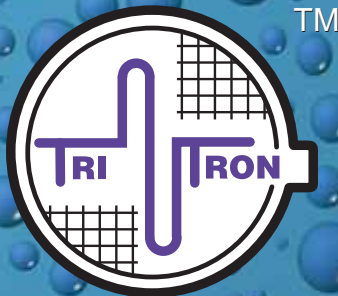
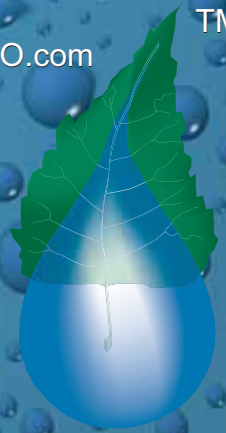


**DISCOVER THE...**

# **eH<sub>2</sub>O WATER TREATMENT SYSTEM**



***A TRULY REMARKABLE WATER TREATMENT ... GUARANTEED!***

TRI-TRON SAVES ENERGY AND CONSERVES WATER, prevents fouling of condensers and heat exchangers, cleans existing fouled systems, optimizes equipment life and performance, ends cleaning regimens, reduces maintenance, increases flow, controls corrosion, eliminates scaling, and curbs bacterial populations . . .

**. . . all while saving you money!**

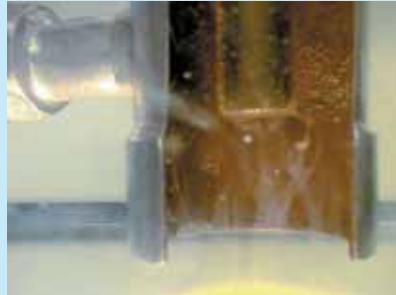
# WATER TREATMENT THAT SAVES YOU MONEY & HEADACHES

TRI-TRON'S PATENTED WATER TREATMENT SYSTEM offers a number of savings besides conserving water. These savings include: chemicals for treatment, elimination of down-time during such treatments, possible re-plumbing where scale chokes-off water flow, and the expensive labor involved in these processes. The increased water flow and optimum heating/cooling transfer are major benefits over unprotected water systems. The Tri-Tron water treatment system is simple to install and is manufactured for the most demanding indus-

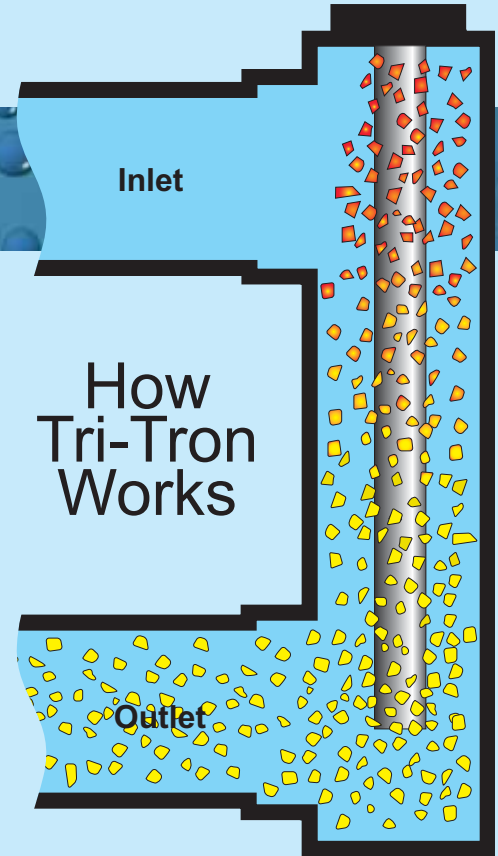
trial environments. Its compact size will free up floor space that other bulky water treatment systems require. The unit is self-operating and requires very little maintenance once installed. The return on investment of our efficient water treatment system, depending on geography and size of system, has been shown to be as short as one year.

## A PROVEN WATER TREATMENT

TO PREVENT "HARD WATER" DEPOSITS from forming in a water system the minerals must be removed. Expensive water softeners, or ion exchangers, remove the hardness, while other more expensive water treatment processes precipitate the hardness minerals. Tri-Tron's efficient and economical process precipitates the hardness from water as very small calcium carbonate crystals.

