to be damaged, please send back the device immediately.
- E Before connecting the Hot Air Generator, make sure that the information given on the type label on the underside of the Hot Air Generator corresponds to the mains supply at the place of installation.
- Ê In case of doubt, or malfunction during operation, immediately disconnect the power plug from the socket.
- É If you have any concerns, ask a specialist to check whether the electrical system is in accordance with the local safety regulations.
- Ê The use of multiple sockets and/or extension cables is not recommended. However, if this

is absolutely necessary, only products with a quality certificate (such as UL, IMQ, VDE, +S etc.) may be used, provided the specified power exceeds the power required (A=Ampere) by the devices that are connected.

- E Operate the Hot Air Generator on a stable and flat surface at sufficient distance from heat sources (oven, stove, chimney, etc.) and in a place where the ambient temperature cannot drop below +5°C (+41°F).
- Ê Store the Hot Air Generator in a dry place protected against the effects of weather. It cannot be used in damp locations (such as bathrooms etc.).
- Ê Keep the Hot Air Generator away from pets (e.g. hamsters, mice) and other animals which could damage the Power Cord insulation.
- Ê To pull the power plug from the socket, pull the power plug directly, never pull the Power Cord.
- E Do not put any objects into the openings of the device.
- Ê Do not leave the Hot Air Generator unattended during operation. Switch off the heater and pump after use if applicable.
- E The Hot Air Generator should be cleaned only with a dry cloth - or a

damp cloth if absolutely necessary. Before cleaning, remove the Power Cord from the socket. Never immerse the Hot Air Generator in water or in other liquid, nor clean it with direct jets of water or steam.

- Ê Do not expose the Hot Air Generator to rain. Do not use in the bathroom or above water.
- E Never put containers containing liquids on the Hot Air Generator. If the Hot Air Generator gets wet, it must be checked by our Service Center for damage to electrical components.
- E Only use original Storz & Bickel accessories and spare parts.

## **3. INTENDED USE**

The VOLCANO HYBRID Vaporization System releases fragrances or aromas from the herbs and other plant materials listed below, or from their extracts (aromatic oils). These aromatic substances are released through vaporization by heated air, and may be exhausted directly into the ambient air, collected in a Valve Balloon for subsequent inhalation or inhaled directly through the Tube. The device may only be used with the recommended vaporizing materials. The use of other substances can present a health risk.

The VOLCANO HYBRID Vaporization System is not FDA approved.

## 4. OVERVIEW OF PLANTS

Below is an overview of the plants that are suitable for vaporization in the VOLCANO HYBRID Vaporization System. The aromas and fragrances from the plant materials listed below may be vaporized. Any other use is inappropriate and potentially dangerous. The VOLCANO HYBRID Vaporization System is not FDA approved.

Plant name	Botanical name	Portion of plant used	Temperature setting
Eucalyptus	Eucalyptus globulus	the leaves	1 / 130°C (266°F)
Hops	Humulus lupulus	the cones	3 / 154°C (309°F)
Chamomile	Matriarca chamomilla	the blossoms	6 / 190°C (374°F)
Lavender	Lavandula angustifolia	the blossoms	1 / 130°C (266°F)
Lemon balm	Melissa officinalis	the leaves	2 / 142°C (288°F)
Sage	Salvia officinalis	the leaves	6 / 190°C (374°F)
Thyme	Thymus vulgaris	the herb	6 / 190°C (374°F)

## 4. OVERVIEW OF PLANTS

The extracts (aromatic oils) of these plants can be vaporized at up to 130°C (266°F) with the help of the Drip Pad supplied with the Hot Air Generator. To do so, please follow the instructions given in Chapter 7.9. "Drip Pad", page 88.

#### WARNING:

Please consult your doctor or pharmacist if you have any medical concerns. It is possible that some plants may cause allergic reactions for the user. If this occurs, it is urgently recommended to refrain from further use of such plants.

Only use the plant parts which are found in this list and which have been verified according to the regulations of the European or any other pharmacopoeia with regard to genuineness, purity and pathogenic germs. You can purchase such plants or plant parts in pharmacies.

It is important to observe the following instructions in order to set the VOLCANO HYBRID Vaporization System with the plant material in the best possible way for your personal requirements.

## 5. FACTORS INFLUENCING VAPORIZATION

The amount of dissolved aromas and fragrances is influenced by the following factors:

- Quality: The amount of aromas or fragrances contained in the respective plant material that can be vaporized.
- 2. Quantity: The amount of vaporization material in the Filling Chamber.
- Surface: The finer the plant is ground, the greater the surface and

the more aromas and fragrances can be released during the vaporization cycle.

 Temperature: The higher the temperatures, the more aromas and fragrances will be released at once.

Please note: Increasing the temperature should be the last resort, because plant material tastes more roasted when using higher temperature.

