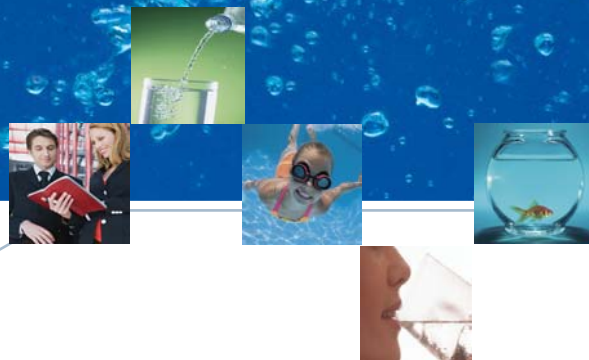


AT 1500

ULTRAVIOLET DISINFECTION



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norweco[®]

*Engineering the future of water
and wastewater treatment*



AT 1500

the safe, **effective** and reliable way to
disinfect in applications where ultraviolet
(UV) treatment is **preferred**

Your complete solution to meet even the most stringent environmental permit requirements, the AT 1500 UV treatment system reduces bacteria levels from secondary effluent to achieve strict water quality standards. The reliability and performance of the AT 1500 is unmatched for onsite and decentralized treatment applications. Every component of the compact unit is highly engineered and constructed to provide reliable disinfection and superior operational life.

UV disinfection is routinely used in ecologically sensitive areas where residuals from chemical disinfection might possibly create problems in the receiving environment. Harmful pathogens and other contaminants, including some that are resistant to chemical disinfection, are rendered completely harmless by the reliable performance of the AT 1500 UV treatment system.

solutions in wastewater treatment

The AT 1500 UV treatment system reduces bacteria levels to meet strict water quality standards

Inlet

Treated wastewater enters the system through an integral 4" inlet hub.

Turbulence Inducer

Turbulence is purposely created within the influent, accomplishing more complete disinfection.

UV Bulb

The heavy duty, long-life bulb provides reliable disinfection of treated wastewater. Our lamp is tested and certified to provide superior bacteria kill over competitive systems, while maintaining extended service life.

Quartz Sleeve

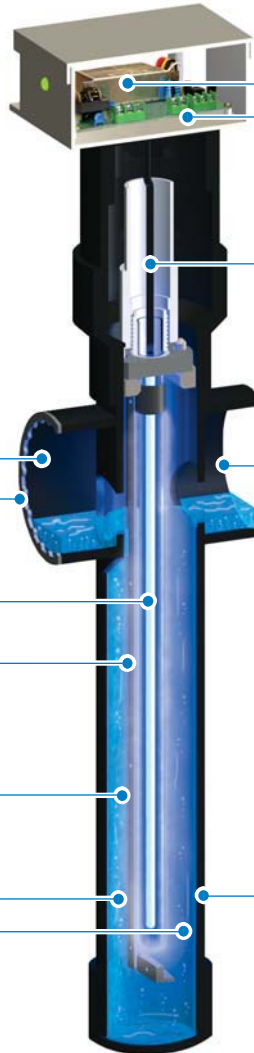
The long-life bulb is encased within a transparent quartz sleeve to isolate the bulb from the flow stream. The sleeve also allows uniform heat dissipation to enhance operational life.

Teflon Cover

A flexible transparent Teflon cover, held in an anodized aluminum frame, creates the flow path for the AT 1500. Resistant to bio-film growth, the Teflon cover ensures maximum UV transmittance.

Dual-Pass Design

Extended treatment time and exposure to UV light allow for maximum disinfection. This design provides additional security and treatment performance for stringent environmental standards.



NEMA 4x Electrical Enclosure with Internal Ballast

The compact electrical enclosure provides a watertight and weatherproof connection for all power lines to the system. The ballast is located safely inside this durable enclosure for protection and long-life. The green light on the enclosure is constantly lit to indicate proper operation.

Solid State Circuit Board

Function of the system is fully solid state, with a current sensing circuit. The current sensor automatically monitors performance of the UV bulb and provides constant assurance of proper operation.

Simplified Wiring

A single incoming power cable through flexible conduit is the only electrical connection required. The current sensing control center operates the bulb through a watertight pre-wired, plug and play power cable assembly.

Outlet

Disinfected effluent exits the system through an integral 4" outlet hub.

ABS Housing

The system is contained within an ABS housing that is carbon-impregnated for maximum durability. The ABS housing is resistant to UV light and provides long operational life.



NPDES Treatment System

UNIQUE, STATE-SPECIFIC TREATMENT NEEDS CAN BE MET WITH NORWECO'S SECONDARY EQUIPMENT AND TANKAGE. THE NPDES TREATMENT UNIT FOLLOWS AEROBIC TREATMENT SYSTEMS AND INCREASES DISSOLVED OXYGEN (DO) TO ABOVE 6 PPM, PLUS HOUSES NORWECO'S STATE OF THE ART UV DISINFECTION UNIT, TO PROTECT THE MOST SENSITIVE RECEIVING ENVIRONMENTS.