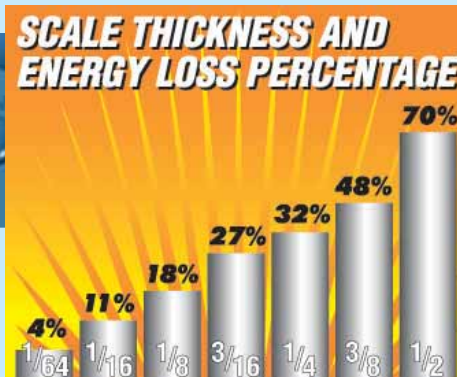


The cutaway view to the right is an actual picture of the Tri-Tron precipitating hardness minerals from the water and enhanced by a light shining from below. As the accompanying illustration shows, the water and dissolved minerals enter the flow cell and pass through the ions that are created from the probe. Once the dissolved minerals encounter the ions, they precipitate out as very fine crystals to be partially filtered or discharged.



## SCALING & FOULING FROM MINERAL ACCRETION

THE CHART ILLUSTRATES that even a small amount of scale produces energy loss that will greatly diminish your efficiency. Below are before and after treatment photos of the inside of a cooling tower.



This cross-section of a heavily scaled pipe shows how it would severely constrict water flow and diminish efficiency.



# DO YOU HAVE A PROBLEM WITH ANY OF THE FOLLOWING?

- Cooling towers
- Boilers
- Evaporative condensers
- Rinse & quench tanks
- Washing equipment
- Chillers

- Compressor cooling
- Pumps
- Heat exchangers
- General plumbing
- Instantaneous heaters
- Water heaters

- Reverse osmosis units
- Engine cooling

Tri-Tron can improve the performance of all of these . . . and more.

## eH<sub>2</sub>O TREATMENT BENEFITS MORE THAN JUST THE CUSTOMER

PROVEN CUSTOMER BENEFITS are eliminating normal water bleed or discharge, avoiding the use of harmful chemicals and the risk associated with them, and curbing bacteria—while complying with EPA regulations and even meeting drinking water standards.



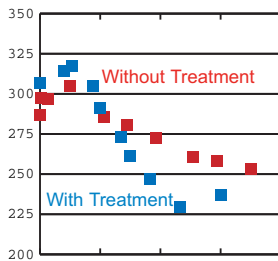
WHEN IT COMES TO ANY SYSTEM needing treatment, you can rely on a totally clean, earth friendly water treatment system without scale build-up. With cooling towers or boilers, the minerals are removed by filtration so it is not necessary to discharge or blow down the water which is normally done with chemicals. This clean system practice is a remarkable treatment for bacteria control. Most importantly, if the system does not operate as described, there is a full one-year money-back guarantee with the product—so you have nothing to lose and everything to gain by trying it.

## CHEMICAL FREE ENVIRONMENTALLY FRIENDLY

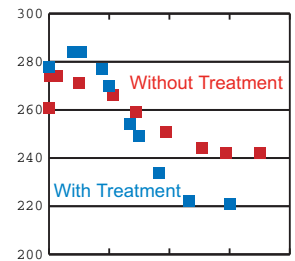
### Making Water Chemistry Work for You

Water analysis of a Tri-Tron treated system shows calcium and total hardness is lowered along with the alkalinity, total dissolved solids (TDS), and conductivity, to transform minerals into a calcium carbonate precipitate. This process also raises the pH of the water, making it less aggressive, and in conjunction with the calcium carbonate precipitate provides excellent corrosion control. Another benefit of our water treatment is the non-residual ions created are reactive agents that are responsible for disinfecting and controlling bacteria.

