



EXPERTS IN ULTRAVIOLET DISINFECTION

www.atguv.com



SWIMMING POOLS & AQUATICS
CLEAN & SAFE ENVIRONMENTS



Why choose atg UV?

EXPERTS IN UV DISINFECTION & CHLORAMINE REDUCTION

DEFINING THE UV INDUSTRY WITH MARKET LEADING TECHNOLOGY SINCE 1981

WITH THE LARGEST NUMBER OF MEDIUM PRESSURE UV SYSTEMS INSTALLED FOR SWIMMING POOLS IN THE WORLD, ATG UV TECHNOLOGY IS RECOGNISED AS THE CLEAR MARKET LEADER FOR AQUATIC UV SYSTEMS THROUGHOUT THE INDUSTRY.

atg UV Technology is a leading manufacturer of UV disinfection systems and integrated technology packages. Established in 1981, we have served both the UK and international markets for over 30 years, and offer a wealth of industry experience, specialised knowledge and expertise.

As an independent UK manufacturer, atg UV Technology has strived to define the market with innovative designs and related technologies. Our

mission is to be recognised as having the greatest knowledge base of all UV manufacturers, and to be recognised as a company with high integrity, honesty and values in all its dealings.

With thousands of installations worldwide, a committed research, product development and validation programme, atg UV Technology is recognised as a market leader for the supply of high quality UV equipment and services across a vast range of industry applications.

“DETERMIND TO SUCCEED TOGETHER”

For over 30 years we have been listening to & working with our clients, suppliers & partners. Our success has been underpinned by our philosophy of ‘Determined to Succeed Together’



CUSTOMER FIRST APPROACH

The continued sustainable growth and success of atg UV Technology has been achieved by investing in our people, products and in our wider community.

PASSION FOR QUALITY

atg UV Technology are passionate about delivering first class product and customer service, providing the ultimate in trouble free disinfection.

EXCEEDING YOUR EXPECTATIONS

All of our team enjoy providing all of our customers with the best possible experience. Talk to us today to find out how we can exceed YOUR expectations.



Aquatic Applications

THE NUMBER ONE IN SWIMMING POOL UV

UV SYSTEMS ARE AN ESTABLISHED SOLUTION FOR SWIMMING POOLS OF ALL TYPES & HAVE BECOME THE PREFERRED TREATMENT METHOD OF CHOICE FOR A NUMBER OF LEADING LEISURE OPERATORS, COMPETITION VENUES & WORLD FAMOUS WATER PARK ATTRACTIONS.

The use of UV disinfection for aquatics is growing fast. From small swimming pools, to large municipal leisure centres and water theme parks, the inclusion of UV treatment is now becoming standard practise for many aquatic facilities worldwide.

As water features, wave machines, flumes and splash pads raise the fun factor in aquatic facilities, traditional methods of disinfection such as chlorine are causing problems for both leisure operators and their customers.

The swimming pool industry has therefore been seeking alternative ways of disinfecting water, protecting against chlorine resistant microorganisms and reducing the organic loading of water.

UV treatment provides the perfect answer for:-

Leisure Pools : Competition Pools : Spa Pools
Hydrotherapy Pools : Thermal Pools : Splash Pads
Water Features : Water Parks : Surf Parks



“ELIMINATES THE CAUSE
OF RED BURNING
EYES, ITCHY SKIN &
UNPLEASANT CHEMICAL
ODOURS”



KEY BENEFITS OF USING UV IN SWIMMING POOLS

Improves Health & Safety

UV is a highly effective disinfection technology used widely in drinking water and beverage production. A correctly sized medium pressure (MP) UV treatment system will allow swimming pool operators to reduce their residual chlorine levels down to as little as 0.5 ppm.

Even the 17 known chlorine-resistant pathogenic microorganisms such as Cryptosporidium and Giardia are easily treated with UV.

Reduces Chloramines

Chloramines are the unpleasant chemical compounds formed when chlorine combines with the nitrogenous compounds introduced to the pool by bathers. Chloramines are powerful irritants, which are responsible for eye, skin and respiratory complaints and the unpleasant ‘chlorine smell’ commonly associated with indoor pools. Chloramines are also corrosive and can lead to damage to pool buildings and structures, through stress corrosion cracking.

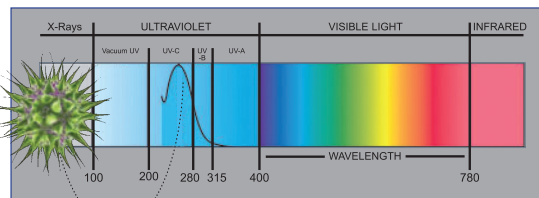
Improves Water Quality

Medium pressure UV systems initiate photo-oxidation reactions which oxidise unwanted organic contaminants, resulting in crystal clear, sparkling water. This occurs both by direct photolysis and through the production of hydroxyl radicals, a highly reactive chemical species which oxidises and breaks down organic compounds and contaminants. These reactions lower the organic loading of the water and significantly improve its clarity.

