

IS YOUR WATER SAFE ENOUGH TO DRINK, COOK AND BATH WITH?

Water quality & quantity "the biggest environmental issue that the world faces in the 21st century"

Billions of people worldwide are drinking water that is potentially hazardous due to chemical and/or bacterial contamination

TRIANGULAR WAVE TECHNOLOGIES, INC., SOLAR POWERED TRANSPORTABLE WATER TREATMENT SYSTEM

• Filtration • Deposit Control • Disinfection/Purification

SAFE DRINKING WATER ANYWHERE...ANY TIME!

The most economical and efficient way
to produce safe drinking water!

Conserves Energy • Clean • Quite • Portable



THE TWT® SOLAR POWERED WATER TREATMENT SYSTEM IS INTEGRATED, ENGINEERED AND DESIGNED TO PRODUCE SAFE DRINKING WATER DEPENDABLY AND ECONOMICALLY FROM A WIDE RANGE OF PROBLEM INPUT SOURCES. THE SYSTEM IS WELL SUITED FOR VARIOUS APPLICATIONS AND IN AREAS WITH NO POWER AND POOR WATER QUALITY.

- Disaster Relief • Refugee Camps • Areas Without Power • Emergency Preparedness
- Remote Construction Projects • Small Community Systems • Environmental Clean-Up Sites
- Wells, Lakes, Rivers & Ponds • Other areas requiring High-Quality, Safe Drinking Water



More people unknowingly drink, bath, and clean with polluted and/or contaminated water, that will effect their health and well being everyday!



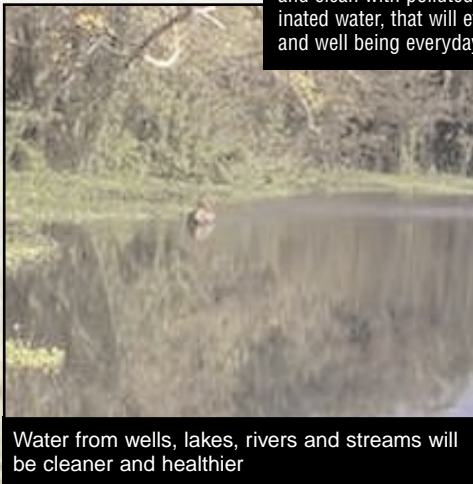
This much we know...toxic chemicals in our grounds, will eventually end up in the water used for cooking & drinking



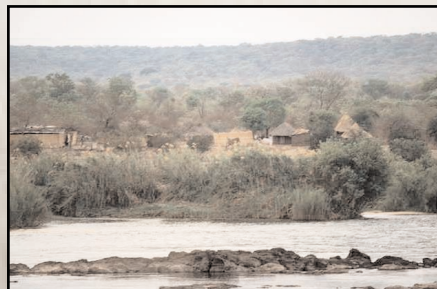
Cows are "fussy" the more water they drink, the more milk they produce
Cleaner water is healthier water!



Cleaner water improves Operating Efficiency of Medicators, Bell Nipple Waterers & Feed Lines
Optimum Health and Growth



Water from wells, lakes, rivers and streams will be cleaner and healthier



TWT® water treatment system are designed and engineered for remote areas with no power and poor water quality



With the TWT water treatment system, farmers crops absorb water and nutrients faster and increase there crop yield

Billions of pounds of hazardous chemical waste are improperly disposed of every year...these toxic chemicals we put into our rivers, lakes, ponds, streams or on the ground, will eventually end up in our wells and the water we use and drink.