Pumping Stations

NORWECO'S SIMPLEX AND DUPLEX PUMPING STATIONS ARE A VERSATILE, DURABLE AND AFFORDABLE WAY TO SOLVE YOUR DOMESTIC FLUID HANDLING NEEDS. BASIC PRE-ENGINEERED PACKAGES INCLUDE A CORROSION RESISTANT POLYETHYLENE BASIN, PRE-WIRED ELECTRICAL CONTROL CENTER AND A WIDE SELECTION OF PUMPING EQUIPMENT.

Blue Crystal® Residential Disinfecting Tablets

OUR PURE CALCIUM HYPOCHLORITE IS SPECIALLY FORMULATED FOR USE IN RESIDENTIAL SETTINGS FOR EFFICIENT, RELIABLE DISINFECTION. EACH TABLET CONTAINS AT LEAST 1.2% AVAILABLE CHLORINE. PACKAGED IN RE-SEALABLE BUCKETS, TABLETS ARE AVAILABLE FROM ANY WATER SUPPLY DISTRIBUTOR IN 10 AND 100 POUND

We are committed to helping you satisfy your customers and keep them coming back. Our motto, "Progress Through Service Since 1906" demonstrates our past and future commitment to this principle.

customer focus



Consider the facts:

- Dual-pass design assures the integrity of the treatment process. All liquid flowing through the system is treated twice by the UV lamp, once on the way down and again on the way back up. This doubles the exposure to UV light and greatly improves treatment.
- All electrical components are contained in a NEMA 4x weatherproof electrical enclosure. These components control the disinfection process and assure treatment integrity. The gasketed cover is secured with screws to seal the enclosure.
- Our long-life lamp is designed and tested to be superior to competitive products currently used in onsite wastewater treatment. The bulb is stronger and provides more complete disinfection.
- The lighting ballast is contained within the gasketed electrical enclosure to assure maximum life. Competitive systems leave the ballast exposed to the treatment environment.
- Disinfection quality is assured by a corrosion resistant solid state circuit board that continually monitors system performance. A current sensing circuit within the controls automatically gives immediate notification should a service interruption occur.
- Easy to install and maintain. The entire UV process is contained within a convenient ABS treatment chamber. Optional concrete or high-density polyethylene enclosures are also available to provide additional treatment.
- No chemical residual or harmful by-products. The AT 1500 UV treatment system provides superior disinfection and its performance is independent of the pH, temperature and ammonia content of the effluent being treated.
- Low electrical usage. The high efficiency electrical controls use very little electricity.
- Inexpensive to install and operate. The AT 1500 can be installed for less than some chemical feed systems, and requires no recurring chemical purchase. The only maintenance requirement is periodic cleaning of the Teflon cover.
- Can be used to eliminate contaminants not readily removed by chemical treatment. Advanced Oxidation Processes (AOP) can be constructed by supplementing the AT 1500 system with ozone or H₂O₂ to remove chemical resistant pollutants, such as certain pharmaceuticals and methyl tertiary butyl ether (MTBE).



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E IN RESIDENTIAL SYSTEMS
CTION. EACH BLUE
AST 70% AVAILABLE
ABLE CONTAINERS, OUR
OUR LOCAL NORWECO
ND POLYETHYLENE PAILS.

Bio-Max® Dechlorination Tablets

BIO-MAX DECHLORINATION TABLETS PROVIDE A CONVENIENT SOURCE OF CONCENTRATED SODIUM SULFITE TO INSTANTLY REMOVE ALL FORMS OF CHLORINE FROM WASTEWATER, POTABLE WATER AND PROCESS WATER. CONTAINING 92% SODIUM SULFITE AS ACTIVE INGREDIENT AND 8% PROPRIETARY INERT INGREDIENTS, BIO-MAX TABLETS CAN BE USED IN ALL BRANDS OF GRAVITY OR PRESSURIZED TABLET FEEDERS.

Bio-Dynamic® Tablet Feeders

BIO-DYNAMIC TABLET FEEDERS PROVIDE LOW COST, EFFECTIVE DISINFECTION AND DECHLORINATION OF SECONDARY EFFLUENT IN LESS SENSITIVE RECEIVING ENVIRONMENTS. EMPLOYING FLOW PROPORTIONAL CHEMICAL DOSAGE WITHOUT MOVING PARTS OR ELECTRICAL COMPONENTS, THE COMPACT TABLET FEEDERS INSTALL EASILY AND PROVIDE UNMATCHED DURABILITY.