## 5. FACTORS INFLUENCING VAPORIZATION

Since the plant ingredients are released in a gentle manner, the vaporization cycle may be repeated with the same contents in the Filling Chamber. Depending on the four factors described above, the load of the Filling Chamber may be reused multiple times until the aromas and fragrances are released completely. Before a new vaporization process, the contents of the Fillina Chamber can be removed and grounded again to increase the surface area of the starting material. An increased temperature would activate more vapor as well, but has a negative effect on the taste. If no more vapors form at maximum temperature, the vaporization material is completely used up and must be replaced with fresh material. However, for the best aroma results it is advisable to replace the vaporization material before this point.

#### 5.1. Using the Valve Balloon

When using the Valve Balloon, it is important to observe the formation of steam in it. A fine, white vapor feels very comfortable when inhaled. As the vapor gets denser the taste can get too strong.

A very high intensity (density) of the vapor can lead to irritation of the respiratory passages from the concentration of the aromas and fragrances. In this case, the temperature should be lowerd, so that the intensity of the vapors is reduced.



It is not necessary to fill the Valve Balloon completely. It is often sufficient to fill only half or even less than half of the Valve Balloon in order to achieve the desired results.

The Valve Balloon is not suitable for storing vapors over a long period because the vapors condense on the Valve Balloon Jacket over time (a few hours). Only fill the amount you want to inhale within 10 minutes.

#### 5.2. Using the Tube Kit

The VOLCANO HYBRID can also be used with the enclosed Tube Kit for direct inhalation. Further details on using the Tube Kit are described in Chapter 7.7. "Tube Kit", page 84.

## 5. FACTORS INFLUENCING VAPORIZATION

#### 5.3. Breathing Technique

The device is not to be used, if the user has respiratory tract or lung conditions. Depending on the density, the vapor could irritate respiratory tracts or lungs, which can lead to coughing.

Inhale only half the amount of air you can normally manage. Hold your breath for a few seconds and then exhale slowly. It is advisable to deliberately concentrate on your breathing process.

#### 6.1. Unpacking

Take out the Hot Air Generator and the accessories from the box. Immediately after unpacking check whether the Hot Air Generator, the accessories, the Power Cord and the power plug are all included in the delivery and work properly. If you notice any defects, inform the seller or the delivery agent immediately.

The packaging elements (plastic bags, polystyrene parts, cardboard boxes, etc.) must not be made accessible to children as they pose a potential danger.

Please dispose of the packing material in a proper and environmentally friendly manner.

We recommend keeping the original packaging in case it is required later (transport, Storz & Bickel Service Center etc.).

#### 6.2. Installation

Before installing the Hot Air Generator, make sure that the information given on the type label on the underside of the device corresponds to the local mains supply data. All parts of the electrical system must comply with currently applicable official regulations. Put the Hot Air Generator on a flat and stable surface.

Take care that the Power Cord cannot be damaged through kinking, crushing or pulling.



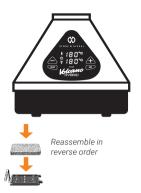
Improper installation may lead to personal injury or material damages, for which the manufacturer cannot be held responsible.

#### 6.3. Care and Maintenance

Before any maintenance work is done, the device has to be switched off and the power plug has to be unplugged from the power supply.

At the bottom of the Hot Air Generator is an Air Filter. The Air Filter must be inspected for contamination every four weeks by turning the Air Filter Cap counterclockwise and remove the Air Filter. Open the rectangular flap and replace the Air Filter.

Please pay attention to the correct positioning of the Air Filter: it has three large and one small rounded corner.



In case of soiling, only clean the housing with a damp, soft cloth, if necessary together with a cleaning agent (soapy water). Please do not use any hard or abrasive implements, such as steel wool, metal brushes, needles, inapppropriate plastic sponges, etc., nor any aggressive cleaning agents.

#### 6.4. Storage

Store the Hot Air Generator in a dry place protected against the effects of weather and out of the reach of children or unqualified persons.

#### 6.5. In Case of Problems

Immediately unplug from the power source.

If the electronics of the VOLCANO HYBRID malfunction, it can be restarted by disconnecting the power plug and plugging it in again after a waiting period of at least three seconds or by keeping the touch button (HEAT) pressed for 10 seconds.

In case of repair, send the Hot Air Generator - after it has cooled down completely - in its original packaging or otherwise well-packed to our Service Center.

If the Hot Air Generator is irreparably damaged, please do not simply throw it away. As it is made of high quality, completely recyclable component parts, it should be brought to a material recycling center in your neighbourhood or sent to our Service Center for disposal.

#### 6.6. Troubleshooting

If the device does not function properly when the power plug is connected to the power socket, please check the Hot Air Generator using the tips in the following table:

Problem	Possible Cause/Remedy
No aerosol is formed.	Check the set and actual temperature (at least 180°C (356°F)).
	Check whether the Filling Chamber and/or Valve Balloon or Tube have been correctly attached.
	Check whether an extract (aromatic oil) has been added to the Drip Pad or whether there is fresh, unused plant material in the Filling Chamber.
The Valve Balloon does	Check whether the pump is turned on.
not fill up.	Check whether the Filling Chamber and/or Valve Balloon are correctly attached.
Particles of herbs in the Valve Balloon or Tube (when using plant	Check whether the Screen in the Filling Chamber Cap is clogged or is not inserted into the notch properly.
material).	Check whether the Filling Chamber was cleaned according to the Instructions for Use.
It is not possible to activate the heater or the pump and the display	Please make sure that the current is on and that the fuse (in the mains fuse box) is switched on and is not defective.
does not show mains operation.	Check the power cord connection on the device and on the socket.
	If the Hot Air Generator still does not function, the internal fuses may have been triggered. In this case, send the Hot Air Generator to our Service Center.