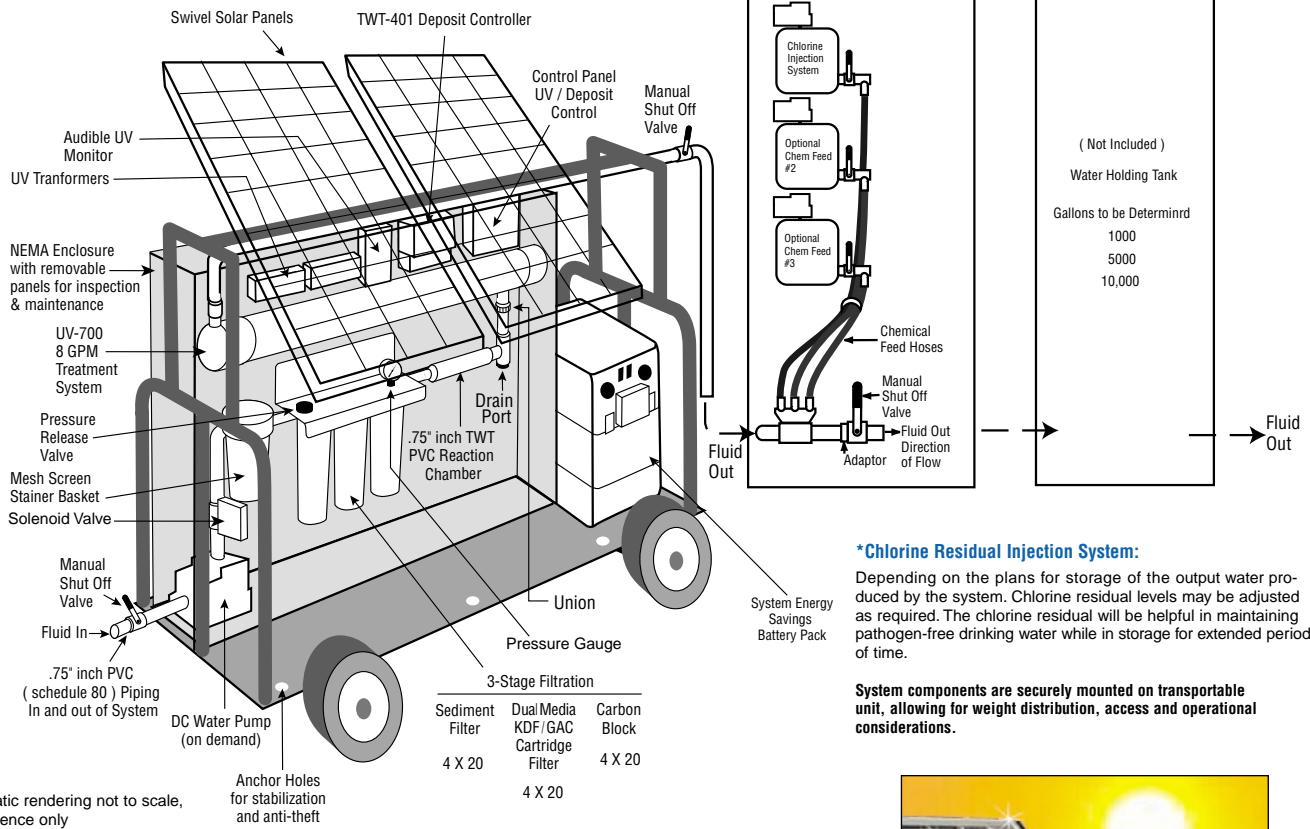
Water The Way Nature Intended It! Chemical-Free

Triangular Wave Technologies, Inc. offers several systems designed to treat and fit your specific needs. These systems improve water quality, save energy, are none chemical, safe and cost effective water conditioning & treatment systems.

Solar Powered Transportable Water Treatment System

• Filtration • Deposit Control & Disinfection/Purification

TWT-SP-401-700-8



***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.

System components are securely mounted on transportable unit, allowing for weight distribution, access and operational considerations.

Factory Assembled and Mounted, Transportable Fork Lift/ Fluid Management Treatment System

This fluid management system is a compact, self-contained, unit for the Disinfection/ Purification of water.

Applies all the needed elements for maximum water protection, management, and peace of mind in one simple packaged solution. Technologically advanced method for water management, Filtration, TWT® Microprocessor 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 contamination dangers.

Specifications:

Factory assembled and mounted on a heavy duty transportable skid, Size approx. 72"L X 72"H X 30"D, weight 00. Filter medium used in staged filter housings is configured as illustrated. Other filter mediums are available and are based upon input water quality and customer and/or industry specific treatment requirements (medium TBT).

