Residential/ Commercial & Industrial Facilities

Governmental

International

Diners Restaurants Drive Thru

Commercial **Buildings**

Educational **Buildings**

Equipment Shelters

Pharmaceutical

Triangularwave Technologies, Inc. (TWT)

CHEMICAL-FREE WATER TREATMENT & CONDITIONING FOR THE BUILDING INDUSTRY

Provide Your Customers with an Effective Water Treatment System

Now available for the building industry, modular, residential, restaurant, finance, education, childcare, corrections, aviation, convenience store, telecommunications markets and commercial/industrial facilities. Chemical-free water treatment, conditioning, purification products and systems.

Building A Better Way!

התרחון עתרחון עתרחון עתרחון עתרחון

FLOOPS SECTION SULX FLY GUEDT NAILED "ZHE & IG'O.G.

מתונתר מתונתר מתונתר

NFICAL FLOOD SECTION 34" USLX FLX GUED INALED 3XIO #2HF (20 16"O.C. 4XIO * 2017 BEIMS IN 4X4 *21 5.11 ROUBLESS INSUL BATTS 124 1.1

Think

HARD WATER PROBLEMS SOLVED EASILY! **DEPOSIT CONTROL • FILTRATION • DISINFECTION • PURIFICATION**

TRIANGULAR WAVE TECHNOLOGIES FLUID MANAGEMENT SYSTEMS VERSATILE FLUID MANAGEMENT SYSTEMS TO EFFECTIVELY MEET THE NEEDS OF ANY APPLICATION IN THE HOME OR OFFICE. CONTROL SCALE DEPOSITS • BACTERIA • CORROSION • ALGAE • COLLOIDS.

VALUE ADDED TECHNOLOGY

Sensing Environmental Needs with Intelligent Solutions



4. @ 74"0L

TWT[®] The Ultimate in Alternative Energy, Water Treatment & Conditioning

The Green Way

HARD WATER PROBLEMS SOLVED EASILY

Triangular Wave Patented Deposit Control System (TWT®) Technologically Advanced Method for Water & Fluid Management...CHEMICAL-FREE

Your Simple and Safe Solution

How the Triangular Wave System Controls Lime Scale, and **Biological Deposits.**

Scale and biological deposits form when these elements "stick" to the surfaces of tubes/pipes, water tanks, heat exchangers, plumbing fixtures and other water-fed equipment. The Triangularwave Deposit Controller charges the particles in the water so that they will not stick together or stick to any surfaces.

Simply Said... The TWT[®] Deposit Control Technology gives you the total effect of soft water without the negative consequences, and clear up the deposits you already have! Breakthrough technology means...

- · Provide the effects of softened water, neutralizes calcium hardness effects in the water
- Prevents scale & slime buildup on tubes/piping and equipment surfaces
- Controls Algae and Bacteria
- · Improves efficiency of all water-fed appliances and extends their life cycle
- Quickly pays for itself and continues saving (energy, water and maintenance)
- Descales the entire system over time
- Extends Life of Heating Elements
- . Designed for safety: The output is safe to both personnel and equipment. There is NO ELECTRICAL CONTACT WITH THE PIPE



All the benefits of SOFT WATER WITHOUT THE SALT!

- Easy to follow application and installation instructions
- Takes up minimal space and plugs into any standard outlet
- GUARANTEED



TWT-SYS700-FS-3/4" pipe size TWT-SYS1200-FS-1" pipe size

Filter Set Systems Specs:Filter Housings 20" sediment filter

20" carbon filter Mounting Bracket Filter Wrench Pressure Tested







TWT-SRC

TWT-SRC.75-Stainless Steel **Reaction Chamber** for pipes 3/4" or less in diameter

TWT-SRC1-Stainless Steel **Reaction Chamber for** pipes 1" or less in diameter



TWT-RC

TWT-RC.75-**PVC Reaction Chamber** for pipes 3/4" or less in diameter TWT-RC-1-PVC **Reaction Chamber for** pipes 1" or less in diameter

POE/POU TREATMENT SYSTEMS

Factory Assembled & Mounted Fluid Management System These fluid management systems are compact, self-contained, mounted unit for the treatment of water.