Problem	Possible Cause/Remedy		
The display shows: 1. Line: "ERR" 2. Line: Number + letter "r" or "n"	Fault in the device. Perform a factory reset if number + "r" is displayed. Display of number + "n" is an irreversible error; the Hot Air Generator must be sent to our Service Center.		DE
Possible error mes- sages			N E N
01r	Error in internal communication. Restart recom- mended.		
02r	The device is either outside its specified tempera- ture, or internal overheating has occurred. Switch the device off, pull the power plug out of the socket,		
	and leave the device for min. 30 mins at room tem- perature without operating it. If the fault continues after 30 mins., contact our Service Center.		
03r	The device is being operated at the incorrect volta- ge. Please check which version (115V/230V) of the device you have, and ensure that you are using it at the correct voltage.		
04n	Device is defective; please send to our Service Center		
bl 000	The firmware has an error and requires a mandato- ry firmware update via the app.		
	If the firmware update fails several times, please send the device to our Service Center.		
Device switches off (automatic switch off)	Automatic switch off has tripped. Switch the heater or pump back on.		

If the preceding tips do not yield the desired results, or for any other defects or problems not mentioned here, please unplug the power plug and contact our Service Center immediately.

Do not open the Hot Air Generator! Without special tools and specialized knowledge, any attempt to open the device will cause damage to it. Such an attempt will invalidate the warranty claim.

Do not try to remedy the defect yourself. Contact our Service Center directly.

#### 7.1. Installation

Do not leave the device unattended during operation. Put the VOLCANO HYBRID on a flat and stable surface. Check whether the mains voltage corresponds to the voltage rating stated on the device. The Power Cord and the power plug must be in perfect condition. Only connect the VOLCANO HYBRID to a properly installed socket.

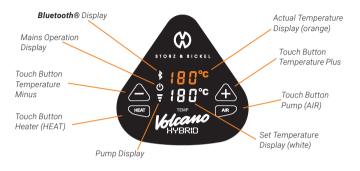
When the power plug is plugged in, all sequences of the LCD display light up briefly, after which the firmware number is displayed. The mains supply indicator, which then appears on the display, indicates that the Hot Air Generator is connected to the mains supply.

#### 7.2. Heating Up

To turn on the heater, press the touch button 'HEAT'. The set/actual temperature will light up, signaling that the heater is switched on. The upper. orange display shows the actual temperature in the Filling Chamber, the lower, white display shows the desired set temperature. The heating process is completed when the set value is equal to the actual value. This is also indicated acoustically by briefly switching on the pump (can be switched off using the app). Depending on the set temperature, heating-up can take up to two minutes. After the heating process is completed, the temperature is constantly maintained at the set value.

For technical reasons the temperature in the Filling Chamber cannot be measured during vaporization. During operation the temperature is measured at the heat exchanger. The display indicates the reference values for the attached Filling Chamber with the pump switched on.

#### 7.3. Temperature Setting



Briefly pressing the touch button Temperature Plus or Minus changes the setpoint values in 1 degree steps in the corresponding direction. By continuously pressing the touch button Temperature Plus or Minus, the setpoint values start to run continuously in the corresponding direction. When the touch buttons Temperature Plus and Minus are pressed simultaneously, the display changes from degrees Celsius to degrees Fahrenheit and vice versa.

If the actual value is higher than the set value, you can speed up the cool off process by switching on the pump.

The automatic switch-off is preset to 30 minutes, which can be individually adjusted with the help of the app. The display is dimmed down to 30% in standby mode; dimming down to 10% can be set using the app.

Whilst the heating still has significant residual heat, this actual temperature is displayed by default until it falls below a value of +40°C (+104°F). The residual heat display can be switched off via the app, in this case the actual temperature display goes blank as soon as the heating is switched off. The display will then go out and the mains supply indicator, which then appears on the display, indicates that the Hot Air Generator is connected to the mains supply.



Pack and store the device only after it has cooled down completely.

#### 7.4. Keyboard Shortcuts

The table below gives an overview of commands that can be entered on the display using key combinations:

Key command	Result	
Press the touch button 'HEAT'	Switches on the heater	EN
Press the touch button 'AIR'	Switches on the pump	œ
Tap the touch button Temperature Plus	Increases the target value in 1-degree steps	
Tap the touch button Temperature Minus	Decreases the target value in 1-degree steps	
Press the touch button Temperature Plus continuously	Continuous increase of the target value	
Press the touch button Temperature Minus continuously	Continuous decrease of the target value	
Simultaneously press the touch buttons Tempera- ture Plus and Minus	Changes the display from degrees Celsius to degrees Fahrenheit and vice versa	