How Does UV Work?

Disinfection

Ultraviolet (UV) light operating between 200 and 280 nanometers (nm) is commonly known as germicidal UV-C light. UV-C light has the ability to protect against all known species of harmful microorganisms in water, by causing irreparable damage to their DNA.



UV-C at a peak wavelength of 265 nm is absorbed into the nucleus of the cell, causing permanent damage to the structure of the DNA molecule through the formation of thymine dimers. This process prevents the recombination of DNA strands during cell division, rendering the microorganism harmless. The same principle applies to RNA in viruses.

“Installing an atg UV Technology ultraviolet disinfection system provides a minimum 3 log (99.9% kill) of harmful microorganisms, typically allowing operators to maintain 0.5 - 0.8 ppm of free chlorine, whilst reducing combined chlorine to levels as low as 0.2 ppm”

Chloramine Reduction

Chloramines are the unpleasant chemical compounds which are formed when free chlorine reacts with nitrogenous compounds such as uric acid, urea, ammonia, histidine and creatine introduced to the pool environment by bathers.

As the cause of itchy skin, eye irritations (red eye), headaches and unpleasant chemical odours, chloramines pose a significant problem for leisure operators worldwide. Independent research has linked chloramines as a cause of asthma in regular swimmers, lifeguards, and instructors.

Chloramines also damage the structure of aquatic facilities through corrosive condensation, degrading structural steel, roof supports, furniture, pool side equipment and ventilation ducts.

The polychromatic wavelengths of medium pressure UV systems break the bonds within all three of the chloramine molecules (low pressure UV is effective only on mono-chloramine):

- Monochloramine (NH₂Cl): 245 nm
- Dichloramine (NHCl₂): 297 nm
- Trichloramine (NCl₃): 260 nm and 340 nm

The result is crystal clear water and fresh clean air. Requirements for ‘shock dosing’, and additional chlorine are reduced, and in most cases, combined chlorine levels are reduced to as little as 0.2 ppm.

Cryptosporidium Protection

UV-C light is a proven and effective barrier for Cryptosporidium and other emerging chlorine resistant microorganisms such as Giardia. Used extensively in drinking water for over 100 years, many leisure operators are now installing UV systems as standard to ensure their water does not pose a risk to public health and safety.

Due to a thick outer membrane, it takes more than 10 days to destroy cryptosporidium in a normal pool using traditional chemical methods (25 °C with free chlorine levels of 1 ppm).

Considered the best protection technology available, UV systems are proven as an effective barrier to safeguard against Cryptosporidium, Giardia and the 15 other chlorine resistant waterborne microorganisms.

Only UV systems that have undergone independent 3rd party validation testing can be trusted to deliver a 99.9% reduction of Cryptosporidium in a single pass.

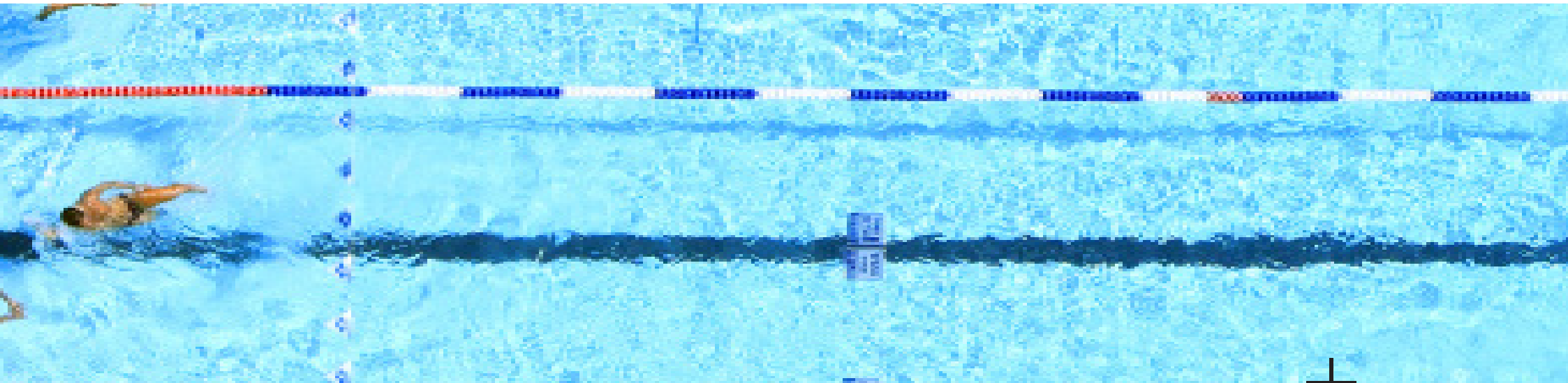
“In 2004 over 5,000 New York residents became infected with Cryptosporidium, caused by ineffective disinfection of public swimming pools. The scale of the outbreak led to the passing of new laws requiring UV systems to be installed on all public swimming pools throughout the State”