Applies all the needed elements for maximum fluid protection, management, and peace of mind in one simple packaged solution. Technologically advanced method for water & fluid management. Filtration, TWT[®] Microprocessor Deposit Controller, Reaction Chamber, and UV Disinfection / Purification units are



In effect, a clean, corrosion-free delivery system is restored and maintained in an environmentally safe and chemical-free manner. The result is clean water, pipes and tubing with no biofilm and bacterial contamination.

Point-Of-Use Treatment Systems for Water-Fed Appliances



Coffee, Tea, Ice and other beverage dispensers and the water lines that feed them suffer from build-up of lime scale and bio-film. Not only does this lead to unpleasant bitter tastes and odors in the beverage, the scale and bio-film become a "home" for bacteria that transfer to the beverage. The dispenser works less efficiently (costs more to run in electricity and water, and more to maintain), and has a shorter overall working life.

 Reduces Down-Time, Maintenance and Onsite Service Costs

How can the TWT Deposit Control System help?

When installed as directed by TWT, the Deposit Controller can help optimize equipment operation and will:

- Reduce and prevent scale, opening up the water flow
- · Reduce bio-film as well as contaminant growth
- Improve beverage taste and appearance lessen bitterness, oily residue, and odor
- Improve coffee/tea to "per serving" ratio, allowing for better tasting beverages
- Increase heating efficiency of coils, hot water tanks and other associated components used for brewing and serving by keeping them all cleaner
- Reduce the need for service calls reduce labor costs
- · Reduce equipment downtime, increase vends and availability of beverages
- · Reduce electricity costs by lowering kilowatt usage through increased heat transfer efficiency
- · Increase the life cycle of the equipment
- · Provide responsible, chemical-free treatment



TWT Patented Deposit Control Technology



TWT-SYSTEM4/QS4M-1 Purification System with Filtration

This point-of-use purifier is designed for many different applications. The UV-4 system has combined two superior quality pre-filters that aid in the removal of sediment, bad taste and odors. This complete system produces high quality drinking water that surpasses all Health Department standards.

POINT-OF-ENTRY TREATMENT SYSTEMS Factory Assembled & Mounted Fluid Management System

These fluid management systems are compact, self- co n t a i n e d , mounted unit for the treatment of water. Applies all the needed elements for maximum fluid protection, management, and peace of mind in one simple packaged solution. Technologically advanced method for water & fluid management. Filtration, TWT[®] Micro-processor Deposit Controller, Reaction Chamber, and UV Disinfection / Purification units are combined to provide a start-to-finish answer to simplified prevention, treatment and management of water line contamination

dangers.TWT[®] solutions are scalable to fit the gpm's and water conditions you need. TWT All-In-One integrated water treatment systems are ruggedly constructed for exceptional performance. These systems are ideally suited for Wells,Homes, Offices, Factories, Farms, Medical / Dental & Laboratory Environments, Hospitals, Restaurants, Schools and anywhere the need for cleaner water to use and drink are required. The rugged self-contained design of these systems ensure that the system





Factory Assembled Skid Mounted, Fork Lift / Fluid Management Treatment System 50/100/200 GPM Systems

Chemical-Free Iron Removal Systems (no chemical injection required)

will enjoy a long and reliable lifecycle when properly cared for.

Effects of iron and manganese in water– When exposed to air, dissolved iron or manganese reacts with oxygen and is converted by oxidation to a colored, solid material that settles out of the water. Iron changes to white, then yellow and finally to a reddish-brown color. Manganese forms a black residue. High concentrations of these sediments cause reddish-brown or black stains on laundry and facility fixtures. Another result of iron and manganese in water is the presence of harmless bacteria in soil,shallow groundwater supplies and some surface water that secrete large amounts of red-brown (iron) or black-brown (manganese) slime that stain toilet tanks and fixtures. The Rust-Erase iron filter system is designed to effectively eliminate rust from your water supply economically and thoroughly.



TWT-RE-30 Maximum Iron Removal Capacity: 30 p.p.m.