Key command	Result
Press the touch button 'HEAT' for 10 seconds while the	Executes the factory reset, which is confirmed by a sequential run on the LCD. The following properties are affected:
VOLCANO HYBRID is	- Resets the setpoint temperature to 180°C (356°F)
switched on	- Sets the booster temperature to 15°C (59°F) above the setpoint temperature
	- Activates the automatic switch off: Runtime 30 min.
	- Sets the LCD backlight (brightness) to 80%
	- Activation of the acoustic signal when the set temperature is reached
	- Displays cooling down
	- Switches on the <b>Bluetooth®</b> module if previously switched off
	Note: the unit displayed so far (°C or °F) is retained with the factory reset
Press the touch button Temperature Minus and the 'AIR' control panel together for approx. 3 seconds.'	Activates/deactivates <b>Bluetooth®</b> . This is also reactivated by a factory reset.

#### 7.5. Application of the VOLCANO HYBRID Filling Chamber

Turn the Filling Chamber Cap counterclockwise in order to remove it from the Filling Chamber.



Remove Filling Chamber Cap

Fill the Filling Chamber with the desired amount of ground plant material up to the lower edge of the hopper.



Fill the Filling Chamber to the bottom edge of the hopper at most

Next screw on the Filling Chamber Cap again.



Screw on Filling Chamber Cap

Take care that the Screens are not obstructed with plant material. To guarantee optimal results, we recommend cleaning the Screens after each vaporization cycle with the enclosed Cleaning Brush.

Place the Filling Chamber with Cap on the hot air outlet of the Hot Air Generator and turn clockwise. Please make sure not to apply too much pressure and not to over-tighten the threads. Otherwise, the device could be damaged and introduce health risks to the user. Switch on the pump. To do this, tap the

touch button pump (AIR). The Filling Chamber as well as the vaporization material must be preheated for a couple of seconds before the aromas and fragrances start to vaporize. Remove the Mouthpiece from the Valve Balloon before placing it on the Filling Chamber.

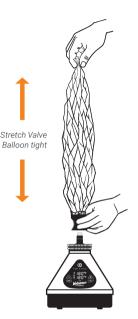




#### 7.6. EASY VALVE Balloon

#### 7.6.1. Application

Tighten the Valve Balloon before placing it on the preheated Filling Chamber filled with vaporization material, so that the Balloon stands vertically on the Hot Air Generator during filling.



Place the Valve Balloon on the preheated Filling Chamber filled with vaporization material and let it lock in place. This will open the Valve. Now the Valve Balloon will fill with vapor.

Only fill the Valve Balloon with the approximate amount of vapor that you intend to use within the next 10 minutes. Do not fill the Valve Balloon completely (overpressure) in order to prevent the

loss of vapor. It is important to observe the vapor density in the Valve Balloon (see Chapter 5. "Factors influencing Vaporization", page 65).



Watch vapor density

When the Valve Balloon is filled, switch off the pump by tapping the touch button pump (AIR) again - and remove the Balloon together with the Filling Chamber. To do this, grasp the Filling Chamber Cap by the rotating knobs and unscrew counterclockwise.



Remove Valve Balloon with Filling Chamber

Caution! Hot surface!

Ŵ



after the Valve Balloon has been filled.

Do not leave the Filling Chamber on the hot air outlet of the VOLCANO HYBRID - except for filling the Valve Balloon - as long as its heater is switched on.



Caution! Hot surface! Do not leave Filling Chamber on VOLCANO HYBRID

Detach the Valve Balloon from the Filling Chamber. When you do so, the Valve is automatically closed so that the vapors in the Valve Balloon cannot escape. Attach the Mouthpiece to the Valve and allow it to lock in place.

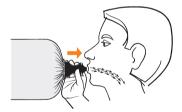


Attach the Mouthpiece to the Valve Balloon

To inhale, put the Mouthpiece to your lips and press them lightly against the Mouthpiece. By doing so, the Valve opens and the vapors can be inhaled from the Valve Balloon. As soon as you remove the pressure from the Mouthpiece, the Valve automatically closes.



Detach Valve Balloon from Filling Chamber

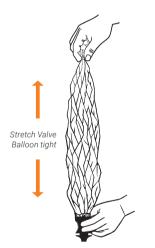


Press Mouthpiece against lips and inhale slowly and evenly for several seconds



To avoid residual moisture deposition in the Valve Balloon, and to minimize the risk of possible contamination, do not blow into the Valve Balloon.

As the content of the Valve Balloon deflates, it may be completely emptied by stretching the Balloon taut and subsequently inhaling the content.



#### 7.6.2. Attachment of the Balloon to the EASY VALVE with Balloon Adapter

As an alternative to the VOLCANO Balloon, use an odor-free, heat-resistant and food safe oven tube or oven bag, which is used in the food industry. It is available in nearly every drug store and supermarket. Do not use any other plastic bags or clingwraps. The procedure to change a Balloon with a heatproof oven tube is described below:

Cut a piece of Balloon Material of approx. 50-60 cm (19-23 inch) and tie it close at one end.



Cut a piece of approx. 50-60 cm (19-23 inch)

Loosen the Balloon Matierial by inserting your hand in the tube. Remove the plastic strip lying on the Balloon Material and use it to tie one end of the tube up tightly.



