



BENEFITS OF UV SYSTEMS FOR SWIMMING POOLS

Ultraviolet water treatment for swimming pool applications worldwide is growing fast. From small swimming pools, spas and hydopools to municipal leisure facilities and full scale water theme parks, UV treatment is now becoming standard in leisure facilities throughout the UK.

As water features, wave machines, flumes and splash pads raise the fun factor in swimming pools, the traditional method of disinfecting water by using chlorine is causing problems for operators and customers alike. Higher water temperatures and increased turbulence in leisure pools requires increased dosages of chlorine, leading to pool users complaining of burning eyes, red or itchy skin and an over powering chlorine smell throughout the facility. In some cases the fabric of the building has also been attacked through corrosive condensation.

The main reason for these problems is the production of chloramines in the water caused by the reaction of free chlorine residuals with organic materials, such as bacteria brought in to the environment by pool users. Whilst Ozone can be successful at reducing chloramine levels, both the installation and operation is extremely expensive and requires skilled personnel to operate the plant, again driving up operating costs.

The swimming pool industry has therefore been seeking alternative ways of disinfecting water and reducing organic load. UV treatment provides a perfect and proven solution.

UV wavelengths between 240 and 280 nanometres deactivate all micro-organisms, particularly Pseudomonas (SP) and Ecoli. Manufacturers such as atg UV can incorporate UV systems

into existing control strategies to protect against micro-organisms including Chlorine resistant pathogens such as Cryptosporidium, an organism that is now a major concern for leisure operators worldwide.

Additionally a correctly sized UV treatment system reduces chloramines, the compound responsible for skin irritations, red eye and chlorine smell, resulting in safe, glacier clear sparkling water, fresh air and a more inviting bathing environment. Typically, following the installation of UV treatment, operators report a significant drop in combined chlorine levels, chlorine smell and a large reduction in the need for taxing back washing and shock treatments.

UV system benefits include: -

- UV is effective against all micro-organisms
- Vastly improved water quality
- Crystal clear water, and fresh clean air
- UV produces no by-products
- Reduces the need for "Shock Treatments"
- Fully automatic and cannot be over dosed
- UV is a non hazardous, green technology

All atg UV swimming pool systems feature an automatic wiper to prevent the build-up of deposits on the quartz tube, UV monitoring to ensure the systems consistently run at an optimum level,



half to full power for increased efficiency during periods of low/no use. e.g. over night, and a state-of-the-art SPECTRA control system that provides operators with data on flow rate, UV dose and intensity.

atg UV Technology have vast experience in providing validated UV systems to the swimming Pool industry worldwide. Using the mandate of the US EPA UVDGM 2006, the worlds strictest validation standard, atg UV systems are fully compliant with industry regulations and have been independently validated to demonstrate performance. For more information please visit www.atguv.com or call: **01942 216161**

atg UV's ECF and ECP system ranges were designed specifically to suit swimming pool applications, treating up to 2000 m³/hr in a single high-output, small footprint system, atg UV systems offer operators a flexible and cost effective solution. www.atguv.com