

# HYDROPATH

www.hdropath.com specialists in water care technology



HYDROPATH  
TECHNOLOGY



eco friendly



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## Water treatment Technology Specialists

**HydroPath Holdings Ltd**  
**is a world-leading specialist in water care technology**

We manufacture electronic ferrite water conditioners in the UK and our patented technology and ferrite bidirectional signal is unique in the treatment of water. A green & eco-friendly technology that does not require maintenance, servicing, salts or chemicals.

Used in a wide range of applications around the world as diverse as: oil wells, public buildings, residential homes, industrial processing, office buildings & farming. HydroPath technology is installed to remove existing lime scale & prevent future scale build up, for managing algae and bacteria problems and to improve filtration by flocculation for swimming pools & fish ponds.

HydroPath technology offers an advanced whole building or point of application solution for the management of water conditioning. The Company operates an ISO9001 quality management programme and all equipment conforms to the appropriate EMC regulations. Made of solid state technology, Hydroflow units have a one year fitness for purpose warranty as well as the standard three year guarantee.

### ***Benefits of using Hydroflow water care technology***

- ***Savings on heating bills***
- ***Prolongs the life of appliances***
- ***Prevents limescale build-up***
- ***Removes existing limescale***
- ***The solution for problems with Biofilm, bacteria & algae***
- ***Improves water clarity***
- ***Easy to install, and retro-fit***
- ***Very low running costs***
- ***Chemical free, green technology***

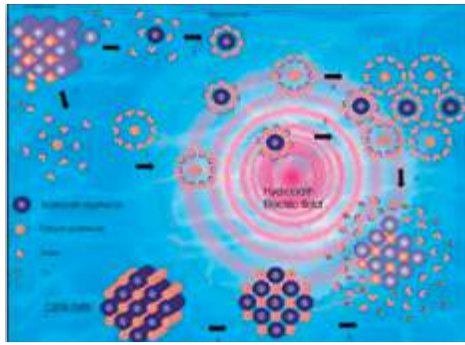




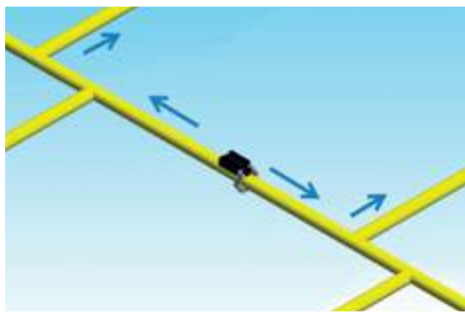
# HydroFLOW™

## Technology in action

### The Solution for problems with Lime scale

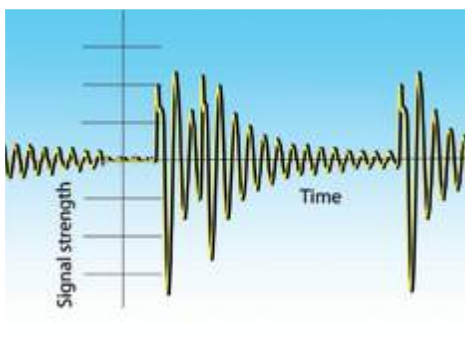


Hydroflow uses a unique patented technology to apply an electric field to the pipe and to the water inside the pipe, without using magnets or wire coils.



A signal is induced into the water and the water in the pipe carries the electrical signal throughout the pipe system.

When the water is either heated or the pressure decreases, the signal makes the positive and negative ions unite as a cluster and from the cluster a crystal is formed.



The crystal stays suspended in the water where it is flushed out of the pipe through the flow. As a result lime scale is prevented from adhering onto surfaces and any existing scale is broken down.

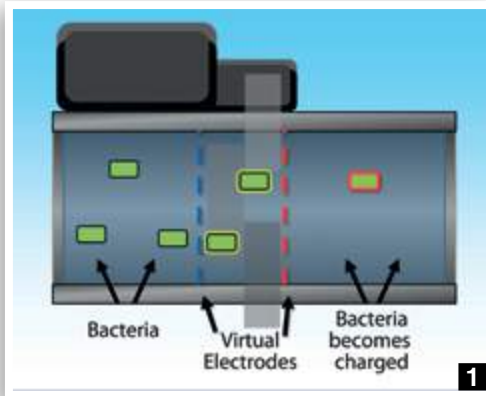
Hydroflow units are very easy to install because there is no cutting into the pipe. They are installed around it and this allows the ferrite ring to induce a bi-directional current into the pipe network.

The signal consists of a series of sine waves that decay exponentially, with a frequency of approximately 150 kHz. It is this oscillating signal which allows Hydroflow to be used in a wide range of applications.



