

AquaKLEAR Is DESIGNED TO SAVE YOU MONEY
Guaranteed

Probably the most expensive consumable cost for any pool is filter backwashing

You have to pay for -

- * The replacement water
 - * Disposing of the backwash
 - * Heating the new water
 - * Chemically dosing

All this, can cost thousands of dollars a year

AquaKLEAR will reduce your backwashing bill by up to 75% while at the same time acting as a highly effective bactericide and algacide. It also reduces the presence of chloramines.

AquaKLEAR is a non invasive, well-proven and technologically advanced water treatment system.

Benefits for pool operators

- ⊙ Reduced water charges
- ⊙ Reduced heating costs
- ⊙ Reduced sewage charges
- ⊙ Bactericidal and algacidal effect
- ⊙ Enhanced pool environment
- ⊙ Elimination of flocculating chemicals
- ⊙ Less chlorine required to maintain concentration

Break down of chloramines

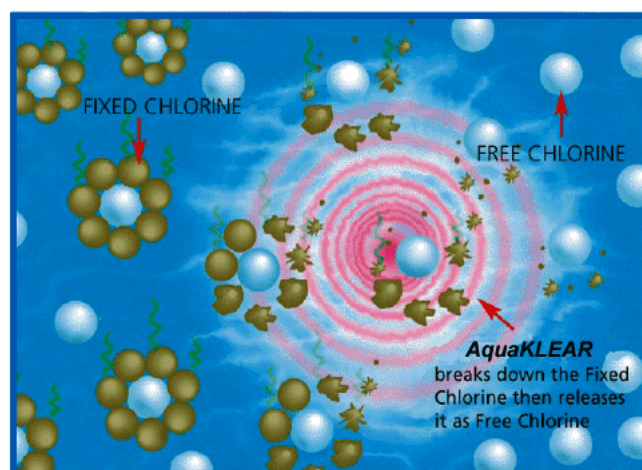
Chloramines are formed when chlorine reacts with the organic materials in the pool and joins with sodium. This is the substance that can produce the distinctive smell and causes sore eyes and irritation.

The electrical field generated by AquaKLEAR causes the bonds in the chloramine molecules, which are bi-polar, to stretch and then break releasing usable free chlorine once more. Most of the organic materials will then be flocculated as described above.



Reduced backwashing

AquaKLEAR achieves this by flocculating the dissolved solids into larger particles that come to rest on top of the sand filter rather than permeating through it. This means that the sand does not become clogged with flock and therefore to remove the surface flock takes far less time and water. The larger flock on top of the sand filter, consequently has larger spaces between, allowing water through and resulting in reduced pressure and frequency of backwashing. This flocculating effect is achieved by the suspended particles being charged by AquaKLEAR is a sinusoidal wave, and attracting water molecules to them. The film of water molecules that therefore surround the particles ensure that others that are attracted stay together to form larger flock.



AquaKLEAR

How does AquaKLEAR work?

An electrical signal (in the form of a sinusoidal wave) is introduced into the water through the pipe, plastic or steel, and the various effects are created.

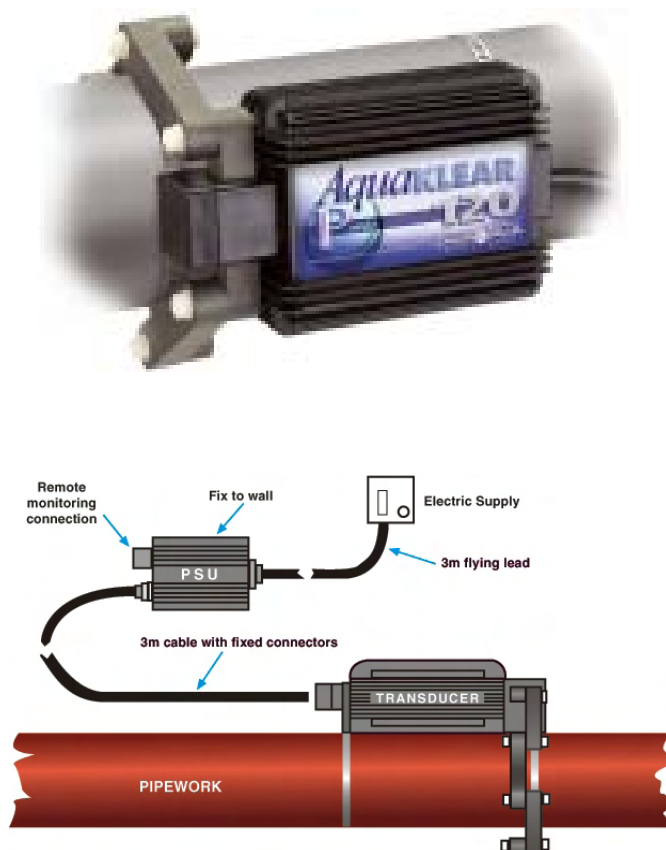
Bactericidal effect

The signal that is induced into the water as it passes through the area surrounded by AquaKLEAR gives a charge to the bacteria. This has the effect of creating a film of pure water around each bacterium. By the process of osmosis, water then flows through its outer membrane leading to a build up of pressure within. The bacterial membrane then either ruptures or the increasing hydrostatic pressure disrupts the metabolic processes and leads to its premature death.

