



The AlkaStream is the result of almost two years' collaborative research between AlkaWay and the Mayu technology Group.



Ever since the release of the AlkaPod, the portable water ionizer, Ian Blair Hamilton, AlkaWay founder, has been researching how to convert the benefits of the AlkaPod into a simple system more suited to home use and 24/7 ionized, alkaline microclustered water. The result speaks for itself; the AlkaStream stands alone in a sophisticated technology marketplace for simplicity, reliability and safety.

AlkaStream uses a combination of media and energising; some from the high tech labs of USA, some from lesser known but equally powerful sources, like Maifanshi stone from China, with its unique ability to stabilise pH and impart negative ions, and tourmaline, already used in water ionizers to impart far infra red energy into the water.

The media in AlkaStream has been selected not just for its specific purpose, but also for its ability to work synergistically with surrounding media layers. This is the reason AlkaStream

performance, in the words of Karin Ma, co-designer, is 'greater than the sum of its parts in filtration and energising ability'.

As a result of testing, AlkaStream filters come in two versions; hard and soft water. Both have been fully lab tested using a 'toxic soup' of chemicals and contaminants. The results can be found [here](#).

Both filter are tested to give filtration protection for up to 5000 litres or six months use, whichever comes first. We recommend a six month change and have an automatic alert email system to make AlkaStream the easiest 'no worries' water ionizer on the market.



How AlkaStream Works:

The AlkaStream actually has twelve separate layers. Five of these are separator layers that prevent mixture of each media layer as well as performing sequential filtration.

Stage One: Ceramic

The lowest layer and first to filter the water is a ceramic with 0.2 micron filtration level; sufficient to block bacteria, cysts, etc. Ceramic was made famous by the British Doulton water filter company. Ceramic has the unique ability of repeated 'recycling' and a special scouring pad is included with your AlkaStream. Simply removing the filter and scouring the outer layer of the ceramic returns it to original filtration power.

That's just *one* of the things that makes AlkaStream 'greener' than other products of this type.

Stage Two: Ion Exchange resin



The second layer is ion exchange media (NSF Certified) This media has been used for many years to remove excess dissolved minerals from input water. In the AlkaStream it reduces water to a less mineralised state and also absorbs fluoride. This is the fundamental difference between the AlkaStream, electronic water ionizers and other non-electric water alkalizers using Activated Alumina.

Electronic water ionizers perform basic carbon filtration on input water and then separate acid and alkaline water using electrolysis. Other forms of non-electric alkalizers often do not use ion exchange resin. It's an expensive media but excellent for what it does; pre-treating and purifying the water prior to the next stage; further specific filtration and then remineralising and energising.

Summarizing, AlkaStream's main difference is to render input water as pure as possible THEN remineralise and energise.

Stage Three:



After passing through a 1 micron separator, the demineralised filtered water passes through a layer of patented US- made Centaur carbon. Centaur is a liquid phase virgin activated carbon that has been manufactured to develop catalytic functionality. It is unique in that it

concentrates reactants via adsorption then promotes their reaction on the surface of the pores. It works far more effectively than basic granulated carbon, especially in neutralising not just chlorine, but chloramines, a mixture of chlorine and ammonia. Compared to standard carbon with a surface area of 500 sq. M per gram, Centaur is double the surface area.

Many municipal supplies have turned to chloramines to reduce costs, rendering ordinary water filters useless.

Stage Four:



Stage four is a mixed media.

1. KDF 85 to remove iron and sulphides, further remove chlorine, chloramines and microorganisms, prevent scaling of later media, and most importantly, neutralise heavy metals. Patented KDF uses an electrochemical reaction. It transfers electrons between molecules, converting harmful contaminants into harmless

molecules.

It also fuses copper and lead to the media using a chemical form of electroplating. Any bacteria or mold that may have evaded prior filtration is also destroyed using a technique of disruption of electron transfer, effectively killing them.

2. Ionizing media. AlkaStream's proprietary ionizing media provides a constant stream of negative ions. Combined with the KDF and catalytic carbon, it pretreats the water in readiness for the powerful next layer of pure ionizing media.

3. Centaur carbon; mixed with KDF and ionizing media.

Stage Five:



Again, after another separator layer, the AlkaStream has a layer of pure ionizing media. This is the heart of the system, providing 24/7 ionizing of the water, high pH and O.R.P., for up to 5000 litres.

The system at this stage is purified energised water without any significant amount of dissolved minerals. The next layer is another mixed media layer. Media includes:

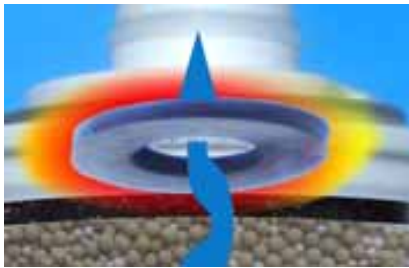
1. Centaur carbon to 'polish' the output water for the incredible final taste.
2. Zendo ceramic, used to add alkaline minerals as well as impart far infra red energy. The ceramic beads contain *Maifanshi* stone and jade, as well as purified alkalizing minerals.

Stage Six:



To perform a final cleanse on the ceramic and prevent any loose ceramic dust from entering the water, a final media layer of carbon and KDF is employed.

Stage Seven



A neodymium magnet is used as a final 'fixer' for the energized alkaline ionized micro-clustered water. This technology has been used for some years and assists in holding alkaline minerals in solution, ensuring that special, unique smoothness our users have grown to love.

Contaminants:

Fluoride

You will notice that in our laboratory tests, AlkaStream removed fluoride, a nasty additive to many water supplies. Ion Exchange resin removes fluoride *to a point*. This means that it absorbs fluoride until it no longer 'has space' for it. At that point your filter will begin allowing fluoride through. This is the reason we advise a maximum 5000L or six month lifespan. By changing your filter within these limits you will get the maximum possible protection.

Fluoride can only be removed by ion exchange or activated alumina. We chose not to use AA in the AlkaStream because its performance is subject to temperature, pH and flow rate.

Chlorine

Is adsorbed using Centaur carbon

Chloramine

Is adsorbed using Centaur carbon

Copper

Absorbed by Centaur Carbon

Lead

Absorbed by Centaur carbon

Taste, Odour Colour

Absorbed by Centaur carbon

Parasites

Blocked by Ceramic membrane

Rust, Dirt

Blocked by ceramic membrane. Cleanable with enclosed scouring pad for longer filter efficiency.

Volatile Organic Compounds

Formed when chlorine combines with organics. These assume many forms, but are neutralised using Centaur carbon.

Volatile Organic Compounds

Formed when chlorine or chlorine derivatives combine with organics.

Heavy Metals

Neutralised using patented KDF media

Excess Minerals

The second layer ion exchange media reduces acid and alkaline mineral levels, and the alkaline activation media replaces vital health-supporting alkaline minerals. Water emerges softer, smoother and microclustered.

The AlkaStream is a comprehensive filtration system with the very best of technology and traditional media providing the simplest, most comprehensive and lowest cost water ionizing family system available today.

Like all water systems, AlkaStream results will vary according to water quality