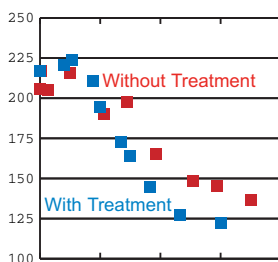
Total Hardness



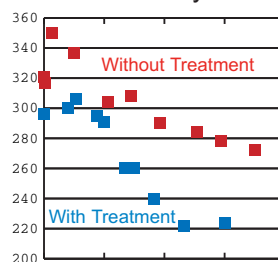
TDS



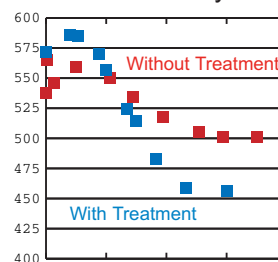
Calcium Hardness



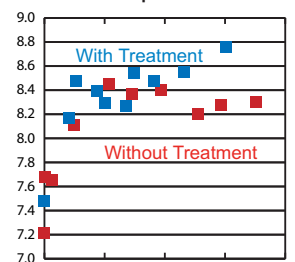
Alkalinity



Conductivity



pH





**TOTALLY CLEAN EFFICIENT WATER TREATMENT SYSTEMS**

At left is our typical small cooling tower system. Water enters the filter and is treated by the Tri-Tron and UV equipment, a controller measures and displays temperature, pH, and conductivity of the water. The water then flows through a corrosion coupon rack. Our system comes assembled on an aluminum frame with complete isolation valves and unions. The Tri-Tron microprocessor readout displays water conditions from the Tri-Tron flow cell, and will automatically adjust for water treatment if water conditions change to ensure continuous proper treatment.



Steam instantaneous heater system



Boiler system

Our small cooling tower system operates at the electrical cost of a 75-watt light bulb that does not deplete into the water—so it's never replaced. With easy maintenance and no moving parts, it is long lasting and trouble free.



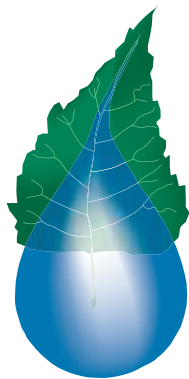
Typical tube-bundle hot water heating system



Large cooling tower treatment system

IF THE TRI-TRON WATER Treatment System does not perform as specified, a full refund of the purchase price will be made for up to one year from date of purchase.

The Tri-Tron Water Treatment System is guaranteed against defects in material and workmanship for a



**eH<sub>2</sub>O, LLC**

381 North Reese Street  
 South Lyon, MI 48178  
 248-437-4232  
 248-437-1241 fax

[www.eH<sub>2</sub>O.com](http://www.eH2O.com)

Dealer Imprint Area

period of five years from date of purchase.

This warranty does not cover damage due to improper handling or abuse, breakage of seal, or the application of improper voltage and Tri-Tron International, Inc. assumes no liability for improper installations.





# eH<sub>2</sub>O

We provide a  
**TOTAL SOLUTION**

## Benefits with Non-Chemical Water Treatment

### Saves Money

- Eliminate chemical costs and minimize insurance, storage, handling and disposal costs.
- Drastically reduce water costs and maintenance costs.

### Makes our Environment Safer

- Eliminate the presence and discharge of dangerous, toxic and cancer causing chemicals and chemical by-products.
- Control and kill Legionella p., E-coli and other microorganisms where these microorganisms are normally protected and grow.
- Functions as a biocide by stopping cellular respiration and degrading cell membranes.

### Conserves Water

- Drastically reduce blow down with higher cycles of concentration

### Makes Equipment Last Longer and Run More Efficiently

- Your system will run cleaner with no scale buildup and more efficient heat transfer to offset fouling.

**eH<sub>2</sub>O, LLC**

**381 N. Reese St.,  
S. Lyon, MI 48178  
248-437-4232  
248-437-1241 fax  
www.eH2O.com**



- ◆ WATER/ENERGY CONSERVATION
- ◆ ISO 14000 ENVIRONMENTAL SYSTEMS
- ◆ SCALE, CORROSION AND MICROBIOLOGICAL EXPERTISE

Our patented, non-chemical water treatment equipment **WORKS BETTER AND LONGER** than any other, with water chemistry documentation.

We have **PROOF WITH SATISFIED CUSTOMERS** and can quickly validate your application.

Our non-chemical equipment **SUCCESSFULLY CONTROLS BACTERIA** and our treated water has passed drinking water standards.