Simple installation

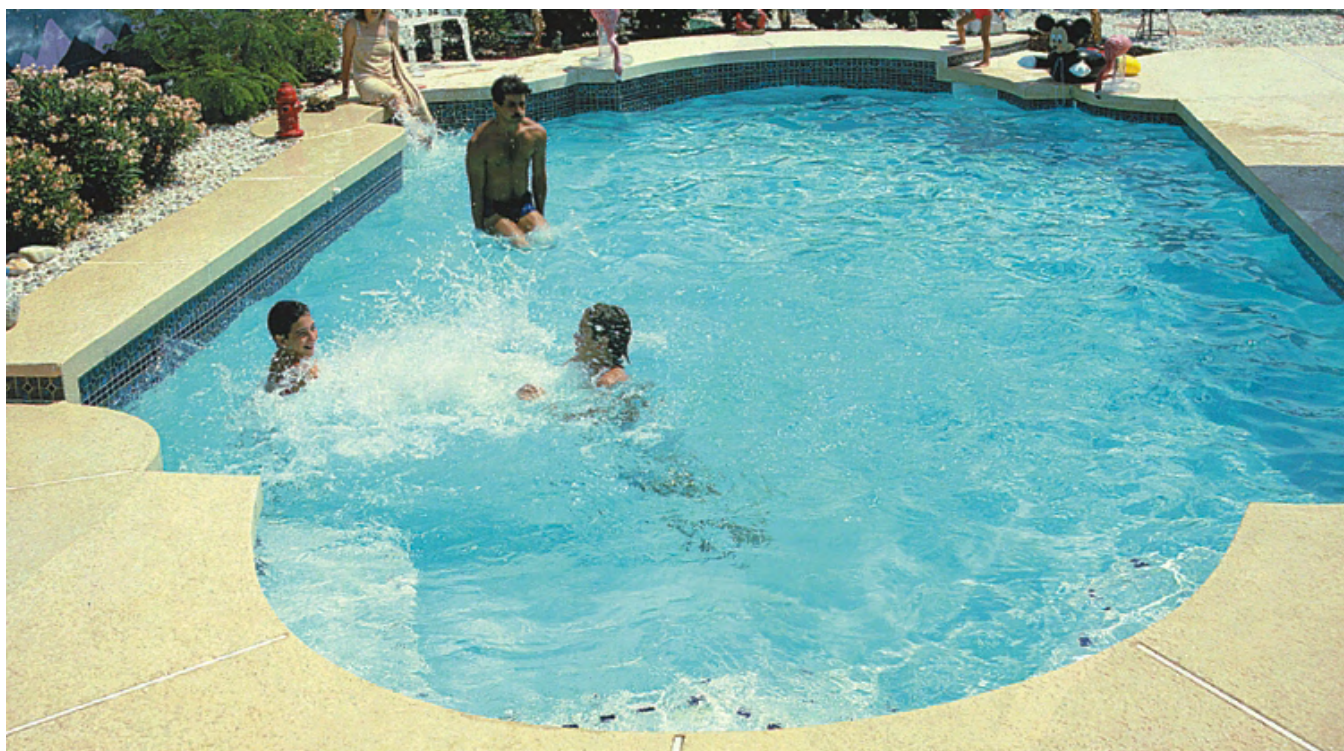
Installation can be completed without disruption to your existing plant and only takes about one hour per unit to complete - subject to local mains power supply.

Domestic Units Also Available:



Guarantee

AquaKLEAR is maintenance free and is fully backed by our two year on site product warranty and our unique two year performance warranty.



