



ISO9001 Certified supplier

# Steriflo HW UV systems



## UV disinfection for hot water systems

To keep bacteria and particularly Legionella, the infectious organism that causes Legionaire's disease, from proliferating in domestic hot water systems the water has to be kept at or above 65°C. This temperature has to be maintained in hospital and retirement home hot water systems but it is too hot to use directly in the hot water supply to taps because of the risk of scalding the user.

One answer is to use a tempering valve to blend the 65°C water with cold water. However a requirement to have the tempering valve at the point of use means that their use is expensive with large numbers of valves being needed, which can be a maintenance headache.

A new range of Steriflo UV systems from Contamination Control provides an answer that has not been available until now. It is desirable to maintain the hot water system at 55°C but this isn't hot enough to kill Legionella. UV light kills Legionella easily but conventional UV lamps can't work in hot water. They are intended to run at about 35°C and their output diminishes dramatically at temperatures over 45°C rendering them ineffective. Therefore UV sterilisers are not specified for such hot water systems.

### HW system lamps work in hot water

The HW series of UV systems from Contamination Control have lamps unaffected by temperature so they can operate at 55°C or more without difficulty. The new lamps also have a greater output than conventional lamps giving a higher treatment capacity than has been available to date.

The two single lamp units in the Steriflo HW range are suitable for treating flows of 5,000 and 10,000L/hr. Other models are available with two or more lamps to treat higher flow rates where necessary.

### New lamp advantages

HW lamps are more powerful than standard lamps so one lamp can treat more water. Secondly the mercury that generates the UV output is in the form of an amalgam, not free mercury droplets as is usually the case. The amount of mercury in a lamp is very low (50 to 100mg) but it can still get into the environment if the lamp is broken, even in a landfill. In the amalgam form the risk of contamination is much less resulting in increased safety to both the operator and the environment. HW system lamps cost more than standard lamps and so will not normally be used for cold water systems except at high flow rates.

### Options

The HW system units are all available in two versions - a basic power supply with lamp failure alarm and an industrial version with hour meter, UV sensor, UV output display and alarm.

### Specifications

Model	Capacity (L/hr)	Connections (mm)
HW5	5,000	40
HW10	10,000	50

Power consumption	120 Watts
Power factor	>98%
Lamp life	9000 Hours
Max pressure	1035kPa (150 psi)



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