

NO MATTER HOW TOUGH THE JOB... TWT IS THE SOLUTION

Triangular Wave Technologies, Inc. (TWT®)

ULTRAVIOLET TECHNOLOGY

TWT-UV100-6 Ultra-Violet Disinfection & Purification 100 GPM System

Commercial • Industrial Ultraviolet Products



TWT-UV100-6 System (100 GPM)

The TWT-UV100-6 sterilizer will ensure a ready supply of safe, pathogen-free water for manufacturing processes or human consumption. Applications include water bottling plants, breweries, waste water treatment or any other type of liquid processing requiring bacterial reduction. With the capacity to remove disease-causing microorganisms effective to a 99.9% kill rate at 100 G.P.M. (379 L.P.M.), you can eliminate the need for chemicals and reduce high overhead costs.

TWT water treatment systems are ruggedly constructed for exceptional performance. The rugged self-contained design, component assembly and Stainless Steel body / frame of these systems ensure that the system will enjoy a long and reliable life cycle when properly cared for.

In order to ensure the greatest level of performance and satisfaction in your work with the TWT products and/or 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 facility and/or industry specific needs.

SPECIFICATIONS

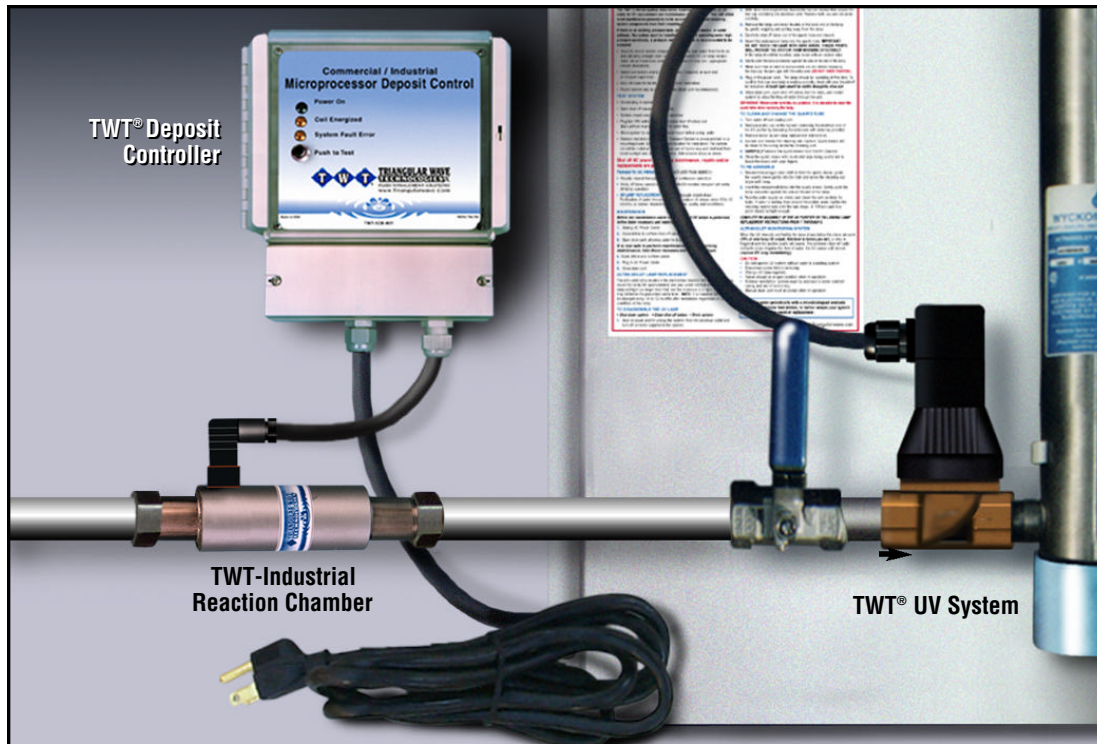
- Alarm System – Fail Safe
The TWT-UV100-6 System comes equipped with an alarm system which sounds an audible alarm if the UV lamps are not functioning properly. The alarm system may be combined and integrated with an optional solenoid valve to stop water flow if required.
- Rated Flow: 379 liters per minute (100 GPM)
- UV Dose @ Flow & 70%T 37 mJ/cm² (37,000 µwsec/cm²)
- Electrical: 100-240V / 50-60 Hz (Universal)
- Lamp Power: 65 W
- Number of Lamps: 6
- Maximum Operating Temp: 37° C (98.6° F)
- Maximum Operating Pressure: 125 psi – 8.6 bar (tested to 500 psi)
- Plumbing: 2" MNPT (3" optional)
- Size: L 117 cm x W 21 cm x H 27 cm
L 46 in x W 8 in x H 10.5 in
- Weight: 41 kg (90 lbs) with controller
- Chamber Material: 316L SS



CHEMICAL-FREE



Patented Deposit Control Technology and TWT Ultraviolet Purifier Treatment Products Integrated for Maximum Results! Recommended Configuration for Combined use as Illustrated



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 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.

Installed in conjunction with the Deposit Control Treatment System, these products prevent scale formation in pipes and water appliances. Recommended that a qualified plumber perform the installation.

**Visit Triangular Wave Technologies, Inc. Comprehensive Website.
The Valuable Technical Resource For All Involved In Water And Fluid Management. www.Triangularwave.com**