AquaKLEAR Cost Saving Calculations		
<u>Pool Operating Costs</u>		
Pump Flow Rate (cubic meters per min)	7	
Frequency of Backwashing per Week	1	
Time of Backwashing (min)	10	
Gap Between Backwashing in Weeks	4	
Incoming Water Temperature	50	
Pool Temperature	84	
Cost of Electricity (kw)		
Cost of Gas (kw)	\$0.12	
Cost of Oil (kw)		
Cost of Water (cubic meters)	\$0.12	
Cost of Chlorine (ltr)	\$0.03	
Chlorine Used per Week (ltr)	\$6.00	
Cost of Acid (kg)	\$38.84	
Cost of Coagulant / Unit	\$0.00	
Effluent Supply Charge per M3	\$0.49	
	<u>Before AquaKLEAR</u>	<u>After AquaKLEAR</u>
Pump Flow Rate (cubic meters per min)	7	
Frequency of Backwashing per Week	1	
Gap Between Backwashing in Weeks	1	4
Frequency of Backwashing per Year	52	13
Time of Backwashing (mins)	10	
Cubic Meters per Backwash	70	14
Cost of Heating for Backwashing Only	\$9,501.84	\$475.14
Cost of New Water	\$4,464.53	\$223.24
Effluent Supply Charge	\$1,775.20	\$88.77
Cost of Chlorine per Year	\$5,630.42	\$2,815.20
Yearly Use of Acid	\$1,413.71	\$471.24
Yearly Use of Coagulant	\$0.00	\$0.00
Total Cost per Year	\$22,785.70	\$4,073.59
Total Cost Savings	\$18,712.11	

Example: Castings were based on 25 meter commercial swimming pool. Prior to fitting AquaKLEAR, **backwashing was done once a week**. The pool operator provided all operating costs.

Once AquaKLEAR was fitted, **backwashing was carried out once per month**. There was no need for coagulants. The above savings reflect those made over a 12 month period.

UK Water Research Company Results

Clearly shows how AquaKLEAR creates the flocculation effect, which helps with the filtration of debris and extends time between backwashing.

Swimming Pool Customers Observe

No damaging effects on swim wear.
Smell of chloramines is virtually eliminated.
No cloudiness in pool.

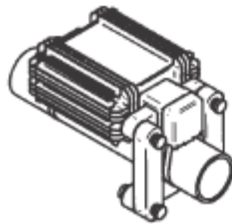
These Benefits Make Your Pool a More Attractive Place to Visit!

For More Information Contact:
ECMI Administrative Office
(866) 964-0072 or info@ecmi.us
WWW.ECMI.US

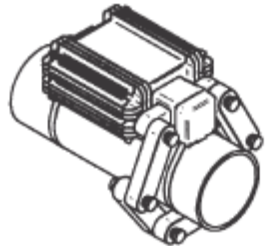
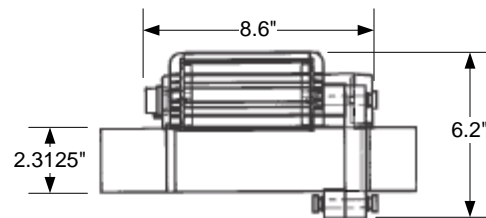


P Unit Sizes and Specifications

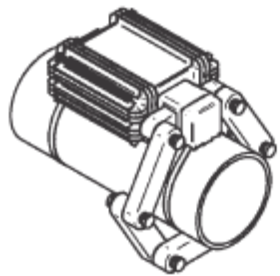
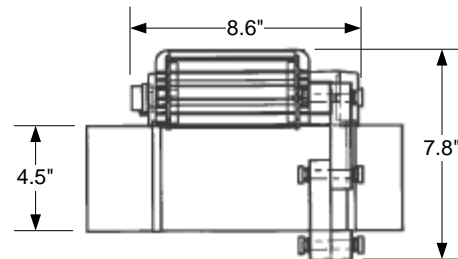
Note: Unit DOES NOT have to fit tightly on the pipe!



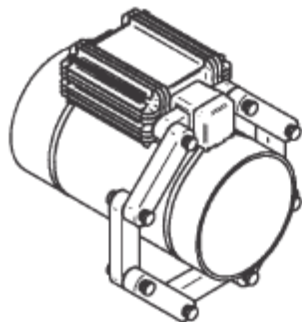
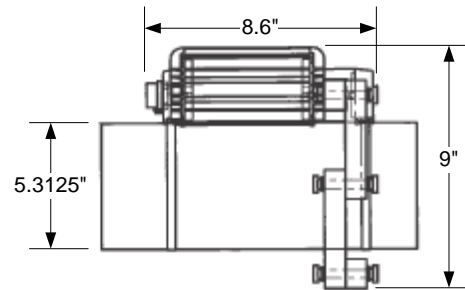
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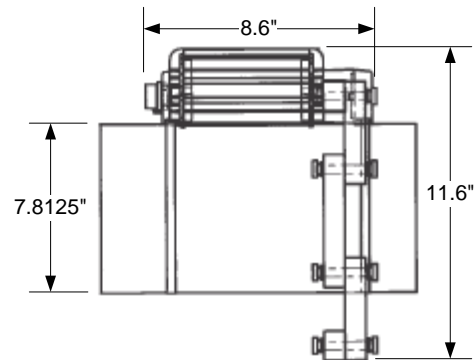
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Installation is accomplished easily by first securing the unit on the pipe using the hardware included, and then assembling the ferrite ring around the pipe.

Installation can usually be accomplished within minutes!

Please refer to the Hydropath Spec Guide for complete specification and installation guidelines.

