AquaKat Frequently Asked Questions

Questions on function

1. What is the purpose of the AquaKat?

Through technical processing and transportation, water loses most of its vitality. The AquaKat was developed to vitalize tap water in all types of households and in wells. Various positive side effects occur when water is vitalized. One side effect is water hardness stabilization, i.e. lime crystallization behaviour changes; no descaling takes place – just a change in how these deposits are formed.

2. How does the AquaKat work?

The special construction of the AquaKat allows it to transmit frequency patterns which vitalize the water. The memory capacity of water is stimulated; i.e. certain water clusters (chains and bundles of molecules) are activated and start to resonate. This resonance is transferred through the whole system and damaging waves can be erased. The AquaKat is not a magnetic, chemical or electrical device.

3. What is in this device?

This device is constructed from a stainless cylinder, metal foil and flax batten. The metal foil has been informed (charged with frequencies) using the Penergetic system.

4. How much water can be treated using this device?

Where there is an even consumption of water, the AquaKat L can be used for houses accommodating 1 - 2 families, i.e. an average of 6 - 8 persons. The AquaKat M is suitable for 2 - 3 persons or secondary vitalization of warm water and the AquaKat S is designed for use when travelling or on single taps.

When more water is consumed, either two or more AquaKats or a larger size AquaKat are needed.

Questions on installation

5. How and where is the AquaKat installed?

The AquaKat should be attached to the water pipe using plastic cable ties or metal hose clamps. In a dwelling where these is a pressure tank – place the AquaKat after the pressure tank. The AquaKat can be attached to any standard approved plumbing water line – metal (e.g. copper) or plastic (e.g. PVC). The pipe should be clean and free from rust and dirt.

6. Is there anything in particular to be noted?

Strong electric currents disrupt the functioning of the AquaKat. If there are large electronic appliances in the room, you should measure electromagnetic pollution where the device is to be installed using a meter. A device such as a Tri-field Meter may be used to confirm there is no magnetic interference that could interfere with the proper functioning of the AquaKat.

With very old pipes, where lime deposits are practically the only thing keeping them watertight, there is a risk that these could leak. The AquaKat should not be used on old lead pipes. Plastic

pipes, in contrast to metal pipes, are more slow-reacting resonators. If the AquaKat is attached to plastic piping, the desired effect will take moderately longer.

7. Can the device be mounted in such a way that it touches two pipes?

This is possible in principle. However, it is more effective to join the two pipes using metal and to install the device before or on the join. The best solution, however, is to install one AquaKat on each main pipe.

8. Can the AquaKat be leaned against the wall?

No, the AquaKat should be positioned so that it does not touch the wall or floor, just the water pipe it is intended to influence.

9. Does the AquaKat have to be fitted in a certain direction?

Only the AquaKat S needs to be installed in a certain direction (and has an arrow to indicate that direction). For all the other sizes/models of AquaKats the direction of orientation does not matter.

10. Both a warm water and cold water pipe are available. Should an AquaKat go on each one or is it possible to connect the pipes? Would this affect the performance?

Ideally, an AquaKat L should be fitted to the cold water pipe and an AquaKat M fitted to the warm water pipe. In smaller apartments, the AquaKat S can also be used.

It is generally recommended to give the warm water supply a secondary vitalization (after the hot water heater), as the heating process reduces the vitality of the water.

11. Can an AquaKat be installed onto the hot water circulation (heating system)?

This is an ideal place for the ThermoKat M to be installed. Simply attach one to the water circulation heating system pipes after the boiler. Advantages: activated water, better heat transfer, less residue, deposits on expensive thermostats can be reduced in this way.

12. In an apartment building (or condominium development) where it is not possible to install a device onto the main water pipe, how can an AquaKat be installed in one's individual dwelling unit?

The AquaKat L (or M – depending on capacity requirements) can be attached where the pipe work branches off or in the apartment itself, if possible at the start of the supply pipe. If there is a lack of space, the AquaKat M can be used. The device can be fitted in the bathroom, kitchen, at the washing machine or under the sink, depending on where it is needed.

Questions on interactions and effects

13. Penergetic products are already in use. Is an AquaKat necessary and can the quantities of the other Penergetic products be reduced?