“IMPROVE YOUR OPERATIONS WITHIN DAYS”

UV significantly improves water quality, allowing for less chemicals, whilst reducing the need for periodic shock-dosing, back-washing and dilution, saving you time and money

Talk with our technical engineers today to find out how our award winning UV systems can benefit you



Guaranteed Performance As Standard

INDEPENDENT 3RD PARTY VALIDATION

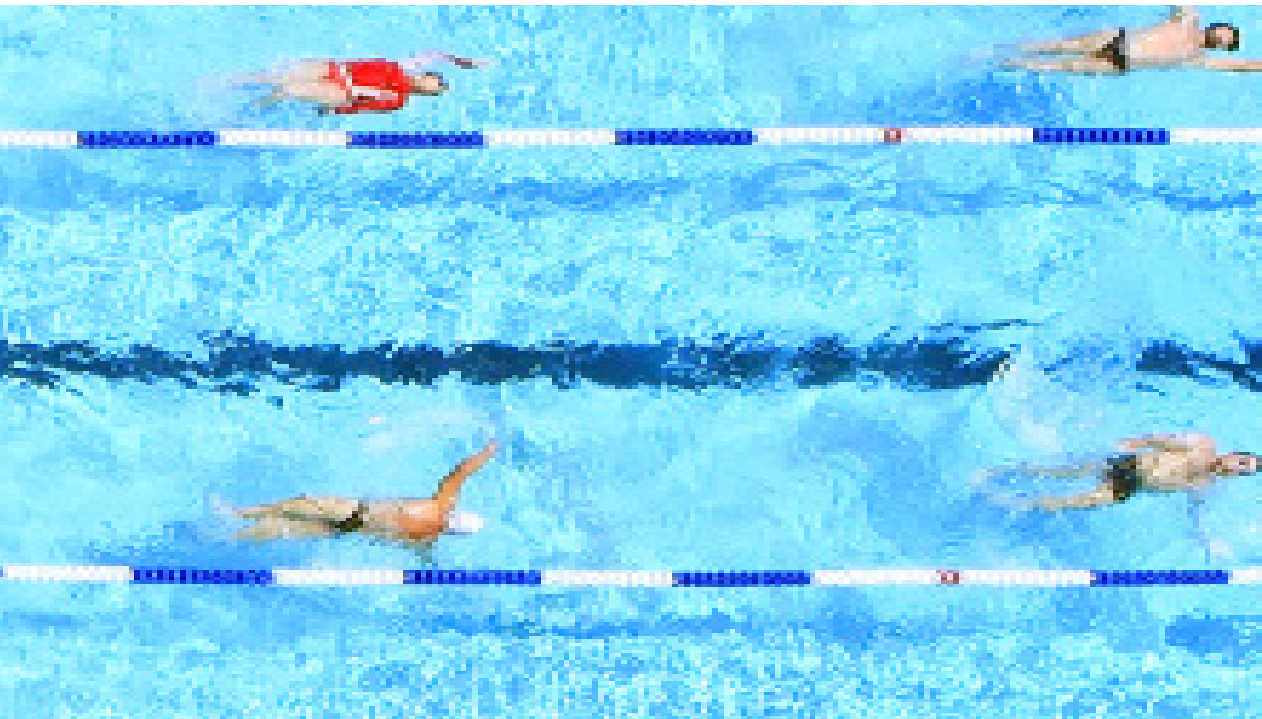
AS THE INDUSTRY LEADER FOR SWIMMING POOL UV SYSTEMS, ATG UV TECHNOLOGY HAVE MORE UV SYSTEMS WITH NSF-50 CERTIFICATION & MODEL AQUATIC HEALTH CODE COMPLIANCE THAN ANY OTHER MANUFACTURE IN THE UV INDUSTRY.

The performance of the disinfection function of a UV treatment system is often overlooked by many UV system manufacturers, who size their equipment as a solution to combined chlorine and water quality improvements only.