TWT-RE-50 Maximum Iron Removal Capacity: 50 p.p.m.

Whole House Filters For Iron, Hydrogen Sulfide And Manganese.

Iron, Manganese and Hydrogen Sulfide are common elements found in your water and can be a nuisance causing stains in sinks, bathtubs, toilets, driveways and even the side of your house. In addition Iron, Manganese and Hydrogen Sulfide release unpleasant odors and tastes to your water supply. FILOXTM, a nonchemical oxidizing media is the answer to these water problems.



TWT-CMWT–Custom Integrated Treatment System (15 GPM)

Cabinet Mount Water Treatment System Combines Iron Removal with UV Disinfection and Multi-level Filtration in a secure cabinet.



POE/POU TREATMENT SYSTEMS

Factory Assembled & Mounted Fluid Management System

These fluid management systems are compact, selfcontained , mounted units for the treatment of water.

Applies all the needed elements for maximum fluid protection, management, and peace of mind in one simple packaged solution. Technologically advanced method for water & fluid management. Filtration, TWT[®] Microprocessor Deposit Controller, Reaction Chamber, and UV Disinfection / Purification units are combined to provide a start-tofinish answer to simplified prevention, treatment and management of water line contamination dangers. TWT[®] solutions are scalable to fit the gpm's and water conditions you need.

TWT All-In-One integrated water treatment systems are ruggedly constructed for exceptional performance. These systems are ideally suited for Wells, Homes, Offices,Factories, Farms, Medical/Dental & Laboratory Environments, Hospitals, Restaurants, Schools and anywhere

the need for cleaner water to use and drink are required. The rugged self-contained design of these systems ensure that the system will enjoy along and reliable lifecycle when properly cared for.



Hard water problems solved easily!



H

Ht.

Using modern integrated circuitry and signal processing techniques, the patented TWT Deposit Control Technology works by producing a complex frequency-modulated waveform. This creates a deionizing effect, induced by physical means, which increases the solubility of the minerals, and colloids in the liquid and changes the shape, size and texture of the calcium carbonate crystals. By this reaction, the minerals, colloids and crystals lose their adhesive properties and remain in suspension in the liquid.Pre-existing scale is taken back into solution and removed in the same way. The effects are immediate and long lasting downstream.

Ultra-Violet Disinfection & Purification





Ultra violet disinfection & purification technology, provides safe 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 contaminats with a 99.9% or greater kill rate" The output water is thus disinfected and offers exceptionally high quality for human consumption and use.

Residential • Commercial • Industrial Applications

P.O.E & P.O.U. TREATMENT SYSTEMS

Using patented Triangularwave Technology, TWT is the Leader in Chemical-Free HVAC Fluid Conditioning & Treatment Systems, Effectively Meeting The Needs Of Any Application



The Triangularwave Deposit Control System uses a Current Source as the drive circuit to the pipe solenoid. A Current Source is the most reliable and strongest conditioning signal over a wide frequency range. Most waters have qualities that vary over time. Higher total dissolved solid concentration will cause greater impedance in the system. The TWT system, with a Current Source generator is able to sense the increased impedance and maintain the strong conditioning.

- One time cost vs. recurring monthly chemicals=better profit margin
- · Labor costs for maintaining the systems will be reduced
- Costs to replace corroded parts like heat exchanger tube bundles, etc. will be reduced.
- Less downtime for equipment repairs an maintenance=increased production
- Increased heat transfer from non-scaled tube surfaces= significant energy savings.



411 DEPOSIT CONTROLLERS

TWT-ISRC-01 INDUSTRIAL ST/ST REACTION

Hot Water/Boilers

HEAVY SCALE BUILDUP

CHAMBERS

Chemicals, Water & Energy

SCALE FREE



colloids treated and the calcium converted to aragonite crystals. Hydrated (wetter) water molecules acting upon the scale, biofilm buildup, and the colloids in the water. Effects are immediate and last downstream

Complex modulated signal producing magnetic field inside the pipe. The resulting induced, oscillating elec-tric field provides the necessary molecular agitation for scale and biofilm prevention and removal

Using modern integrated circuitry and signal processing techniques, the patented TWT Deposit Control Technology works by producing a complex frequency-modulated waveform. This creates a deionizing effect, induced by physical means, which increases the solubility of the minerals, and colloids in the liquid and changes the shape, size and texture of the calcium carbonate crystals. By this reaction, the minerals, colloids and crystals lose their adhesive properties and remain in suspension in the liquid. Pre-existing scale is taken back into solution and in the same way. The result is clean corrosion-free pipes, tubing and delivery system with no biofilm and reduced bacterial contamination.