**WE HAVE ZERO DISCHARGE SYSTEMS** that have been in operation for as long as seven years

Our equipment is **EASY AND INEXPENSIVE TO INSTALL.**

Our equipment has **“ULTRA-MINIMUM” MAINTENANCE**

Our equipment has no moving parts and is **TROUBLE-FREE, LONG-LASTING** and has **“ULTRA-MINIMUM” OPERATING COSTS** equivalent to one 75 watt light bulb.

**FAST RETURN ON INVESTMENT** and **WE GUARANTEE OUR EQUIPMENT.**

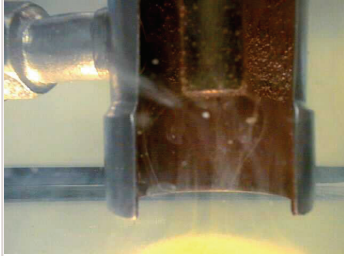
**LEED CERTIFICATION** addresses rating system for energy efficiency, water efficiency, and upgrades to meet green building energy and water.

***“Specialists in Advanced Non-Chemical Water Treatment Products”***



### TRI-TRON

Non chemical water treatment is now very well understood with research at Drexel that explains the dissociation of bicarbonate ions using the calcium ion as the charge center to accelerate the dissociation



process of bicarbonate ions to induce the bulk precipitation of calcium carbonate crystals.

With light shining through the glass, the view above is an actual non enhanced picture of the Tri-Tron cut away showing the calcium carbonate precipitating from the water. Now you can actually see this happen because our patented process produces so much bulk precipitate. This allows us to treat the water side stream and not full stream as the others, so maintenance can be performed and provide the equipment at a lower cost since it is only needed to treat a small percentage of the water. As with most precipitation softening, the increased pH along with the calcium carbonate precipitate provides excellent corrosion control.

# A Better Water Treatment



### MICRO-TRON/TRI-TRON ELECTRONICS

Automatic blowdown is just the beginning. The Tri-Tron will notify

the user if any maintenance is necessary so the system runs at 100% efficiency. The others get shielded from deposits and then loose efficacy. Remotely monitor water conservation, conductivity, pH and the actual performance of the water treatment. This can be done over the internet or using a common monitoring system language.



Once you see all of this data, it is impossible to have it alter the optimum performance parameters. For the first time, perform SPC for water treatment results.



### COUPON RACK

This rack has two coupon holders for monitoring and an added port for the MicroTron.

# eH2O ... Superior Performance



### FILTRATION

Filtration is very important and we offer bag filtration that is shown, or a media filter that uses water to backwash. We filter the water side stream so we can polish the water and remove the dirt, debris, sand and silt that deposit with calcium and other minerals in systems that create ideal colonies for microbiological growth. These deposits also are where microbiological induced corrosion will take place so it is vital to remove these materials. The filtration also removes the Tri-Tron precipitate.

