

Safe, Healthy & Fresh Water

**ESCO**  
International

Our UV Technology for your  
Swimming Pools & Spas

THE CLEAN TECHNOLOGY



WATER TREATMENT



# UV Systems

## Design Excellence, For Your Needs

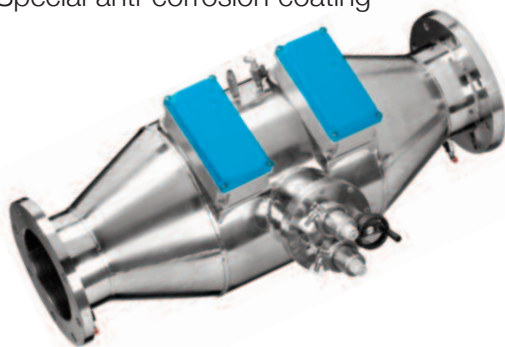
Our innovative solutions and technologies give ESCO International a commanding position when it comes to treating challenging and specific pollutants from Swimming Pool water, cost effectively achieving Disinfection, successful Breakdown of Combined Chlorine, Reduction of Tri-halomethanes (THMs) and Toxic carcinogens, by products that come from chlorination.

ESCO International's UV system range offers not only a peace of mind for pool operators but also gives bathers crystal clear safe and healthy water to enjoy.

### Features & Benefits

Our Leading UV systems can be delivered with Standard or Optional features for greater flexibility & user friendly control

- Manual or Automatic cleaning system
- Chemical cleaning system
- PLC control panel
- UV intensity monitoring
- Reactor temperature control
- Alarms for faults
- Automatic UV power control
- Special anti-corrosion coating



### Safety & Quality

Safety is a major consideration in the design of all our product and, the UV systems are no exception.

Our products are made from total and absolute highest quality materials. All products are CE approved and, are designed in compliance with ISO 9001/2000 standards.

### Performance & Reliability

Our UV lamp technologies ensure cost effective treatment of swimming pool water particularly at higher flow rates; reducing chloramines and making water free and safe from the complete range of germicidal spectrum including Cryptosporidium and Giardiasis.

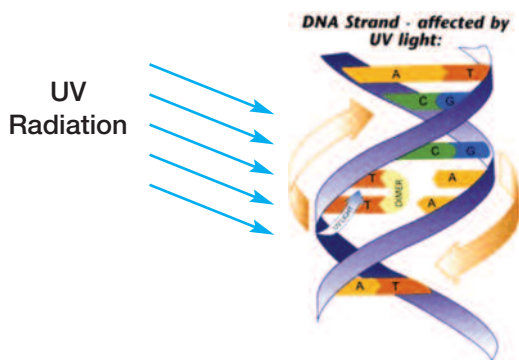
- Our low pressure high output Amalgam lamp performance is independent of water temperature in the range 5-60°C.
- The UV lamp output can be integrated to vary while maintaining same UV dose, hence power consumption and running costs are continuously optimized.
- Our In-line medium pressure UV systems are practically unaffected by water temperature.
- Our systems use accurate intensity monitoring equipment, ensuring correct UV dosage for treatment.
- Choice of magnetic or electronic ballasts and pace control operation for more flexible operation to suite your needs.

Our UV systems are designed for 24 hour operation all year round, are robust and, provide the best traditions of reliability and quality to avoid unexpected failures and system downtime.