Tie the Balloon tightly closed at one end

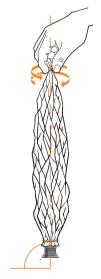
As the opening of the Balloon is much wider than the diameter of the Valve Housing, the Balloon must be neatly folded to fit. Fold the opening into 16 folds. Then pull the Balloon Fixation Ring approximately 3 cm (1.2 inch) over the open end of the Balloon and then pull the Balloon Fixation Ring with the Balloon over the Valve Collar until it fits into the intended notch.



Attach Balloon to Valve

Adjust the folds equally around the Valve Collar making sure that the Valve hangs straight down when the Balloon is held at the end.

Bend the protruding end of the Balloon back. Secure the Balloon by pulling the Slipring over both the Valve and the Balloon Fixation Ring so that the Balloon Fixation Ring is no longer visible and the protruding end of the Balloon points backwards.



Align Balloon to Valve



Fixing the Balloon with the Slipring

If needed, the extending collar can be trimmed away using a pair of scissors, taking care to avoid making a hole in the Balloon.

Valve Balloon ready to use



Balloon sets can be ordered at **www.storz-bickel.**com.

#### 7.6.3. Reusability

The EASY VALVE Balloon and its Mouthpiece require no maintenance. For hygienic reasons, they should be replaced with a new Valve Balloon and Mouthpiece every two weeks. To avoid possible transmission of pathogens, Valve Balloon with Mouthpiece may only be used by one person and not together by several persons.

#### 7.7. Tube Kit

#### 7.7.1. Application

Before using the Tube, switch off the pump by pressing the touch button pump (AIR).

Instead of the Valve Balloon, place the Tube with Tube Flexer directly on the preheated Filling Chamber filled with vaporization material. Then turn the Filling Chamber clockwise until it stops. Slowly inhale the vapor from the Tube with the Mouthpiece attached for a few seconds.



Inhale slowly for a few seconds from the Tube with the Mouthpiece attached



To avoid residual moisture deposition in the Tube, and to minimize the risk of possible contamination, do not blow into the Tube.



#### Caution! Hot surface!

Do not touch any components of the Filling Chamber (except at the textured grip) until they have cooled down.

Do not leave the Filling Chamber on the hot air outlet of the VOLCANO HYBRID - except when using the Tube Kit - as long as its heater is switched on.



Caution! Hot surface! Do not leave Filling Chamber on VOLCANO HYBRID

#### 7.7.2. Reusability, Cleaning and Care

The Tube is maintenance-free and must be replaced with a new Tube every two weeks for hygienic reasons. To avoid possible transmission of pathogens, the Tube with Mouthpiece may only be used by one person and not together by several persons.

Clean the Tube Flexer and the Mouthpiece regularly together with the Filling Chamber parts as described in Chapter 7.8. "Cleaning and Care of the VOLCANO HYBRID Filling Chamber with Filling Chamber Cap", page 85. Disconnect the Tube from the outlet of the Tube Flexer and the Mouthpiece by pulling it off. Disconnect the Tube from the outlet of the Tube Flexer and the Mouthpiece by pulling it off. Cut off a new piece of Tubing Section (approx. 1 m) and attach the Tube Flexer and Mouthpiece.



#### Caution! Hot surface!

Do not use Tubes shorter than 1 m, otherwise they will not have sufficient cooling effect (danger of burning).

#### 7.8. Cleaning and Maintenance of the VOLCANO HYBRID Filling Chamber, the Tube Flexer and the Mouthpiece

Please allow the Filling Chamber, the Cap and the Tube Kit to cool down before disassembling them.

The component parts of the Filling Chamber as well as the Tube Flexer and the Mouthpiece must be thoroughly cleaned on a regular basis to guarantee proper operation and pure flavor. For hygienic reasons, it is also necessary to clean the Filling Chamber with Cap when the device is to be used by a different person. If a new Valve Balloon or Tube is used, the Filling Chamber must also be cleaned first. Isopropyl alcohol with paper or cotton cloths or warm water with dishwashing liquid can be used for manual cleaning.

Filling Chamber and Cap as well as the Tube Kit may be easily disassemblend and reassembled for cleaning in a few seconds. (See Chapter 7.8.1 "Disassembling and Assembling the Filling Chamber Cap", 7.8.2. "Disassembling the VOLCANO HYBRID Filling Chamber", 7.8.3. "Assembling the VOLCANO HYBRID Filling Chamber". as well as 7.8.4 Disassembling and Assembling the Tube Kit", starting on page 86). Filling Chamber and Cap Components as well as the Tube Flexer and the Mouthpiece may also be cleaned in a dishwasher. However, the Screens and the Filling Chamber Rings are too small and could get lost.

Before assembling allow all component parts to dry properly.

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Manual cleaning with isopropyl alcohol (70 %) or detergent



#### Warning! Isopropyl alcohol is flammable and may easily ignite.

The safety instructions furnished by the manufacturer of the isopropyl alcohol

must be observed!