The products from Penergetic work in harmony with each other. Water is the most important element. Once an AquaKat is installed, you may observe that the quantities of other Penergetic products can gradually be reduced in all areas where vitalized water is in use. The amount depends: on average approx. 10% - 30%.

14. Can an earth ground cable disrupt the AquaKat?

Yes, if there is leaking current on this line and the protective device on the control panel does not respond.

15. What difference does the pipe material make?

The AquaKat will function with all pipe materials; best and most efficiently with stainless steel pipes, then with galvanized pipe and pipes made from other metal compounds. The effects are slower with plastic piping (see question 6).

16. Lime stabilization is managed by a magnet. Will this work together with an AquaKat?

No, the function of the AquaKat would be disrupted. The AquaKat attempts to neutralize the magnetic changes in water. A positive effect would no longer be noticeable. A possible remedy would be to take off the magnet and to bang with a hammer on various parts of the pipe to "dissolve" the magnetization, wait a few days and then install the AquaKat.

17. An electromagnetic device has already been installed to manage lime. Does this work together with an AquaKat?

See question 18. Take out the plug and wait a few days. Then install the AquaKat.

18. Will a chemical water-softening system disrupt the AquaKat?

Chemical systems cost a lot to maintain and are highly damaging to the environment. The system should be discontinued after the AquaKat has started to work. Water softeners can also be reduced in the dishwasher - the amount varies and must be tested.

19. Chemicals must be added to very aggressive water in order to protect pipes. Can this be left out now?

This is a tricky question. Where the pH-value is very low, you must wait and see how the AquaKat takes effect. After this, the chemical dosage needed can gradually be adjusted. It is possible that, in extreme cases, chemical treatment may still be necessary.

20. Does a reverse osmosis filter / filter work with the AquaKat?

Yes. However, the filter cartridges must be well maintained. Also, the AquaKat should be placed after the R.O. filter to revitalize the water again. A common complaint about R.O. water is that since it has essentially been stripped of its mineral content no longer has a satiating effect (no longer seems to quench one's thirst). Installation of an AquaKat after the R.O. filter will help to overcome this problem – giving the water more taste.

21. Due to pathogens, the water is treated with UV rays!

A common problem with UV treatment is maintenance. If the reflective mirror becomes cloudy, it effectiveness is reduced. Installation of an AquaKat before the UV device can be beneficial in preventing the UUV reflective mirror from becoming cloudy. On the other hand, the UV effect can reduce the vitalizing effectiveness of the AquaKat such that a further device may be need on the downstream side of the UV device.

22. There are lead pipes in the apartment. Can this cause problems?

The AquaKat should not be used on old lead pipes (hairline cracks in the pipes).

23. Can the AquaKat be combined with the Grander system?

We recommend that one or other system is chosen.

24. It is claimed that deposits in pipes may dissolve. Do these end up in large quantities in the body? Should a filter be installed?

Generally, old deposits are dissolved in the form of larger chips, which lodge in the tap's nozzle (filter). The fine lime particles that are dissolved temporarily increase the conductivity of the water. The dissolved lime is produced in small quantities and over a long period of time so there is no risk of an increased consumption of lime. An extra filter is not necessary.

Questions on effect

25. By how many degrees is the water hardness reduced following the installation of an AquaKat?

Water hardness stays the same; it can even be slightly increased for a time through the dissolved lime coming off the walls of the pipes. In almost all cases the AquaKat causes hardness stabilization, but no softening of the water takes place.

26. What is hardness stabilization? What happens to the lime?

Hardness stabilization is a physical process where the crystallization behaviour of water elements will change to such an extent that the crystals will no longer form in chains or in bundles. So, they no longer form aggressive lime or scale.

27. How can the effectiveness be tested?

In many ways: the starting point can be recorded. Here is an example:

Do you have problems with lime deposits? (Please tick)

BEFORE: extreme problems \Box quite bad \Box not too bad \Box none \Box

AFTER: extreme problems \Box quite bad \Box not too bad \Box none \Box

How often must your household appliances be thoroughly descaled?