IonGuard Disinfection/Purification:

The lonGuard 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 lonGuard 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).





TWT-UV-60 (60 GPM)

Customized systems available upon request:

Design a system to process your required GPM of input source water, output water that will be of extremely high quality and free from disease-causing pathogens.

CLEAN, QUIET, READY & PORTABLE

Transportable Water Treatment Systems with Multi-Stage Filtration, Deposit Control and Ultra-Violet Disinfection

Custom Upgrades available upon request:

- Systems can be sized to suit virtually any required flow rate
- Designed as turnkey systems to process required GPM of input source water.
- Output water is of extremely high quality and free from disease-causing pathogens.



TWT-UV-200 (200 GPM) Treatment System



Solar Powered Treatment System

- Protect Customers Investments
- Protects Plumbing Equipment & Appliances
- Environmentally Friendly
- Cleaner Water Is Healthier Water

TWT[®] products and systems provide technologically advanced methods for water and fluid management that are both efficient and cost effective. Components and subsystems chosen from across the range of treatment methods can be combined in different configurations to provide custom solutions specific to any industry, site or application.

TWT systems work to consistently deliver high quality water, reduce scale and bio-fouling in plumbing systems, and to increase efficiency of both once-through and re-circulating HVAC, process cooling, agriculture, industrial processing, wastewater and other fluid based systems. Each product line offers a variety of both standalone and comprehensive treatment solutions for end-to-end fluid management, for all types of applications.



In order to ensure the greatest level of performance and satisfaction in your work with TWT[®] product and systems, we recommend that you contact our engineering staff, who will be pleased to work closely with you to determine the optimal application and installation for your industry specific needs.

TECHNOLOGICALLY ADVANCED METHODS FOR WATER & FLUID MANAGEMENT!

Join Our Team, Become A Distributor, Dealer and/or Representative

TWT[®] treatment products & systems are ruggedly constructed for exceptional performance. The rugged self-contained design of these products & systems ensure that they will enjoy a long and reliable life cycle, providing efficient & cost effective end-to-end solutions.

Visit Triangular Wave Technologies, Inc.'s comprehensive website, the valuable technical resource for all involved in water and fluid management...WWW.TRIANGULARWAVE.COM Triangular Wave Technologies, Inc. Chemical-Free Products & Systems for the Residential, Commercial & Industrial Environments. Utilizing Filtration, Patented Deposit Control, Disinfection & Purification Technology

> Versatile Fluid Management Products & Systems To Effectively Meet The Needs Of Any Industry & Application

- Control Scale Deposits
- Bacteria
- Corrosion
- Algae
- Colloids
- In All Fluid Based Systems

Potable Water, Process and Waste Water Treatment & Conditioning

PROTECTION FOR NEW EQUIPMENT

TWT provides new equipment with the ability to enhance the product features and benefits

TREATMENT FOR EXISTING EQUIPMENT

Retrofit existing equipment to improve its operating efficiency and life cycle

ENHANCE PRODUCT LINE

Enter new markets and broaden customer satisfaction

CUSTOM DESIGN

Let TWT, Inc. custom design a fluid management system to meet any industry specific application



BRINGING YOU THE BEST IN FLUID MANAGEMENT SOLUTIONS

The Triangular Wave Technologies team consists of a diverse group of bright,

are designed, distributed and installed. Our unique capabilities and design

of customers.

passionate and driven individuals with years of experience who combine their

talents as a team, revolutionizing the way fluid management products & systems

expertise have successfully solved a wide variety of problems for a wide variety