

TRIANGULAR WAVE TECHNOLOGIES APPLICATIONS

for HOMES, OFFICES, APARTMENTS and CONDOMINIUMS

Water is one of the most precious and yet potentially most abused or dangerous substances. Clean water is absolutely essential to human health. There are three basic causes of water/fluid related problems...

- Scale:**
- Loss of heat transfer efficiency
 - Flow restriction in pipes and frozen valves
 - Back pressure increases energy needed to pump
 - Reduced reaction vessel capacity
 - Localized corrosion
 - Visible surface scale objectionable

- Biofilm:**
- Loss of heat transfer efficiency
 - General corrosion
 - Biocorrosion (both general and local)
 - Sludge
 - Disease and odors
 - Bacteria, Algae, Fungus, etc.

- Adverse Water Chemistry:**
- General corrosion

The End Results of Water Problems

- Wasted water • Ruined equipment • High energy costs
- Productivity losses • Product contamination or quality problems
- Disease and odor in the water environment

TREATMENT

The bottom line is that if the problem causing materials are controlled, then 85% to 90% of the problems are eliminated. Treatment options include removal and control. The most effective systems utilize a variety of both removal and control methods depending upon the specific nature of the water being treated and its intended use. These combinations of various techniques can be arranged to effectively solve your specific problems and designed to function together in a way that will enhance the effectiveness of each component in achieving the desired results.

FILTRATION

Filters are designed to trap various kinds of debris, dirt and organic particles that will otherwise enter your plumbing system, restrict your water flow and create a breeding ground for bacteria. The first line of defense for residential/light commercial facilities located in and around rural areas 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 primary filtration device, that effectively removes particulate matter and similar debris. A TWT Sediment Filter effectively removes sediment and water-borne pollutants ranging from herbicides and pesticides to iron and manganese.

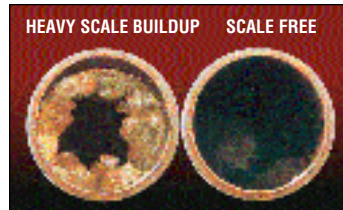
Other TWT filter systems employ patented KDF technology. The filters provide a bacteriostatic environment and are designed to remove chlorine, lead, volatile organic chemicals, hydrogen sulfide and sulfur, herbicides, pesticides, chemical fertilizer residues, Trihalomethanes, MTBE, and many other pollutants.

The filters remove odors and restore clarity to municipally treated drinking water. The filters use KDF process media, which is a specially formulated copper/zinc alloy media. The KDF is used in conjunction with carbon block filters, granular activated carbon filters, and sediment filters. They all combine to provide highly effective protection.

DEPOSIT CONTROL SYSTEM

A means to control the substances in your water supply that will result in deposit buildup in your pipes and in your water-fed appliances. The TWT Deposit Control system, comprised of a microprocessor unit and a solenoid coil (either an on-site wrap or a factory wrapped reaction chamber), provides an array of benefits:

- Removes and prevents scale build-up and bio-film deposits (descales entire plumbing system over time).
- Improves efficiency of all water-fed appliances and extends their useful life (saves 5% to 30% on water heating bills).
- Provides the effects of softened water without the harsh chemicals by neutralizing calcium hardness effects in water, and leaving in the beneficial minerals.
- Non-invasive, safe and maintenance-free.
- Pays for itself quickly and provides continuous savings throughout its life.
- Controls algae and bacteria (they are dispersed in the water and prevented from attaching to surfaces where they feed and reproduce), thus eliminating damage to vessel surfaces from bio-growth.
- In effect, a clean, bio-film, corrosion-free plumbing system is restored and maintained in an environmentally safe, responsible, and chemical-free manner.
- Uses NO salts or other CHEMICALS.
- Neutralizes hardness effects in the water without using chemicals-provides the positives of softened water without the negative effects.
- Improved ability of soap to lather and rinse in all process bathing, laundering, dishwashing, etc.; the soap formula can "complete" and rinse out properly, where it could not before.
- Pennies per day to operate.
- Easy to install.
- Moves when you do



Eliminates deposits in pipes, fixtures and equipment.

PURIFICATION AND/OR DISINFECTION SYSTEMS

As an important health measure, all households or facilities should include on-site purification and/or disinfection components as part of their treatment systems. In residential locations that lack adequate purification methods for treating water-borne microorganisms (bacteria, viruses, etc.), or when existing systems are poorly managed, ultraviolet disinfection produces water that effectively kills 99.9% of these health-threatening microorganisms.