BEFORE: 1. Tap nozzles 2. Saucepans 3. Coffee machine 4. Bathroom Fittings Page - 4 -

5._____ time between descalings

AFTER: 1. Tap nozzles 2. Saucepans 3. Coffee machine 4. Bathroom Fittings

5._____ time between descalings

Which subjective changes were noticeable in terms of...? Lime (to remove), water color (clearer), water taste, meals (taste), detergents (savings), laundry (softer), effort needed for cleaning, skin and hair (feel, appearance, ease of care), plants (appearance, health), animals (appearance, well-being), etc.

28. It is working well, but there are still hard deposits on the pressure cooker and the kettle – why?

In pressure cookers, temperatures of over 212° F and enormous pressure are normal. Under these conditions, lime starts to build as scale. After use, the pressure cooker should be cleaned, filled with cold, (AquaKat) energized water and left to stand. This can help to dissolve any deposits.

In kettles, leftover water which has already been boiled is often reboiled. Vitalization disappears over time, however. So this older water and released lime forms small deposits which can build up over time if they are not cleaned out. To avoid this, the kettle should be completely emptied after boiling and any lime remnants rinsed out.

29. The water is brown all of a sudden. Why?

This is a very positive effect! Lime and other components, like iron (rust) are dissolving from the pipes. During this time, pipes should be regularly and thoroughly flushed through.

30. The tap nozzles and filters are blocked.

Take off the tap nozzles and remove deposits which have released from the pipes and lodged there.

31. Can small children drink tap water which is being treated by an AquaKat?

This depends totally on the quality of the water supply. One noticeable effect that is often observed is that a former chlorine taste in water (assuming chlorine was added to the water supply system) suddenly has disappeared or is diminished. There are reports of children suddenly liking the taste of tap water once an AquaKat is installed, due to the absence of this former chlorine taste. Many substances are not even recorded in a simple analysis (15 parameters).

Questions on guarantee and life expectancy

32. How long does the device's guarantee last?

For residential installations a 30 day satisfaction guarantee with the right to return undamaged devices applies. For commercial or agricultural installations the same guarantee, bot for 60 days, applied. Also there is a 5-year guarantee on workmanship and materials.

33. How long does the AquaKat last?

Based on experience to date, a life expectancy of at least 20 years can be expected [In that the first devices installed over twenty years ago are still in use today.].

34. Product liability law?

The AquaKat was developed to vitalize water. The side effect of hardness stabilization is not a promise – it is a possible side effect.

35. And what happens if the device has stopped working after 3 months?

It is highly unlikely. However, contact your distributor and review with them possible changes or causes in order to identify a solution.

Questions on special applications

36. Can the AquaKat be used to vitalize swimming pool water?

In swimming pools etc., the AquaKat is fitted to the circulation pipe. An additional AquaKat can also be fitted to the central fresh water supply.

37. How many AquaKats are needed in a swimming pool?

The number of AquaKats needed depends on the daily flow of fresh water being exchanged. Up to 800 gallons of fresh water per day = 1 AquaKat. Quantities over and above this limit will require 2 and more AquaKats.

38. Problems with pathogens in a swimming pool?

When water is vitalized, the milieu for pathogens changes. This can bring about a situation where pathogens no longer thrive. The effects must be monitored.

39. Can chlorine be left out?

In public pools, regulations apply. A reduction in chlorine can be considered however. If pathogens are monitored, a more suitable dosage can be found. In general, 'normal' swimming pools can not be managed without using chlorine. The natural filters (algae, etc.) are lacking.

40. Can an AquaKat be fitted to an air-conditioning system?

Yes, an AquaKat can be used in conjunction with air-conditioning systems. UV-radiation would, however, inhibit the effectiveness of the device. If the system runs under extreme pressure and at very high temperatures, the effects may not be as high as expected.

41. Can the AquaKat be used in industrial plants?

The AquaKat was specially designed for domestic water systems. Industrial use must be discussed in advance with the manufacturers.

42. Important to note

Since water is such a large part of life and our most important foodstuff, the user will always benefit from a vitalization of their water supply.

Recommended Reading

The following books deal with the themes of water / drinking water.

<u>Water – A book about the phenomenal elixir of life and its re-vitalization</u> Gottfried Hilscher ISBN 3-929771-09-8

<u>The Healing Energies of Water</u> Charlie Ryrie IBSN 1-885203-72-1

<u>Messages from Water</u> Masaru Emoto (Doctor of Alternive Medicine)