Norweco distributors are located throughout the United States and much of the rest of the world. Research, product development, manufacturing, marketing and sales support are conducted inside our offices and factory in Norwalk, Ohio. Everyone at Norweco is committed to shaping the future of our industry.

engineering

the future

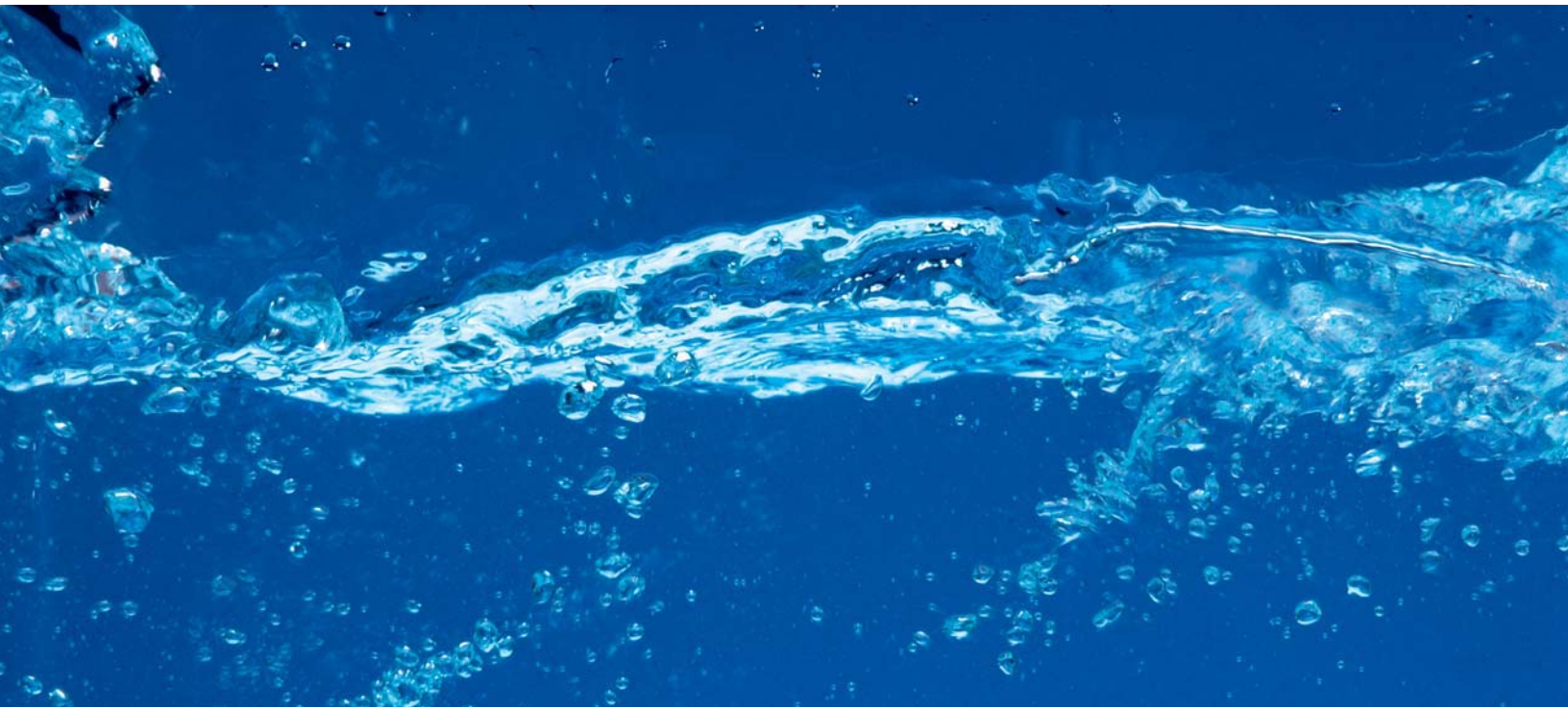
of water and wastewater treatment

Specify Norweco UV Disinfection

Equipped with an internal current sensing circuit that continuously monitors the performance of the UV bulb, the AT 1500 automatically provides notification if system operation is interrupted. This self-diagnostic feature protects the disinfection process from disruptions and maintains treatment quality. When used in conjunction with a Norweco remote monitoring controller, the system owner and service provider can be immediately notified of any change in performance.

The compact design and rigid construction of the system makes installation quick and easy. The treatment chamber is constructed from carbon-impregnated ABS plastic that is resistant to ultraviolet light and the engineered flow path assures disinfection quality.

Today's Answer for the Protection of Tomorrow's Environment



comprehensive protection, guaranteed



The AT 1500 system is warranted against defects in material and workmanship under normal use and service by a comprehensive 1 year warranty. This limited warranty provides single source protection and covers all system components. A warranty registration card is included with every new AT 1500 Installation and Operation Manual.

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Progress Through Service Since 1906

We engineer, manufacture, install and maintain advanced water and wastewater treatment technologies for residential properties, communities and commercial properties that are not connected to sewer lines. Norweco treatment systems are in service all over the world.

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