## How Does UV Work?

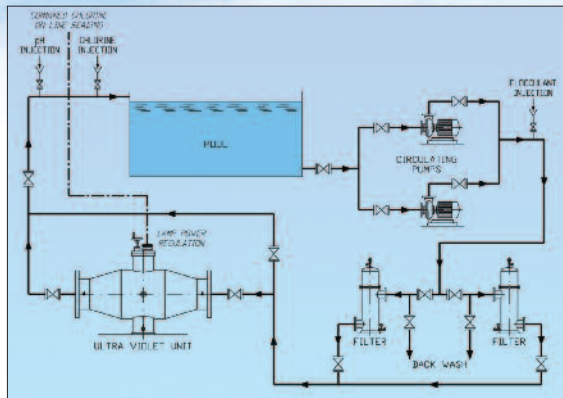
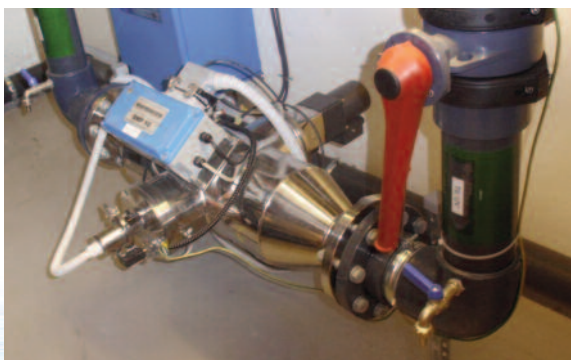
The natural disinfection properties of sunlight are attributable to UV radiation within the sun's rays. The UV spectrum is reproduced and enhanced to provide excellent control of microbiological activity and, by careful wavelength selection, destruction of targeted organic compounds, chloramines and THMs.

In the case of disinfection, the cell is subjected to germicidal UV at a wavelength of 200 – 280nm. This results in damage of protein structures and alteration of the cell DNA, preventing the cell from metabolizing and reproducing.



## Benefits of UV Technology

- UV radiation kills all microbes and, acts quickly.
- Low in Capital Investment.
- Low running & maintenance costs.
- Compact & Easy to Install.
- Easy to Retrofit.
- Accurate control of UV power.
- Minimize the use of chemicals.
- No effect on water chemical composition.
- No negative Environmental impact.
- Minimal plant room space requirement
- Help water reuse by cost effectively reducing water discharge and intake.



## Treatment

### Swimming Pools

ESCO UV systems offer a simple and convenient environmentally favorable method for treating swimming pool waters, with the additional benefit of eliminating chloramines, THMs and the discomfort associated with chlorine treatment alone.

Our equipment can treat water flow rates up to 1400m<sup>3</sup>/h standard and, offers custom design option to meet all your requirements.

### Therapy Pools & SPAs

These are much smaller than swimming pools and with close bather contact, increasing the risk of contamination. We specialize in 'out of the box' applications. ESCO UV systems perform and are reliable at higher temperatures and increased circulation rates. Our UV range offers low-pressure Amalgam lamp technology and in-line medium pressure UV systems for effective treatment of water.

### Splash Pads & Spray Pools

Often seen in parks and popular with the young, splash pads and pools typically have low water volumes and higher bather loads, thus increasing the risk of micro-organism contamination. Our UV systems offer water treatment that's necessary and, ensuring safe water for children to enjoy.



### Water Parks

ESCO UV systems are capable of effectively treating large amounts of water flow rates. We have the experience and technical know-how to meet your water treatment needs.



## The Natural Choice

The UV technology is proven effective against organic pollutants, harmful bacteria & viruses; including Cryptosporidium. UV is also an efficient way of reducing chlorination byproducts such as THMs, chloro-organics and chloramines responsible for asthma, lung damage & cancer. Our UV technology is clean, reliable way to disinfect and decontaminate pool water. Our combination of solutions & technologies is the way forward for Safe and Healthy pools.

## Proven Expertise & Solutions

Our aim is to provide cost effective and sustainable solutions to clients using our expertise in UV, Ozone and Advanced Oxidation Process technologies. Our experienced technical consultancy is up for a challenge to meet all your water purification needs.



Unit 8, Cae Ffwyt Business Park,  
Glan Conwy, Conwy, LL28 5SP, UK

Phone: +44 (0)1492 584140

Email: [info@escouk.com](mailto:info@escouk.com)

[www.escouk.com](http://www.escouk.com)

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