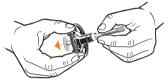
Do not immerse plastic parts in isopropyl alcohol for more than half an hour. Prolonged

contact with isopropyl alcohol can lead to color changes or embrittlement of the plastic parts.

After cleaning, check all component parts for surface damage, tears, softening or hardening, impurities, distortion and discoloration and set damaged component parts aside.

#### 7.8.1. Disassembling an Assembling the Filling Chamber Cap

Push the upper Screen downwards, by using (for example) the handle of the Cleaning Brush supplied.



Push out the upper Screen with help of the Cleaning Brush

Push the Cap Cylinder downwards out of the Cap Housing. At the same time the Cap Ring will be stripped off.



Push the Cap Cylinder out of the Cap Housing

Reassemble in reverse order.

Slide the cap cylinder into the cap housing and let it lock in place, then strip the Cap Ring from above over the cap cylinder up to the cap housing.

When using ground plant material, press the upper Screen into the cap cylinder from below and let it lock in place in the notch provided for this purpose.

When using extract (aromatic oils), the two Screens are not required. Only the Drip Pad is used instead of the lower Screen.



The upper Screen has to be placed carefully into the intended notch. If this is not observed, particles of herbs can get into the Valve Balloon or the Tube and be inhaled.

#### 7.8.2. Disassembling the VOLCANO HYBRID Filling Chamber

Press the Filling Chamber Cylinder with Screen or, if necessary, Drip Pad upwards out of the Filling Chamber Housing.



Press the lower Screen upwards out of the Filling Chamber Cylinder.



#### 7.8.3. Assembling the VOLCANO HYBRID Filling Chamber

Push the Filling Chamber Cylinder from above into the Filling Chamber Housing and allow it to lock in place.

Insert the Screen or the Drip Pad into the Filling Chamber from above. Screw the Filling Chamber Cap cap onto the Filling Chamber clockwise.

#### 7.8.4. Disassembling and Assembling the Tube Kit

Pull the Tube Flexer and the Mouthpiece off the Tube.



For reassembling, attach the Tube to the Tube Flexer and the Mouthpiece to the Tube.

## 7.9. Drip Pad

The Drip Pad is used to vaporize the extracts (aromatic oils) of the plants specified in the plant list. The stainless steel wire of the Drip Pad serves as the carrier of the essence, comparable to the unvaporizable plant fibers in vaporization plant material.

Caution! The extracts are usually concentrates; therefore, a very small dosage is sufficient. The evaporated concentrates must not be inhaled directly, but must only be pumped directly from the Filling Chamber into the room air without a Valve Balloon or Tube attached.

## 7.9.1. Preparation

If the Drip Pad is used, the Screens in the Filling Chamber are not required and should be removed. The Drip Pad is inserted into the Filling Chamber instead of the lower Screen.



Preparation to use the Drip Pad

#### 7.9.2. Application

Turn the Filling Chamber upside down and use a pipette to drop the extract onto the center of the bottom of the Drip Pad. The Drip Pad (dimensions Ø  $15 \times H 5$  mm) can hold up to ten drops. If you use an extract with unknown concentration, use maximum one drop and carefully increase the amount until you achieve the correct dosage.



Applying drops with a pipette

Please note that oils become more liquid at high temperatures. If you use too many drops, the extract could drip into the Hot Air Generator, which must be avoided.

Certain extracts may be provided in a diluted form as alcoholic solutions The advantage of such extracts is that the liquid is distributed more evenly around the stainless steel wire of the Drip Pad. Therefore, the surface used for vaporization is larger. However, if such extracts are used, first the alcohol must be separated from the extract as alcohol should not be inhaled. To do this, put the Filling Chamber onto the unheated (room temperature) Hot Air Generator and switch on the pump until the alcohol has evaporated, which may take a few seconds. As alcohol has a characteristic odor, a simple smell test can be performed to find out whether the Filling Chamber is free of alcohol. The extracts that vaporize only at higher temperatures remain in the Drip Pad. Then heat up the Hot Air Generator and add the extract remaining on the Drip Pad as described in Chapter 7.5. "Application of the VOLCANO HYBRID Filling Chamber", described starting on page 77.

Extracts without solvents can be vaporized directly after they are applied to the Drip Pad. Ш

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## 7.9.3. Cleaning

Place the Drip Pad in isopropyl alcohol and rinse well. As the Drip Pad is made of stainless steel, it can be used again and again if it is cleaned well.

## 7.10. S&BApp

The S&B App is not necessary for the operation of the Hot Air Generator, but allows individual settings and the reading of additional information during operation with the Hot Air Generator.

To do that, connect the Hot Air Generator to an iPhone or Android smartphone via **Bluetooth®**. The minimum requirement is iOS6 or higher and Android 4.3 or higher. The S&B App can be downloaded from the App Store or Google Play Store.

#### 7.10.1. Connecting the VOLCANO HYBRID with a Smartphone

Switch on the smartphone and download the S&B App. Ensure that the **Bluetooth**<sup>®</sup> function is switched on and this is not blocked by another **Bluetooth**<sup>®</sup> device. Then switch on the VOLCANO HYBRID and, after that, the S&B App.

