Triangularwave Technologies, Inc. (TWT®)

# EMICAL-FREE FLUID CONDITIONING REATMENT for the HVAC INDUSTRY Sensing Environmental Needs With Intelligent Solutions

The Difference in Technology Matters!

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

TWT<sup>®</sup> Patented Deposit Control systems use advanced technology to restore

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THANGULAR WAVE

and maintain a clean, corrosion-free delivery system in an environ mentally safe and chemical-free manner... The result is clean pipes and tubing with no biofilm and reduced bacterial contamination.

# *Hard Water Problems Solved Easily* Efficient, Cost Effective & Reliable

**TWT**<sup>®</sup> **Patented Deposit Control Technology** Process and Waste Water Treatment & Conditioning

Triangularwave Technologies, Inc. Leading the Industry in Chemical-Free HVAC Fluid Conditioning & Treatment Systems. Using It's Triangularwave Deposit Control & Ionization Technology, TWT<sup>®</sup> Effectively Meets The Needs Of Any Application. Enhancing Water Quality, Improving HVAC Operating Efficiency and Equipment Life Cycle

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System Fault Erro

Push to Tes

Ownership of the TWT System will afford you and your customers significant savings over a short period of time and even greater savings over the life cycle of the equipment.

Tests conclusively demonstrates the ability of TWT<sup>®</sup> deposit control technology (hard water conditioning & treatment) to Inhibit & remove scale deposits in pipes, tubes and heat exchangers



Stainless Steel Industrial Reaction Chamber Unique, Scalable Systems For Every Need TWT® Deposit Control Products & Systems can be deployed in different modular configurations, scaling to fit your specific application requirements.

Conserve Water, Save Energy...Non-Chemical, Safe, Cost-Effective Treatment System:

*TWT*<sup>®</sup> *The Ultimate in Alternative Energy, Water Treatment & Conditioning* 

The Green Way



### The Return On Investment of a TWT System is Undeniably Significant From Operational, Economical, and Safety Points-Of-View.

The Triangularwave System represents a significant breakthrough in electromagnetic technology. The triangularwave has made possible the use of electromagnetic technology in applications of all sizes, from residential to large commercial and industrial applications.

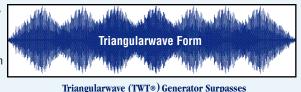
An advanced system for controlling scale and bio-fouling, it is applicable with oncethrough and recirculating HVAC, heating and process cooling systems, as well as agricultural, industrial processing, wastewater, and other fluid-based systems.

#### TWT Patented Microprocessor Deposit Control Systems. Technologically Advanced Method for Water & Fluid Management Providing Comprehensive End-To-End Solutions. Water The way Nature Intended It! Chemical Free.

#### How TWT Deposit Controller and Reaction Chamber System Work:

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 solu-

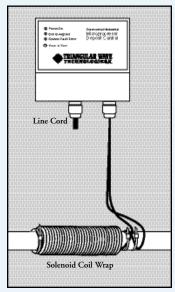
bility of the minerals, and colloids in the liquid and changes the shape, size and texture of the calcium carbonate crystals. By this reaction, the



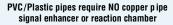
minerals, colloids and **Other Wave Form Generators** 

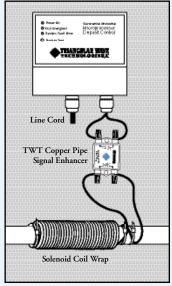
crystals lose their adhesive properties and remain in suspension in the liquid. Pre-existing scale is taken back into solution and removed in the same way. The effects are immediate and long lasting down stream.

