

UVC Water Trap Disinfecter

Effective reduction of bacteria from wastewater in sink and wash basins.

Water traps are some of the most contaminated areas in hospitals and increasingly recognised as potential vehicles for transmission of multi-drug resistant bacteria to patients.

Water used for staff hand washing, hygiene of patients or washing devices is contaminated and then drained through the sinks. If the flow of the water is restricted, biofilm-forming bacteria may form stable reservoirs in the waste pipes and the semi-horizontal drain pipes if they are not inclined enough or are partially blocked.

The DDC Dolphin UVC Water Trap Disinfecter keeps the water in sink waste pipes sanitised, killing bacteria and preventing biofilm formulation.

By preventing the spread of multi-resistant bacteria you reduce the risk of HCAI's which is not only cost-efficient, but also safeguards your clinicians and patients' health.

The UVC lamp only uses approximately 12w per hour and will only need changing once a year for continued efficiency.

Easy to install and inexpensive to run the DDC Dolphin UVC Water Trap Disinfecter is available to fit all sink and wash basin variations.



Benefits

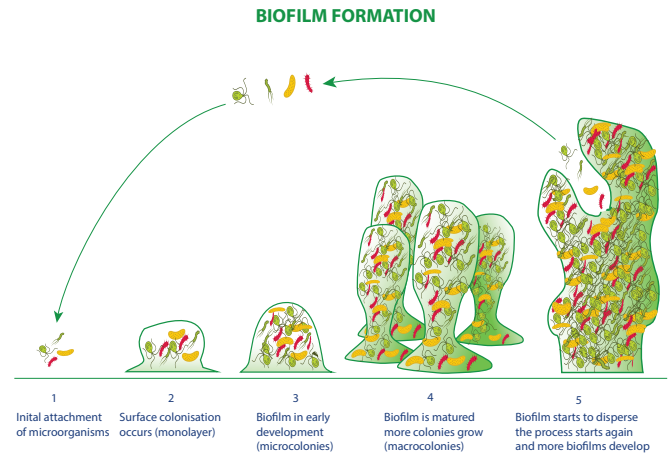
- Eliminates MDR Bacteria such as CPOS, VRE and ESBL producing organisms
- Germ count in water traps can be reduced up to 3-6 log using UVC in the drains
- Prevents Biofilm formation
- Low running costs, as little as 12w per hour
- Easy to install
- Fits all sink and wash basin variations
- Clinically tested.



How do Biofilms Form?

A biofilm is a collection of organic and inorganic, living and dead material collected on a surface. It may be a complete film or, more commonly in water systems, in patches on pipe surfaces. Biofilm microbial communities form in thick slimy layers on the inside wall of the water pipe, created by the continual growth of micro-organisms.

Unchecked Biofilm growth poses a real risk to public health. Biofilm formations will harbour a wide range of micro-organisms, including opportunistic respiratory pathogens.



The Technology

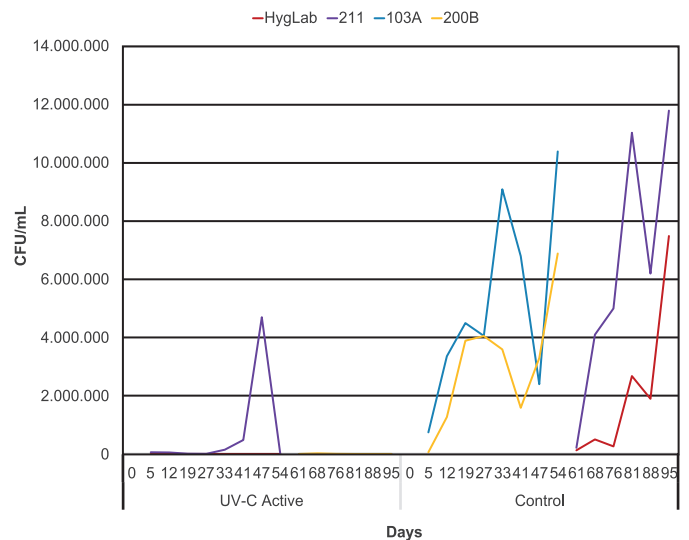
The UVC Lamp contained within the UVC Water Trap Disinfectant will target biofilm formation by continuously irradiating the internal surfaces of the water trap, destroying the bacteria, or limiting its ability to colonise and form biofilms.

Clinical Testing

Copenhagen University Hospital

A clinical study was undertaken by Copenhagen University Hospital to evaluate the efficacy of Ultraviolet C (UVC) light to decontaminate water traps. It was concluded that there was a marked reduction in bacteria counts within the first week and a marked difference in bacterial counts was observed between water traps exposed to UVC light and control water traps throughout the experimental period.

Under UVC light exposure *Pseudomonas aeruginosa* and Gram negative intestinal commensals disappear, while *Stenotrophomonas maltophilia* is markedly reduced.



Development of bacterial counts in washbasins exposed to UV-C light (UV-C active) and control washbasins (Control) in part 1 and 2 of the experiment.