NEW HOMES

CUSTOM
& LUXURY
HOMES

REFURBISHED
HOMES

WATER FRONT
PROPERTIES

RETIREMENT
COMMUNITIES

OFFICE
COMPLEXES

MOBILE
HOME
COMPLEXES

HOME/OFFICE FLUID MANAGEMENT SOLUTIONS

ENSURE THAT THE WATER IN THE HOME OR OFFICE IS SAFE ENOUGH TO USE & DRINK!

CHEMICAL-FREE WATER TREATMENT &
CONDITIONING SYSTEMS FOR THE HOME & OFFICE
WATER THE WAY NATURE INTENDED IT!



HARD WATER PROBLEMS SOLVED EASILY!

**TWT® PATENTED DEPOSIT CONTROL TECHNOLOGY
FILTRATION • DISINFECTION • PURIFICATION**

TRIANGULAR WAVE TECHNOLOGIES FLUID MANAGEMENT PRODUCTS

**VERSATILE FLUID MANAGEMENT SYSTEMS TO
EFFECTIVELY MEET THE NEEDS OF ANY APPLICATION**

**CONTROL SCALE DEPOSITS • BACTERIA
• CORROSION • ALGAE • COLLOIDS**

YOUR SIMPLE AND SAFE SOLUTION



- Enhance water quality, and improve operating efficiency and equipment life cycle.
- Protects Plumbing Equipment & Appliances
- Environmentally Friendly
- Cleaner Water Is Healthier Water



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

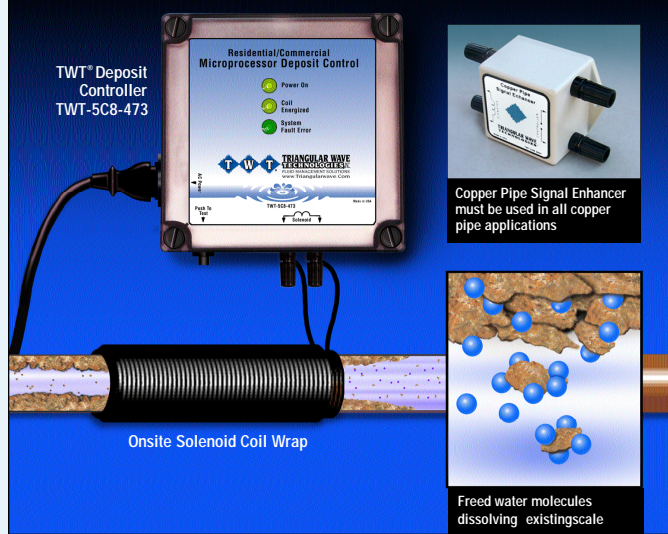
Scale and biological deposits form when these elements "stick" to the surfaces of tubes/pipes, water tanks, heat exchangers, plumbing fixtures and other water-fed equipment. The Triangular Wave Deposit Controller charges the particles in the water so that they will not stick together or stick to any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

Patented Deposit Control Technology



All the benefits of SOFT WATER WITHOUT THE SALT!

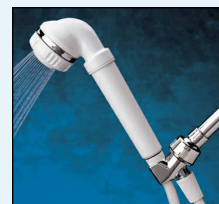
- Easy to follow application and installation instructions
- Takes up minimal space and plugs into any standard outlet
- GUARANTEED

Universal Shower Filter Systems

TWT offers four distinct styles of shower filters that fit any shower head. Customers can choose from optional shower heads, low-profile or high-capacity reversible filters with a choice of price points. Plus a unique hose filter that fits any existing shower handle. Universal shower filtering technology offers exclusive shower filtration media containing... chlorgon & KDF—The only non-carbon filtering media to remove: Free chlorine (CL⁻), combined chlorine (sodium hypochlorite), hydrogen sulfide (rotten egg smell), iron oxide (rust water), dirt, sediment, odors, plus, its pH balanced.



Prestige All-In-One Universal Shower Filter



The Universal Filtered Shower Handles



TWT® MINI-ZAP Portable, Water Purification System

The TWT® Mini-Zap portable, filtration, ultraviolet water purification system is ideally suited for homes, offices, camping, recreational vehicles, laboratories, boating, and world travelers concerned about water quality. These systems provide clean, clear, safe drinking water and protection from disease causing pathogens with a 99.9% kill rate for bacterial, viral and cyst contamination.