#### For Maximum Effectiveness Follow These Simple Guidelines

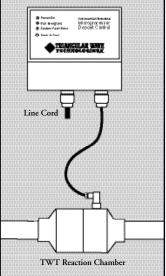


TWT-Deposit Control Solenoid Coil Wrap on PVC Pipe Application:





**TWT-Deposit Control Solenoid Coil** Wrap with a CSE Copper Pipe Signal **Enhancer Application:** 



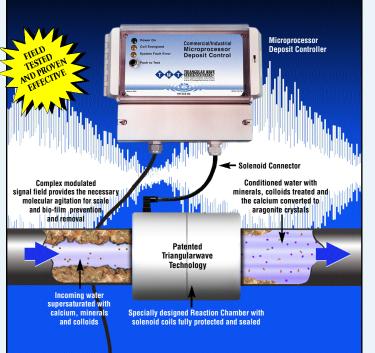
**TWT-Deposit Control with** Stainless Steel or PVC Reaction Chamber Application:

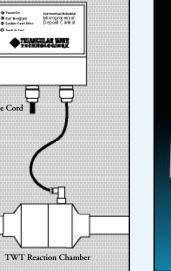
**TWT®** Copper Pipe Signal Enhancer

The copper pipe signal enhancer is a passive signal/ impedance matching circuit. This device provides a power boost to the conditioning signal in copper pipes (for copper pipe applications only).

#### **TWT® Reaction Chambers**

To use in conjunction with the TWT Deposit Control Systems when required, Triangularwave Technologies, Inc. has developed a line of factory-wrapped wire Reaction Chambers to address magnetic pipe environments. Typically, wire coil cannot be installed on any magnetic pipe, such as steel, galvanized steel, ductile iron, or cast iron. The TWT Reaction Chambers solve this problem by providing an easily installed section of non-magnetic pipe to provide the proper pipe material for the Deposit Control System to work as designed. The TWT Reaction Chambers are fully sealed, protecting their two layers of factorywrapped coil. The PVC, Stainless Steel and the Industrial Reaction Chamber systems are designed and manufactured to meet the highest quality specifications.





TWT, Inc. offers a full range of products & systems designed to address fluid problems wherever fluid flows. TWT has the versatile, efficient, cost-effective methods to solve your fluid management problems end to end.

- Controls scale, bio-film & corrosion
- Enhance operating efficiency & life cycle of equipment
- The only products & systems that pay for themselves

We sincerely thank you for your time and interest in our products, and look forward to being a valued part of your operation.

ISO Certified Facility





The TWT Reaction Chamber is part of the patented TWT Deposit Control Technology, the function of which is to control scale and bio-film in the plumbing infrastructure, fixtures, and water-fed appliances found in the HVAC system being treated.

The Reaction Chamber provides a chamber through which the water flows and is exposed to the triangularwave signal that lies at the heart of the deposit control technology.

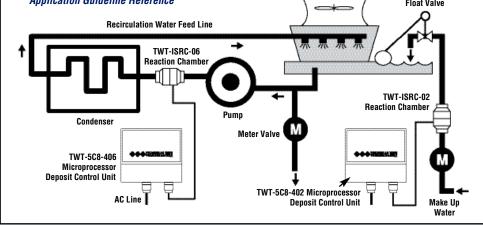
As the fluid passes through, it is treated and then carries that treatment downstream, to condition the rest of the plumbing system, non-chemically and reliably.

To find additional technical information about TWT® Deposit Control Technology, go on the home page of the TWT web site and click on "About the Technology" there you will find additional Installation & Technical Guidelines TWT® THE COMPETITIVE EDGE!

Application & Installation Guidelines:

Install a TWT deposit control system on the water recirculation feed line

Install a TWT deposit control system on the make up water feed line. Treat all of the water all of the time
Application Guideline Reference
Becirculation Water Feed Line



TWT, Inc. offers a full range of products & systems designed to address HVAC water treatment problems end-to-end. Versatile, scalable products & systems can be deployed in different configurations to fit your industry specific flow requirements and other treatment needs.

In order to ensure the greatest level of performance, satisfaction in your work with the TWT products, systems and other optional processing technologies (ionization) for the HVAC industry, 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.



TWT<sup>®</sup> Microprocessor-Electro-Magnetic Fluid Conditioning with Remote Monitoring Ability

Triangularwave Technologies, Inc.(TWT) Sensing Environmental Needs with Intelligent Solutions Be Smart, Buy Once! Go Green Save Green