When selecting the VOLCANO, you will be asked to enter the serial number (= six-digit alphanumeric character string on the type label at the bottom of the device (prefix "VH" is already specified)) of your VOLCANO HYBRID.

It is sufficient to enter the serial number once. Calling the S&B App automatically connects the two devices. If another VOLCANO HYBRID is to be controlled by the same smartphone, the previous connection is to be disconnected by use of the "Disconnect" button and the serial number of the other VOLCANO HYBRID entered.

# 7.10.2. The Menu Items of the S&B App

#### Temperature:

Temperatures can be set on the device itself as well as through the app.

Temperatures can be set between 40°C-230°C (104°F-446°F); see Chapter 4. "Overview of Plants", page 64).

When you press the plus button, the set value is increased, and when you press the minus button, the set value is decreased. When you briefly tap on the plus or minus button, the set values are increased or decreased respectively in 1-degree increments. If you keep the plus or minus button pressed, the set values start running continuously in the corresponding direction. The current actual temperature can be read from the upper line of the display.

## Fahrenheit/Celsius

If you simultaneously tap on the plus button and the minus button, the display changes from degree Celsius to degree Fahrenheit and vice versa.

#### Device

Device-related information, such as operating hours, software versions etc. can be found in this section.

## Information

Here you will find further information such as lists of plants and prices, Quick Start Manuals, Instruction for Uses, Terms and Conditions, Privacy Policy as well as direct links to the Storz & Bickel website or to the online shop.

#### Settings

In the settings section, you can change further individual settings, e.g. adjusting the time to shutoff. You will find further informaiton about the S&B app here:

https://www.storz-bickel.com/eu/en/app/.

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## 8.1. Filling Chamber Reducer

Suitable for vaporizing small amounts of plant material, is the Filling Chamber Reducer, which is available as an accessory, along with the Dosing Capsules. For vaporizing small amounts of aromatic oils, the small Drip Pad is to be used additionally.

The Filling Chamber Reducer is used instead of the Filling Chamber Cylinder (see Chapter 7.8.2. "Disassembling the VOLCANO HYBRID Filling Chamber" and 7.8.3. "Assembling the VOLCANO HYBRID Filling Chamber", starting on page 87).

#### 8.1.1. Filling the Filling Chamber Reducer with ground Plant Material

The Filling Chamber Reducer can be filled with ground plant material directly. Dosing Capsules containing ground plant material can be inserted into the Filling Chamber Reducer as well.



Fill the Filling Chamber Reducer with ground plant material directly or with a filled Dosing Capsule

#### 8.1.2. Filling the Filling Chamber Reducer with aromatic Oils

Either directly insert the small Drip Pad (dimensions Ø 15 x H 5 mm) into the Filling Chamber Reducer or a Dosing Capsule equipped with a Drip Pad (dimensions Ø 13 x H 6 mm).



Insert either a small Drip Pad directly into the Filling Chamber Reducer or a Dosing Capsule equipped with a Drip Pad



Please make sure to not overfill the Drip Pad. It can contain up to five drops.



For details on how to use the Drip Pad, please refer to Chapter 7.9. "Drip Pad", page

88.

#### 8.2. Dosing Capsules (for single use) and Magazine



Dosing Capsules with Magazine

With the Dosing Capsules, which are available as accessories, you can fill ground plant material or aromatic oils using the Drip Pads into the Dosing Capsules in advance and store them in the Magazine. This facilitates the handling.

The Dosing Capsules are disposables, which must be thrown away with your regular household waste after use.

#### 8.2.1. Filling the Dosing Capsules with ground Plant Material

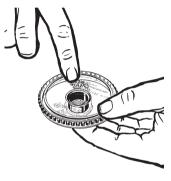
The plant material has to be ground with the included Herb Mill first.

The Dosing Capsules can be filled with ground plant material per Capsule and be stored in the Magazine as a reserve.



Dosing Capsule with removed cap

Grind the plant material and fill the Dosing Capsule by using the Magazine Cap (funnel).



Dosing Capsule while being filled with Magazin Cap (funnel)

Attach the cap onto the Dosing Capsule. Repeat the filling process until the desired amount of Dosing Capsules is filled and insert them into the Magazine. The Magazine can hold up to 8 Dosing Capsules.



Attaching the Magazine Cap

After filling the Dosing Capsules, attach the Magazine Cap and close it by turning it clockwise.

# 8.2.2. Filling the Dosing Capsules with aromatic Oils

The Dosing Capsules with inserted Drip Pad, which are available as accessories, can be filled with aromatic oils and store them in the Magazine. For details on how to use the Drip Pad, please refer to Chapter 7.9. "Drip Pad", page 88.

Attach the cap onto the Dosing Capsule. Repeat the filling process until the desired amount of Dosing Capsules is filled and insert them into the Magazine. The Magazine can hold up to 8 Dosing Capsules.



Attaching the Magazine Cap

After filling the Dosing Capsules, attach the Magazine Cap and close it by turning it clockwise.