### SANITRON

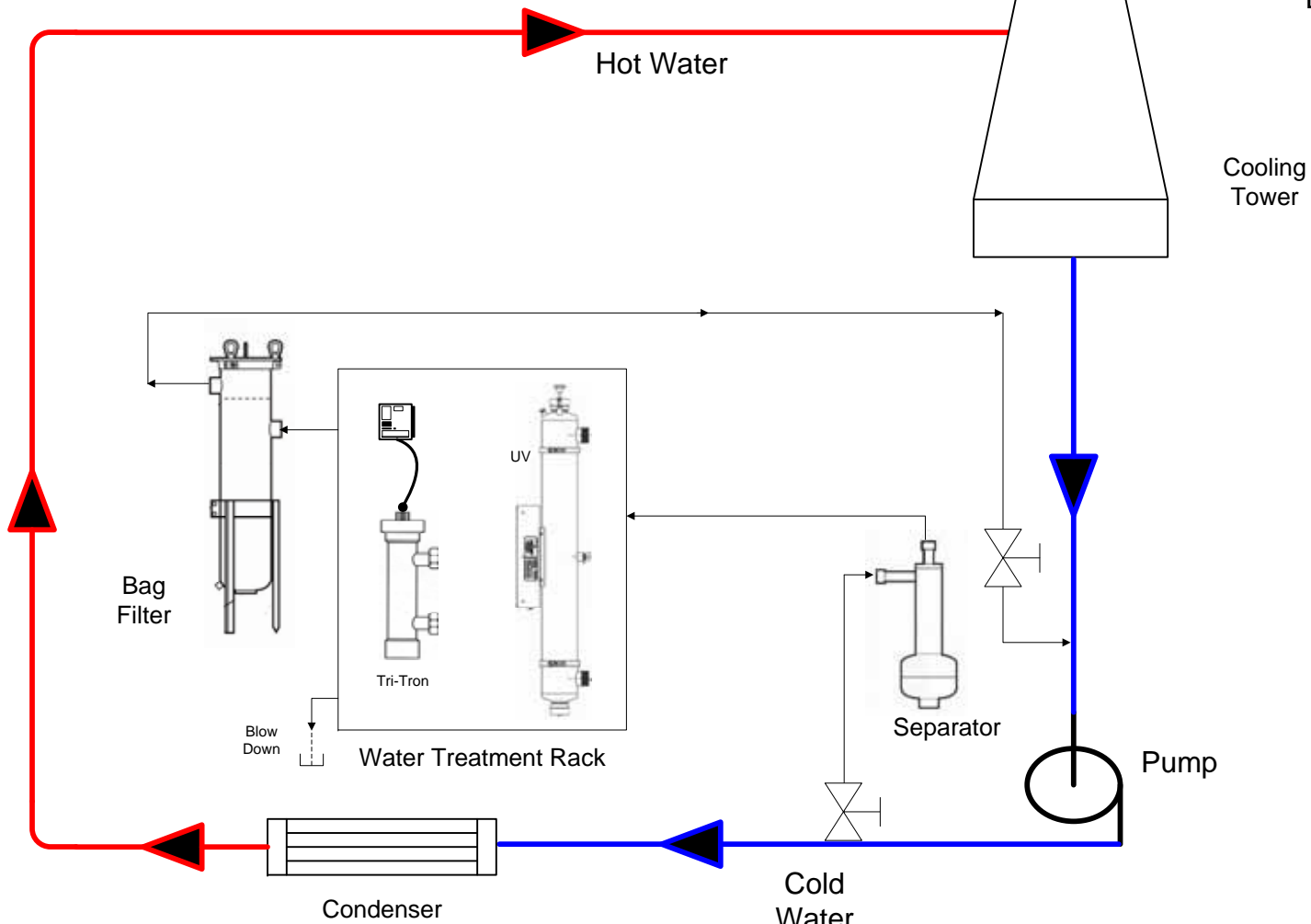
UV light deactivates the DNA of bacteria, viruses and other pathogens. UV destroys their ability to multiply and cause disease. UV light causes damage to the nucleic acid of microorganisms by forming covalent bonds between certain adjacent bases in the DNA, The formation of such bonds prevent the DNA from being unzipped for replication, and the organism is unable to reproduce. Our water treatment produces such clear and clean water for the UV to function.



# eH<sub>2</sub>O WATER TREATMENT SYSTEM



DO NOT SCALE  
DRAWING



## REVISIONS

REV.	DESCRIPTION	DATE	BY

CUSTOMER: COOLING TOWER WATER TREATMENT  
DESCRIPTION: EQUIPMENT FLOW SCHEMATIC

**eH<sub>2</sub>O**

DESIGNED BY: R. PETERSON  
DATE:

# Unparalleled Performance

Compare our results to all other water treatments; chemical or non-chemical



Above  
A complete eH<sub>2</sub>O non-chemical water treatment system to provide total performance.



Above  
Microbiological results showing just 1000 colony forming units of bacteria.

This is extremely clean for a cooling tower environment.

Having results such as this are quite common with the eH<sub>2</sub>O water treatment system.

Since 1999, every eH<sub>2</sub>O non chemical cooling tower water treatment system has been shipped with our patented Tri-Tron pulsed powered water treatment along with ultraviolet water purification, filtration, automatic conductivity control, and a complete corrosion coupon rack.

For all of this time, it has been important to monitor the corrosion, microbiological, and scale control of the system. eH<sub>2</sub>O also has instantaneous corrosion monitoring that we do in the field.

eH<sub>2</sub>O provides you coupons for corrosion monitoring and also dip slides for microbiological control.

