

# DO YOU KNOW WHAT'S IN YOUR WATER?\*

## IS IT COSTLY, DIRTY, SAFE TO USE?

TWT has extensive design, engineering, manufacturing, consulting and training ability to work with customers worldwide, and to use its products and/or systems in whole or component form, as a component assembly, or as an accessory to their primary product. Take advantage of our outstanding manufacturing and marketing expertise — let TWT custom design a product and/or system to meet your specific application, system integration, and/or retro-fit program needs.

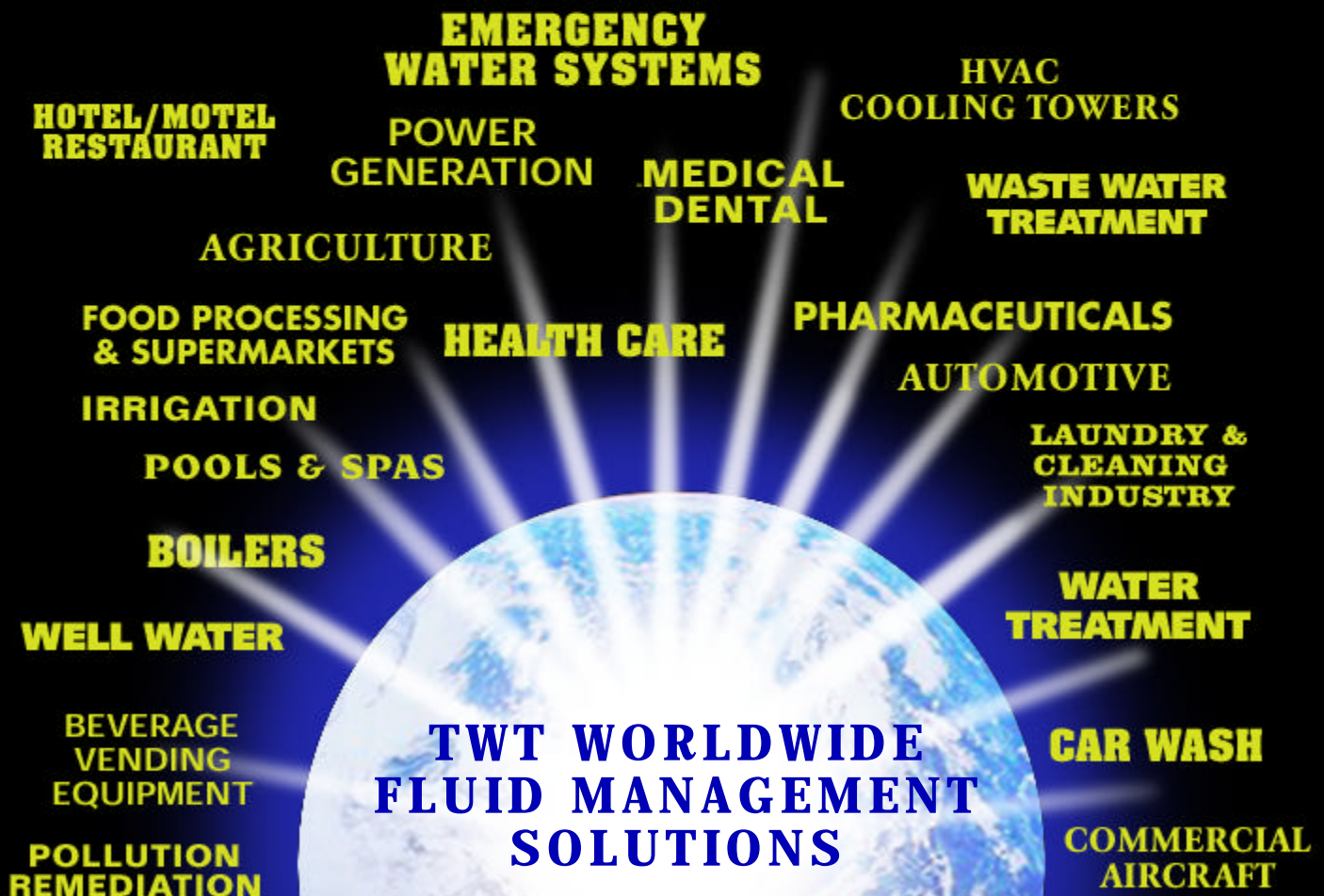
*Our unique capabilities and custom design expertise have and continue to successfully solve a wide variety of problems for a wide variety of customers (Commercial • Industrial*

*• Residential).*

- FROM IDEAS TO FINAL PRODUCTION
- EFFICIENT ENGINEERING DESIGN TEAM

- STATE -OF-THE-ART PRODUCTION EQUIPMENT AND FACILITY TO MEET THE EVER CHALLENGING PRODUCTION REQUIREMENTS
- TECHNICAL AND TEST DEPARTMENT WITH OUTSTANDING QUALITY CONTROL GUARANTEED
- COST EFFECTIVE AND DELIVERED ON TIME
- IN ORDER TO ENSURE THE GREATEST LEVEL OF PERFORMANCE AND SATISFACTION IN YOUR WORK WITH TWT PRODUCTS AND SYSTEMS, WE RECOMMEND THAT YOU CONTACT OUR ENGINEERING STAFF, WHO WILL BE PLEASED TO WORK CLOSELY WITH YOU TO DETERMINE THE OPTIMAL INSTALLATION FOR YOUR INDUSTRY SPECIFIC NEEDS.

REVIEW SOME OF THE FEATURED CUSTOM DESIGN PRODUCTS, SYSTEMS, APPLICATIONS AND INSTALLATIONS FOR SOME OF OUR INDUSTRY SPECIFIC CUSTOMERS WORLDWIDE



The basic functions & components of Triangular Wave Technologies, Inc. (TWT) fluid treatment systems can be designed, integrated and assembled to combine various treatment methods that meet your industry specific process needs.