## 8.2.3. Inserting the Dosing Capsules

First, the Filling Chamber Reducer, also available as an accessory, must be used instead of the Filling Chamber Cylinder (see Chapter 7.8.2 "Disassembling the VOLCANO HYBRID Filling Chamber" and 7.8.3. "Assembling



Dosing Capsule with removed cap and inserted Drip Pad



Please make sure to not overfill the Drip Pad. It can contain up to five drops.

the VOLCANO HYBRID Filling Chamber", from page 87), then insert the Dosing Capsule with the cap facing upwards into the Filling Chamber Reducer.



The Dosing Capsule inserted into the Filling Chamber Reducer

Next screw on the Filling Chamber Cap again.



Screw on Filling Chamber Cap

The Filling Chamber Reducer can be filled directly as well (without a Dosing Capsule), see Chapter 8.1. "Filling Chamber Reducer", page 92.

#### 8.3. Filling Set for 40 Dosing Capsules

The Filling Set for 40 Dosing Capsules was developed to fill a larger quantity of Dosing Capsules simultaneously with ground plant material.



Filling Set for 40 Dosing Capsules

# 9. TECHNICAL SPECIFICATIONS

Characteristic	VOLCANO HYBRID
Voltage	220-240 V / 50-60 Hz or 110-120 V / 50-60 Hz
Heat output	270 W
Pump output	10 W
Selectable range of the vaporization temperature	between approx. 40°C-230°C (104°F-446°F)
Automatic switch off	Default setting: after 30 min. individually adjustable via the app.
Weight	approx. 1.8 kg (4.0 lb)
Size	20.0 x 18.0 cm (7.9 x 7.1 inch)
Safety category	II (protective insulation)

The voltage specification is located on the bottom side of the VOLCANO HYBRID Hot Air Generator.

Please unplug to disconnect from the mains current.

Subject to technical changes.

## Patents and designs:

www.storz-bickel.com/patents



Storz & Bickel GmbH & Co. KG

In Grubenäcker 5-9 78532 Tuttlingen, Germany

# 10. COMPLIANCE WITH LEGAL AND NORMATIVE REQUIREMENTS

The devices comply with the following EC Directives:

- Ê Low Voltage Directive (LVD) 2014/35/EU
- É Electromagnetic Compatibility (EMC) 2014/30/EU
- Ê DIN EN 61000 Electromagnetic Compatibility (EMC)



Manufacturer:

Storz & Bickel GmbH & Co. KG In Grubenäcker 5-9 78532 Tuttlingen, Germany

# **11. WARRANTY, LIABILITY, REPAIR SERVICE**

#### 11.1. Warranty

Storz & Bickel GmbH & Co. KG and Storz & Bickel America Inc., as the seller, hereby guarantee the customer, that the product will be free from defects in accordance with the specifications of German law, and pursuant to our General Terms and Conditions (GTC), upon which the purchasing agreement are based. In addition, we guarantee that our product VOLCANO HYBRID will be free from defects for a period of three years. Of course, Storz & Bickel will only be subject to a warranty obligation if the customer has purchased the products directly from us. If products are purchased from third parties. warranty claims may only be asserted against these third parties, and Storz & Bickel cannot provide any information on the content of such claims

In clarification, we would like to note once again, that the warranty extends only to correcting such initial defects that exist despite proper handling of the product in consideration of this Instruc-, tions for Use and further information provided to users. Normal wear or tear to the products is not considered a defect under warranty law. If the customer has commissioned third parties with completing maintenance or repair of the product, or if the customer uses external products, Storz & Bickel's warranty obligations will only exist if the customer can prove that the defect was not caused by use of the external service or external product.

Storz & Bickel will decide at its own discretion whether to correct a defect covered by warranty law through repair or by delivering a new product to the customer.

Any warranty claims must be directed to Storz & Bickel GmbH & Co. KG, In Grubenäcker 5-9, 78532 Tuttlingen. American and Canadian customers should direct warranty claims to Storz & Bickel America Inc., 1078 60th Street, Suite A, Oakland, CA 94608. Please send the complete defective item to us, not disassembled, with invoice. Please use external packaging that would prevent any damage during transportation.

In order to avoid misunderstandings, we would like to note that all information on our products provided in this Instructions for Use or elsewhere does not represent any guarantee of features or durability, unless we have expressly referred to a guarantee for such features or durability.

#### 11.2. Liability

Storz & Bickel shall be liable for any damages caused to the customer by our products in accordance with German law and pursuant to our GTC. Under said provisions, we are only liable for damages caused by intentional action or gross negligence, unless such damages involve death, personal injury, or injury to health, or if the injury is related to a cardinal contractual obliga-

# **11. WARRANTY, LIABILITY, REPAIR SERVICE**

tion. In such cases, we will also be liable to the customer for simple negligence.

## 11.3. Repair Service

In addition to our warranty obligations, we offer competent repair service to our customers. We will promptly repair any defective products made by us after we have informed the customer of estimated costs and obtained customer approval.

## 11.4. Copyright

This document is copyright protected, and may not be used either in whole or in part pursuant to Sections 15 et seqq. UrhG (German Copyright Act) without prior written approval of Storz & Bickel. Ш

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