The corrosion results have been remarkable with eH<sub>2</sub>O, because the calcium carbonate is readily dissolved back into the system before any other metals. The system also raises the pH which buffers the water.

The microbiological results have shown superior over most chemical water treatment systems. This is done via electrical pasteurization and encapsulating the bacteria in the mineral precipitate which is then filtered. This process produces very clear water to allow the UV to function in this environment. This clear clean system remediates biofilms by removing their nutrient source.

All inspections of condenser tubes and heat exchangers have shown excellent results with clean tubes for heat transfer.

We go even further. eH<sub>2</sub>O water treatment has display functions that will show you if it is not functioning at 100% peak performance. We also have remote features with this so you can monitor the system right at your desk.



Above  
A clean tube bundle with inspection. Perfectly clean tube bundles are what you see with eH<sub>2</sub>O tube bundle inspections. Machine temperatures also validate the performance of the system.



Above  
Rates in the 1 Mil Per Year range is typical with eH<sub>2</sub>O water treatment. This is an excellent corrosion rate for mild steel.



[www.eH<sub>2</sub>O.com](http://www.eH2O.com)

# Incredible Water Conservation Guaranteed

eH<sub>2</sub>O, LLC • 381 N. Reese Street • South Lyon, MI 48178 • 248-437-4232  
www.eH<sub>2</sub>O.com



**Water Conservation** is becoming extremely important as our population of 300 million people take for granted this precious resource.

Global Warming is changing the snow melt in the Sierra Nevada and Colorado Rockies that supplies precious water to the Southwest. The Ogallala Aquifer that supplies NE, KA, OK, and TX is declining. The Tennessee Valley Authority drafted a drought plan in 2007 for the Appalachian Mountain range that feeds the southeast and has cut hydro-electric output due to drought.

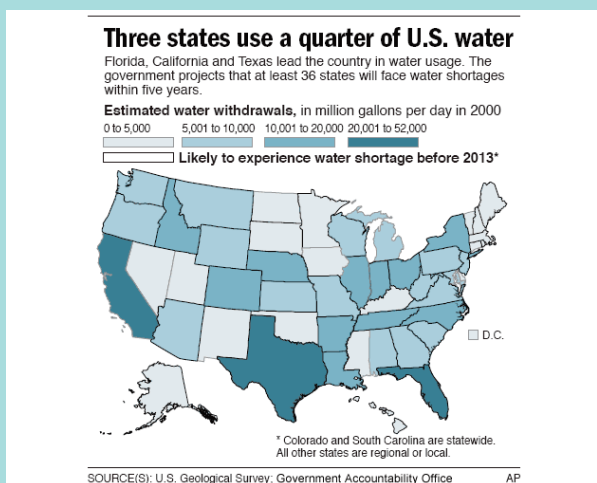
State	Change in water in storage	
	Predevelopment to 2003 (million acre-feet)	2002 to 2003 (million acre-feet)
Colorado	-129	-1.1
Kansas	-95.6	-4.1
Nebraska	-11.4	-0.1
New Mexico	9.0	0.3
Oklahoma	-11.4	-0.5
South Dakota	-0.4	-0.4
Texas	133.0	-4.2
Wyoming	-0.5	-0.2
High Plains (Total)	-235.2	-18.9

Discover a non chemical water treatment system that outperforms ANY other system with water conservation. HVAC cooling towers for air conditioning evaporate pure water and MUST discharge their mineral laden water which is a tremendous waste. Now without the use of any chemicals, the minerals are removed from the water and the water stays in use with the system. These HVAC systems use a tremendous amount of water so the savings are tremendous.

Immediately see remarkable results with this system...Guaranteed.



A typical eH<sub>2</sub>O non chemical water treatment system on a 1000 ton HVAC cooling tower.



Florida, California, and Texas use 1/4 of U.S. water. The USGS is predicting water shortages before 2013. **It is time to take action now!**



Above is the amount of minerals removed on a 1000 ton HVAC system in just one day! With chemical treatment, your throwing away everything; continuously.