CLEARWATER TECH, LLC



"I've had more compliments on my Koi Pond since I've been using the ozone system from ClearWater Tech. I have less algae, healthier fish and cleaner water which gives me so much peace of mind."

Doreen Lew, Waterform Designs, Escondido, Ca



ClearWater Tech, LLC. Ozone Systems for Water & Air Purification

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or KOI PONDS

eeping Koi is a hobby of passion and perfection that is greatly enhanced by maintaining clean, clear water at all times. One of the best ways to maintain superior water quality in your Koi pond is with modern ozone systems from ClearWater Tech.

WHAT IS OZONE & HOW DOES IT WORK

Ozone is a naturally occurring form of oxygen molecule in an electrically charged state known as O_3 . O_3 is a highly reactive gas that eliminates organic waste products in the pond through oxidation – safely decomposing them. The ozone gas is used up in the oxidation process, reverting to the more common, non-reactive O_2 molecule.

CLEARER WATER THROUGH ALGAE CONTROL

Algae is not normally harmful, but it can ruin the aesthetics of your pond, to the point of not being able to see your beautiful koi at all. Ozone is effective in algae control because 1) it oxidizes the algae spores that give rise to the green bloom you don't want to see, and 2) it will help control some of the nutrients algae need for growth. Evidence suggests that ozone can help reduce filamentous stringy algae on the pond walls. Furthermore, older ponds gradually accumulate dissolved organic carbons (DOC) which turn the pond water a yellow color and actually inhibit fish growth. Ozone oxidizes DOCs and imparts a crystal clear and healthy look to the pond. These effects are a bonus over standard pond ultra-violet sterilizers.

PROPER USE OF OZONE

Too much ozone in the water, called residual ozone, can burn Koi gills. In a properly designed and maintained system, the residual ozone level will be very low and safe. Properly designed, installed and maintained ozone systems will give your Koi pond unsurpassed water quality and be safe for your fish. Here are some of the keys to a great system:

SIZING

An appropriately-sized ozone unit must be selected for your pond volume. A unit that is too small will not

give the desired water quality and a too-large unit can potentially harm your fish. It's important to work with a trained, knowledgeable dealer installer, who uses only quality equipment.

INSTALLATION

Correct installation of the ozone generator is essential for efficiency and safety. Ozone gas is usually injected into the return pipe lines to the pond. Here the gas mixes with pond water and begins to oxidize organics within the return water. The return line acts as a "contact chamber" – the longer the length and therefore contact time, the greater the oxidizing effect of the ozone on organic wastes, and the less residual ozone that will be returned to the pond. Any residual ozone reaching the end of the return pipe can be vented into the atmosphere by splashing the water over a waterfall. With good design and installation, very little residual ozone will return to the pond. Your authorized dealer can help you design an effective and safe system, incorporating the ozone system to best complement your other equipment including biofilters.

MAINTENANCE

Ozone will gradually reduce the amount of dissolved organic waste in your pond over time. As your pond water becomes cleaner, more ozone will be unused in reaction and remain as residual ozone. In other words, a dirty pond will require lots of ozone, while a clean pond will require much less. Hiqh-quality ozone systems include output controls and residual ozone measurement so you can safely control operation as your pond water quality improves. Your authorized dealer can provide or advise you on proper maintenance.

Quality ozone systems from ClearWater Tech will let you enjoy your Koi pond more than you might ever have imagined. Your authorized dealer can show you how easy it can be to experience the clearest, most sparkling pond ever.

ClearWater Tech would like to thank Laguna Koi Ponds for their expertise in Koi Pond Systems.