UV is a chemical-free, environmentally positive method of providing safe drinking water anywhere any time. The TWT® Mini-Zap Systems combines high-quality pre-filtration with high-power ultraviolet purification technology to produce an enhanced water quality system for use in various applications. The pre-filter system removes sediment, rust, dirt, that may impart bad tastes and odors to your drinking water. The water is then purified in the UV chamber producing drinking water that is crystal-clear and free from disease-causing pathogens.

Filtration Products/Counter Top Filter Systems



TWT® Counter Top functions and features Model TWT-CT-MW

- Flow is registered in gallons per minute
- Range is 0.33 to 2.0 GPM
- Pre-sets for alarm sounds and / or days
- Audible alarm sounds to indicate when cartridge replacement is necessary
- Standard threads are 3/8" FNPT• Highly accurate (to 75% of settings)
- Two AAA batteries are included
- Low battery alarm
- Batteries are used only when water is flowing

TWT® RPOU001 Point-of-Use Potable Water Treatment & Conditioning System



This point-of-use purifier is designed for many different applications. The UV-4 system has deposit control combined with 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.

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



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

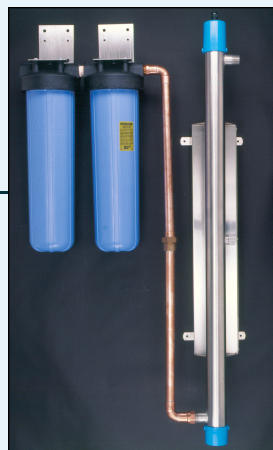
Effects of iron and manganese in water- When exposed to air, dissolved iron or manganese reacts with oxygen and is converted by oxidation to a colored, solid material that settles out of the water. Iron changes to white, then yellow and finally to a reddish-brown color. Manganese forms a black residue. 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. 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.



P.O.E. Filtration and/or UV Disinfection/Purification

These two units, UV-1500 / UV-3000 are similar in appearance, but have different capacities. The need for different flow rates will depend on the application and the nature of the installation. These TWT systems provide clean, safe water to large operations for manufacturing processes or human consumption. The units operate continuously, automatically and inexpensively. Installation is easy and there is no need to heat or cool the water prior to purification.



TWT-5C8-401
DEPOSIT CONTROLLERS

TWT-ISRC-01
INDUSTRIAL
ST/ST REACTION
CHAMBERS

Hot Water/Boilers

TWT® Microprocessor Based Control System represents a significant breakthrough in electromagnetic technology. This state-of-the-art electronic device provides continuous scale and bio-film control. Eliminate the bio-film that creates the breeding grounds for bacteria.



TWT DEPOSIT CONTROL PROTECTION FOR NEW EQUIPMENT

Provides new equipment with the ability to enhance its features and benefits

TREATMENT FOR EXISTING EQUIPMENT

Retrofit existing equipment to improve its operating efficiency and life cycle

SPARKLING CLEAR ALGAE-FREE WATER FOR POOLS & SPAS



EASY ON THE EYES

Gain peace of mind with TWT Enhanced Control Pool Management Systems, the chemical-free, safe and easy way to enjoy your pool and spa! Your back-yard pool is a place for relaxation. Everyone wants to avoid problems with his or her pool, and also with the effects of handling, storing, and swimming in harsh chemicals and treated water. TWT has the solution for both!

SUPER SPARKLING WATER

The Enhanced Control Pool Management System works with your existing pool filter and pump systems to control deposits and purify the water, killing and removing harmful bacteria and algae, and preventing corrosion and deterioration of your pipes and equipment. Reduce your chemical treatments and maintenance efforts by 80% or more, and make your swimming experience safe, fun, and environmentally friendly.

- Reduce the need for chlorine and get the same results with TWT chemical-free treatment & conditioning system
- Protect the investment in your pool/spa from the harsh effects of chemicals



TWT® Technologically Advanced Method for Water & Fluid Management “The Competitive Edge”

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 GPM requirements and 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, waste water 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.

To learn more about TWT products & systems visit our website at www.Triangularwave.com



Triangular Wave Technologies, Inc. (TWT)

Email: info@triangularwave.com • triwaveinc@aol.com • Website: www.triangularwave.com