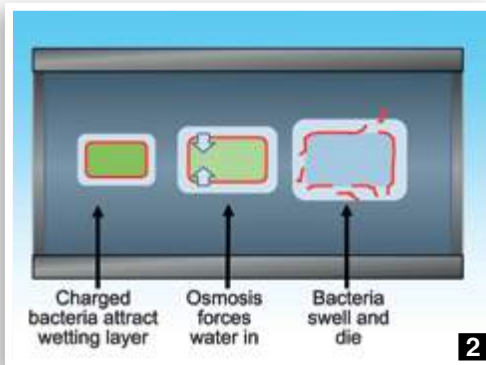
# HydroFLOW™

## The solution for problems with Biofilm, bacteria and algae

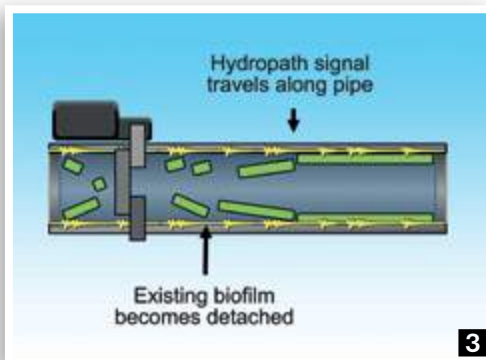


Biological contamination of industrial systems and commercial systems can be a major problem, and its treatment usually requires the use of large amounts of chemicals. Hydropath technology can reduce the problem of bio-fouling common in re-circulating water systems.

The units create “virtual electrodes” in the water and as the bacteria pass these become electrically charged **1**



The charged bacteria attract a wetting layer of extremely pure water. This is then forced into the bacteria by osmotic pressure, causing the bacteria to swell and die via osmotic lysis **2**

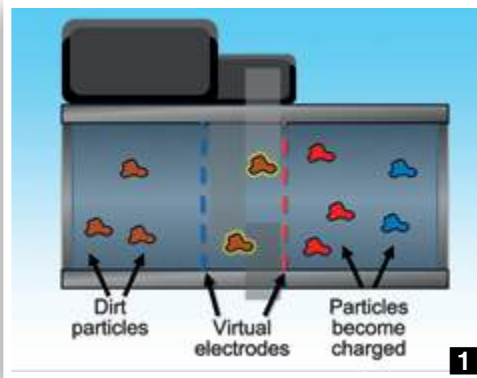


As well as killing bacteria and algae that pass through the unit, the unit also transmits a signal up- and downstream which will cause existing biofilm to detach **3**

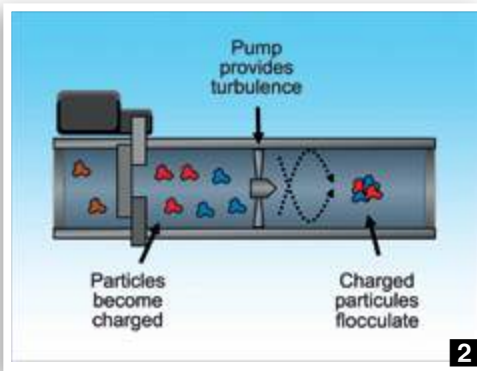


# HydroFLOW™

## The solution for Filtration

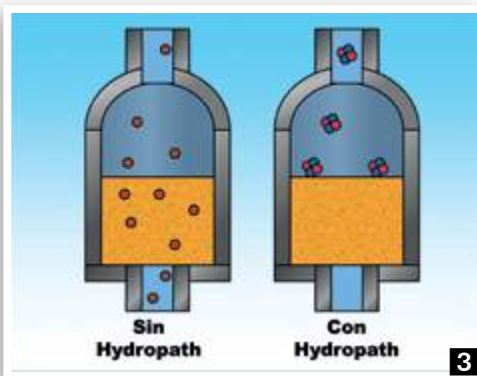


Any filtration system has an intrinsic limitation in that it can only filter particles of a certain size. In addition, over time the filter will become clogged, and require either cleaning or backwashing.



Hydropath units provide solutions to both these problems. As dirt particles pass through the unit **1** they become charged due to the “virtual electrodes” created. Turbulence (due to a pump, for example) stirs up the water and the particles will meet and flocculate together due to their electric charges **2**.

These larger clumps are more easily filtered out, so any filter will be much more effective and able to filter out particles of a smaller size **3**. The quality and clarity of the water is greatly improved.



Additionally, these flocks do not penetrate into the filter itself and so are much more easily removed. This means that the amount of backwash water can be vastly reduced - by around 4 times - saving money on water and sewage charges as well as any costs for heating and chemically treating the replacement water.





# HydroFLOW™

## Domestic & Mid Range Hydroflow products and applications



The **Hydroflow HS38**, is the domestic model for the average 3 bedroom sized home. Fitting one HS38 protects the boiler, pipes, pumps, and appliances from limescale build-up and removes the existing limescale too. This model also will also protect light commercial appliances like solar hot water panels, ice making machines, and tea urns.