- Heavy duty skid mounted water treatment system
- Solar powered panels (maintenance free)
- System battery pack (maintenance free)
- Staged filtration**
- TWT® deposit control technology (maintenance free)
- Ultra violet disinfection & purification***
- DC water pump (for deep well applications pump)

size upgrade is available & recommended)

- Optional chemical feed tank injection system
- 8 GPM disinfection/purification treatment system
- 3.0 hours sun powered run time = approximately 1200 to 1500 gallon output
- 8.0 hours charged battery pack, solar power run time = approximately 4000 to 5000 gallons per day
- Pressure max 125/150 psi
- Battery pack = 12 Volt DC draw

Easy to ship anywhere in the world

The system is fully self-contained and mounted on transportable skid. The total dimensions are within allowable limits, making it possible to ship by air-freight to any international airport.

****Sediment, Carbon and other Cartridge Replacement:**

Generally three times a year, depending on water use, quality, & conditions.

*****UV lamp replacement:**

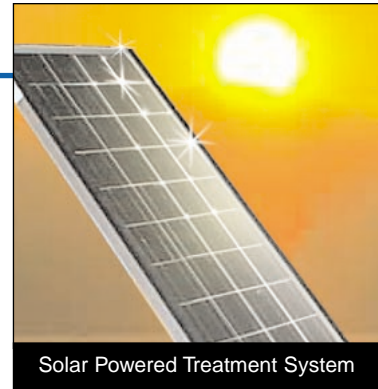
To ensure adequate disinfection/purification, replace UV lamps every 10 to 12 months (or sooner depending on water use, quality and conditions).

Note:

TWT Inc. recommends that an initial supply of replacement products e.g., replacement filters, UV lamps and battery pack etc. be stored at owners facility at all times, that will insure uninterrupted service and treatment.

Please Note:

System engineering design, weight, size and system component assembly can vary based on TWT engineering review, water conditions, application, industry and/or customer specific needs Pumps, piping, fittings, valves, and other material needed to and from system owners responsibility



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.

Easy to follow care, maintenance & operational procedures and other basic informational labels will be permanently affixed to the TWT solar powered system. This information will ensure owners of a long and reliable lifecycle if system is properly cared for (system requires minimal maintenance).

**CLEAN & QUITE
READY & PORTABLE**

TWT® Technologically advanced method for water management. Triangular Wave Technologies, Inc. Solar panel fluid management system, the ultimate in water treatment & conditioning

The TWT® system are factory engineered and assembled, applying all of the needed elements for maximum fluid protection, management, and peace of mind in one simple packaged solution. TWT® Filtration, Microprocessor Deposit Controller, Reaction Chamber, and UV Disinfection units are combined to provide a start-to-finish answer to simplified prevention, treatment and management of water contamination dangers. ***The TWT Solar Panel Fluid management water disinfection/purification system is a unique, compact, self-contained unit for the treatment of water.***

Water from wells, lakes, rivers, ponds and in the residential, commercial & industrial sectors, ***where clean water is essential***, commonly allow a contaminated interior environment conducive to the growth of bacteria, protozoa, and fungi, which initially arrive in small numbers through the water plumbing systems. Over time, these microorganisms bind to the sides of your water pipes and tubing, forming biofilm. As water flows through the pipes and tubes, the biofilm sheds microorganisms and bacterial endotoxins into the water, leading to these harmful conditions.

How the TWT Solar Powered system works!

1. 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.

2. Deposit Control

TWT® Patented Deposit Control Technology

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.

3. Disinfection/Purification:

Ultra-Violet:

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.

Cleans any fresh water source:

The Triangular Wave Technologies solar panel Portable Water Treatment System serves as a small scale water treatment plant, creating clean, good-tasting water from streams, ponds, lakes, cisterns or contaminated community water supplies. It filters out over 100 contaminants including sediments, mercury, pesticides, giardia cysts and cryptosporidium.

The TWT® Solar Powered Fluid Treatment System:

TWT water treatment system is ruggedly constructed for exceptional performance. This system is ideally suited for Wells, Military Camps, Disaster Relief, Refugee Camps, Emergency Preparedness, Remote Construction Projects, Small Community Systems, Environmental Clean-Up Sites 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.

Solar Power Energy Efficient System:

The solar power water purification system serves as a mobile unit to purify a set amount of water on a any given day, in areas with no power and poor water quality. The system as illustrated pumps water from a storage container or a natural water source such as a wells, lakes, and/or streams. The water is fed through the system eliminating bacteria and other microorganisms that will lower diseases spread through normally untreated water.