***TWT has extensive design, engineering, and manufacturing ability to work with customers to use our products in whole or component form, as a component assembly, or as an accessory to their primary product. TWT offers custom design, private labeling at cost effective pricing schedules. Take advantage of our outstanding manufacturing and marketing expertise -- let TWT custom design a product and/or system to meet your specific application needs.***

***TWT will work together with your sales and technical staffs to develop fluid management systems and system enhancements, product marketing initiatives, sales support, and training programs to make your success the priority. The TWT team is driven by a simple but challenging goal - to build superior products and systems to continually innovate to be the leader in fluid and water management solutions.***

#### ***Filtration Systems:***

Filters are designed to trap various kinds of debris, dirt and organic particles that will otherwise enter your equipment and/or plumbing system, restrict your water flow and create a breeding ground for bacteria. Filtration is the first line of defense for residential, commercial, industrial facilities, where the source of water may be ponds, wells or streams that have high exposure to contamination from airborne pollutants, surface run-off, agricultural or industrial waste or similar dangers. The first step in achieving clean water is to install a filtration device that effectively removes particulate matter and similar debris. Filtration is an important step in water treatment, especially for water intended for human consumption. Filtration systems provide a bacteriostatic environment and are designed to remove, volatile organic chemicals, hydrogen sulfide and sulfur, herbicides, pesticides, chemical fertilizer residues, trihalomethanes and many other pollutants. The filtration units utilized in TWT systems are comprised of several media that remove harmful chemicals, metals, and toxins from the water as it passes through these layers. The TWT Filter media can utilize a sediment filter, a dual media KDF-55 granular activated carbon filter, extruded carbon activated block filter, Silica, DE, or other filter media upon request. TWT filter system/media can be configured to trap particles of various micron sizes. The end result is clean and healthy water that is free of chemicals and organic pollutants.

#### ***TWT Patented Deposit Control System:***

The basic component in the TWT systems is the deposit controller. It is comprised of a microprocessor, solenoid coil wrap and/or a reaction chamber. The microprocessor is a patented controller that functions like a small computer to relay a continuous electrical power supply to the solenoid coil and/or reaction chamber. The reaction chamber is plumbed into the main water in-take line and/or just before each piece of vital processing equipment, and provides a factory-wrapped wire coil forming a solenoid. The solenoid conveys the triangular wave signal at the appropriate power level (as allowed by the model chosen) to the water passing through the chamber. This signal constantly changes the polarity, frequency, and amplitude of the current entering the water. This triangular wave treatment produces several benefits. It increases the capability of the water to hydrate scale ions and other colloidal particles. In effect, the surface charge of the hydrogen molecules is enhanced and the water is made "wetter". This "hydrated" water can dissolve unwanted particles, suspend them in solution, and allow them to be easily

filtered out or flushed from the system. Accordingly, the mineral and biological particles that cause scale, deposits, and corrosion are dissolved and washed away. This means that the breeding environments for bacteria, such as bio-film and corrosion, are eliminated. The agitation created in the reaction chamber also disrupts the conditions essential for the normal reproduction of bacteria and they die, thus allowing them to be harmlessly flushed out of the system. If left untreated, scale build-up inside the reaction chamber and on the quartz sleeve containing the UV lamps may rapidly diminish the UV disinfection effectiveness by reducing the amount of UV light which is absorbed into the water stream. The TWT Deposit Control System will further condition the filtered water stream so as to prevent this scale-build-up inside the UV reaction chamber, helping to maintain maximum UV life cycle and penetration into the water stream.

#### ***Ozonator Disinfection/Purification***

The Ozonator is a natural, safe way to purify water in many different applications. It eliminates the need for chemicals which can be irritating to people and costly to budget. The Ozonator converts Oxygen (O<sub>2</sub>) into (O<sub>3</sub>) by the action of the corona discharge system. Ozone is then injected into the water where it destroys viruses, bacteria and many other micro-organisms. taste, odor and color disappear and iron oxide, hydrogen sulphide, lignite and tannin are precipitated out, leaving your water pure and clean

#### ***Ultra-Violet Disinfection:***

The UV disinfection technology used in the system to provide safe, potable drinking water, free of disease-causing pathogens. As water passes through the UV chamber, UV light will attack and render harmless any bacterial, viral or spore contamination present in the treated water. "High intensity UV light destroys these contaminants with a 99.9% kill rate" The output water is thus disinfected and offers exceptionally high quality for human consumption.

#### ***IonGuard Purification:***

The IonGuard Purification System purifies water through a process called ionization. This process utilizes a low voltage direct current [DC] to place precise and minute amounts of copper and silver ions into water systems. Copper ions kill algae and silver ions kill bacteria. The IonGuard Purification System is an electrolytic copper/silver ion generator. The system units contain specially cast copper/silver alloy electrodes. These electrodes are mounted in a housing designed for easy access (HVAC & Pool Environments).

#### ***Chlorine Residual Injection System:***

Depending on the plans for storage of the output water produced by the system. Chlorine residual levels may be adjusted as required. The chlorine residual will be helpful in maintaining pathogen-free drinking water while in storage for extended periods of time.

#### ***pH(+) and pH(-) Injection System:***

Injection system to maintain proper pH levels at all times.

#### ***System recirculating line adapter:***

An alternative or addition to chlorine residual, this adapter can be integrated (installed) to attach external storage to system for re-treatment.

#### ***Fluid Treatment Systems:***

TWT water treatment systems are ruggedly constructed for exceptional performance and long service life.