Fits on pipe size up to 38mm outside diameter



The **Hydroflow S38**, is designed for a larger residential property 3+ bathrooms, light commercial and steam and sauna applications and appliances where lime scale might otherwise build up quickly for example: steam boilers, steam ovens humidifiers and evaporators reducing efficiency and causing equipment break down.

The S38 can be also used for management of algae and bacteria problems and for improving filtration, through flocculation in small household aquariums, and terrapin tanks. A special feature is that the S38 is fully encapsulated to protect the model from ingress of steam.

Fits on pipe size up to 38mm outside diameter



The **Hydroflow HS40** is the domestic model designed for the larger family home with larger pipe sizes. Fitting one HS40 protects the boiler, pipes, pumps, and appliances from limescale build-up and removes existing lime scale This increases the performance and reliability of your heating system, and appliances such as washing machines and dishwashers. The HS40 is easy to install and retro-fit. Fits on pipe size of up to 63mm outside diameter.

- Prevents limescale build-up
- Easy to install, and retro-fit
- Saves money on heating bills
- Removes existing limescale
- Very low running costs
- Prolongs the life of appliances



# HydroFLOW™

## Commercial and Industrial Hydroflow Products and Applications

The **Hydroflow S, C and I** ranges are commercial and industrial ranges designed for all areas of the heating, ventilation and plumbing system as well as for the management of buildings and for challenging applications within heavy industry.

The **Hydroflow Commercial C Range** is designed for all areas of a heating, ventilation and plumbing system in commerce as well as industry. The standard range is designed for pipe sizes up to 200mm, but bespoke models can be made for any pipe size. Fitting the **Hydroflow Commercial C Range** protects the boiler, pipes, pumps, and fittings from limescale build-up and removes the existing limescale. A BMS connection for building management comes as standard with the **C Range**.



The **Hydroflow Commercial S Range** is specifically designed to protect the industrial high-pressure steam boiler system. Installing **Hydroflow** protects against limescale build-up and removes the existing limescale too. The **Hydroflow S Range** is used for steam boilers in food processing, garment industry, commercial laundries and land fill sites. This unit is fully encapsulated.

The **Hydroflow Industrial I Range** is designed for challenging applications in industrial environments providing a range of water treatment benefits, including limescale protection, flocculation biofouling control and for saving water usage. In addition to being much more powerful than the standard commercial units, the Industrial range is fully enclosed to IP68 standards, and is designed for ease of connection to the power supply and business management systems.



- Prevents limescale build-up
- Easy to install, and retro-fit
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# HydroFLOW™

## Products and Applications for Swimming Pools and Hot tubs



The pool industry is a demanding sector, because the water must be of impeccable clarity. Hydropath Technology can save water and energy by reducing backwashing and the use of chlorine. It prevents algae accumulation, eliminates odour, reduces scum lines and surfaces will shine again.



The **Hydroflow K40 AquaKlear** is designed for the effective management of domestic pools, hot tubs, spas, hydrotherapy pools, swim spas, ornamental ponds, water features, and other related applications.

Poor water quality (due to particulates or bacteria/algae in the water) increases the time and cost spent on maintenance, reduces efficiency and decreases your enjoyment of the system. The **K40** will reduce maintenance time and costs, and increase the efficiency of the system.

Fits on pipe up to 63mm outside diameter.



The **Hydroflow P Range AquaKlear** is used in cooling towers in industry, and for public swimming pools.

Installing **Aquaklear** protects against limescale build-up and removes the existing limescale too.

Aquaklear is also designed for the management of algae and bacteria problems and for improving filtration, through flocculation. It fits around the pipe, and is suitable for all types of pipe material.



- **Prevents limescale build up**
- **Removes existing limescale**
- **Easy to install and retrofit**
- **Saves on water**
- **Save on heating**
- **Improves water clarity**
- **Reduces chlorine smell and chlorine use**
- **Reduce bacteria and algae**





# HydroFLOW™

## About Hydropath

Hydropath started in 1992 after founder Dr. Danny Stefanini devised his theory on crystallisation and developed the first prototype model for treating limescale within the home. The technology is used all over the world as a cost effective, energy saving, green technology and a proven means of conditioning water for limescale, flocculation, bacteria and algae management.

Hydropath's mission is to ensure that each and every water conditioner is packed and dispatched to the highest standard and does the job that it is designed to do.

Hydropath provides incomparable knowledge on Hydropath Technology and all the sectors and applications that utilise it, through on-going training programmes, consultation and support. Our commitment is to give all of our customers a professional service.

Based in Nottingham, UK, Hydropath is now the leading specialist in water care technology with more than one million units sold worldwide and with an ever increasing global presence, Hydropath Technology is available in 68 different countries, providing solutions for a diverse range of industries



**HYDROPATH**  
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Hydropath Authorised Distributor



[www.hydroflowcanada.com](http://www.hydroflowcanada.com)

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