In order to prevent the manipulation of UV disinfection performance by manufacturers regarding the delivered UV dose and capacity of their equipment, the requirement for independent 3rd party validated performance is now a fundamental requirement when choosing a UV supplier.

Using the test protocols developed by the USEPA Ultraviolet Disinfection Guidance Manual, atg UV Technology systems are rigorously biometrically tested using live surrogate microorganisms (MS2) for guaranteed disinfection performance against Cryptosporidium and other microorganisms.

atg UVTechnology have more 3rd party validated, NSF-50 certified & Model Aquatic Health Code (MAHC) compliant medium pressure UV systems than any other UV manufacture. All systems are guaranteed to provide a minimum 3-log reduction (99.9% kill) of Cryptosporidium.



“SAFEGUARD YOUR REPUTATION”

Contact us today to find out why the worlds' leading leisure clubs, water parks, hotels and professional competition venues choose and trust atg UV Technology to protect their bathers, and safeguard their reputations



“atg UV Technology medium pressure UV systems were chosen to protect the world’s elite athletes against harmful microorganisms and provide perfect air & water quality for London Aquatics Centre, designed especially for use during the London 2012 Games”

LONDON 2012 GAMES, UK

“Described as the worlds most impressive, and technologically advanced water theme park, over 20 NSF-50 certified atg UV medium pressure UV systems were installed at the Yas Island Water Park for Cryptosporidium protection & chloramine reduction”

YAS ISLAND WATER PARK, ABU DHABI

“atg UV Technology’s range of medium pressure UV systems are used by market leading leisure chain, Virgin Active throughout the UK, South Africa, Spain & Italy to protect their customers against waterborne pathogens and provide crystal clear water and fresh clean air”

VIRGIN ACTIVE, HEALTH & FITNESS CLUBS



Market Leading Technology

DESIGNED ESPECIALLY FOR THE AQUATICS INDUSTRY

Performance & Installation

- ✓ US EPA UVDGM 3rd party validation
- ✓ NSF-50 & MAHC Compliant
- ✓ Horizontal or vertical installation
- ✓ Ultra compact design installs directly into the pipe
- ✓ Capacities from 1m³/hr to 5,000 m³/hr
- ✓ Ethernet, Modbus, Profibus & Data-Stream™
- ✓ Interface with BMS (building management system)

Specification & Features

- ✓ Automatic wiper systems supplied as standard
- ✓ UV intensity monitoring supplied as standard
- ✓ Strainer baskets supplied as standard
- ✓ Robust microprocessor based control panel
- ✓ Automatic 50% power timer for over night operation
- ✓ Variable power control (automatic) for use with variable speed drive pumps

Operational Benefits

- ✓ Reduces need for back washing & shock dosing
- ✓ Provides treatment for the full re circulating flow
- ✓ Simple to operate & easy to maintain
- ✓ Savings on water, chemicals and power usage
- ✓ Suitable for new builds and retrofits / upgrades
- ✓ No additional filters or contact vessels required
- ✓ Lower capital investment than comparative solutions



“THE ECL & SX RANGE
OFFERS A COMPACT UV
TREATMENT SOLUTION
FOR CAPACITIES OF
1 M³/HR - 5,000 M³/HR IN
A SINGLE HIGH OUTPUT
UV SYSTEM



SUPERIOR QUALITY & RELIABILITY AS STANDARD

Data-Stream

The atg UV technology 'Data-Stream' service is the first of its kind in the UV industry, allowing operators to monitor the performance of their UV system anywhere in the world, at any time. Using a simple wifi connection, the Data-Stream service transmits operational performance data in real time (updating every 30 seconds) directly from the plant room to any web enabled device, including smart phones, I-Pads, laptops & PC's.

5 Year Warranty

atg UV Technology are passionate about providing a first class after sales service and customer care experience. As the market leader for aquatic UV systems, atg UV Technology were the first UV manufacturer in the world to offer an exclusive 5 year warranty for standard UV systems. The 5 year warranty is a demonstration of our commitment to our customers, and an indication of the high level of quality and reliability in all of our products.

Recent Projects

- ✓ London Aquatics Centre, 2012 London Games
- ✓ Edinburgh 2013 Commonwealth Games
- ✓ Wet N Wild Water Park, Australia
- ✓ Centre Parcs Holiday Resort, Woburn, UK
- ✓ Yas Island Water Park, Abu Dhabi, U.A.E
- ✓ Wild Wadi Water Park, Dubai, U.A.E
- ✓ Virgin Active Health Clubs, Worldwide
- ✓ Port Ghaleb Luxury Holiday Resort, Egypt

LISTENING TO & WORKING WITH OUR CUSTOMERS FOR OVER 30 YEARS

CONTACT US TODAY



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