



ENVIRONMENTALLY FRIENDLY, SAFE, ECONOMICAL :

A few good reasons to choose ProMinent Fluid Controls

ProMinent have developed non-chemical water treatment systems to meet the needs of the nursery grower enabling the water to be disinfected before reaching the plants. This is especially important where water is recycled or if it is suspected that there are pathogens in the water.

There are two main systems available, ProMinent DulcoDes™ Ultra Violet (UV) systems and ozone generation plants. They work in different ways and the most suitable system will depend on the particular situation on the nursery.

Both systems destroy pathogens as the water passes through the UV or ozone units. Unlike chemical treatments there is not any residual activity in the water after it has passed through.

DulcoDes™ Ultra Violet (UV) Disinfection System

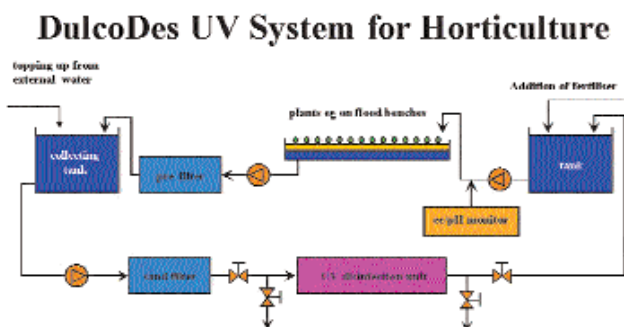
- No addition of chemicals
- No formation of undesired substances in the water
- No storage or handlings of chemicals
- User-friendly system, little maintenance required
- Safe, environmentally friendly and reliable technology

How does DulcoDes™ UV system work?:

UV wavelength used affects the DNA destroying the chemical bonds. This means that DNA is unable to develop therefore the cells or virus are destroyed. DNA is essential for life therefore when they are affected by UV light the water is disinfected.



Sample Layout of DulcoDes™ UV system in a Re-cycled System



How is it designed? :

The DulcoDes UV units are longitudinal flow-past lamps, optimal design for all sizes from 1 to many 100s' m³/hr. due to the compact design and length the flow is guided properly and the water is thoroughly mixed resulting in constant radiation of the water flow. The diagram below shows the flow and the picture above is a system in situ. The units come with a monitoring system, which is alarmed for when the tubes need replacing or cleaning.



ProMinent Ozonifilt™ OZVa Systems

Ozone systems have in the past be restricted to high water flow rates. It is only recently that ProMinent have brought out a range, ProMinent Ozonifilt™OZVA system, that can cope with a water flow rate of 10 to 20m³ per hour.

ProMinent Ozonifilt™ OZVA system is designed to produce ozone by taking the air out of the atmosphere. The air is dried and passed over cells which electrically charge the oxygen content of the air forming ozone.

For flow rates above 20 m³ per hour then a system is tailor made to the specific need.

After ozone is generated it is diffused into the water. Ozone is a highly effective oxidising agent which is the method by which it disinfects. The ozone rapidly breaks down into carbon dioxide, water and oxygen as it disinfects. Therefore, it is an environmentally friendly way of disinfecting the water.



ProMinent Fluid Control Systems are one of the leaders in their field. Offering a wide range of equipment from dosing pumps, monitoring systems, probes, chlorine dioxide generators to UV systems and Ozone generators. ProMinent are always bringing out new product ranges of which Reverse Osmosis is the latest. contact Fargo Ltd for more details.

ProMinent Fluid Control is an international company supplying products in the water treatment industry. Traditionally they have provided systems for all sectors of the water industry from small pools, food and manufacturing processes as well as the main water utilities.

ProMinent water treatment product range includes chemical dosing and monitoring as well as the non-chemical treatments including Ultra Violet system, ozone and Reverse Osmosis.

ProMinent’s range of accurate dosing pumps and systems for chemical cleaning and disinfection within irrigation lines (eg acids, chlorine dioxide, Reciclean) are reliable and makes handling of chemicals safer. They are also ideal for concentrated acid dosing and can be assembled so as to fit directly into the 45 litre drums, therefore eliminating the need to dilute before dosing.

ProMinent Gamma Pumps and Dosing Systems

Reciclean Dosing System



Prominent Gamma Pumps are highly accurate digital pumps that are capable of dosing small amounts of chemical into irrigation/feed water in many situations.

Dosing is extremely accurate as it is regulated by the water flow once the dose per cubic metre has been set. Therefore the pumps are connected to water flow meters. The pumps can be connected to many existing flow meters but if this is not available then ProMinent have a range of meters that will fit into the water system.

There are a wide range of pumps available to suit most chemical or acid dosing needs. Prominent pumps are suitable to safely and accurately dose highly corrosive acids such as hydrofluoric and nitric acid. It is always important to state what the pump is to be used for so that the correct materials are used.

ProMinent pumps are recommended by Kemira for dosing the chemical, Reciclean. It is used for cleaning and disinfecting irrigation lines, especially drip irrigation, for crops including tomatoes, cucumbers and ornamentals. For further information on Reciclean see ‘Cleaners & Disinfectants’ in the ‘Chemical’ section. Tanks and chemical bunds are available to suit each situation, such as the installation for Reciclean shown above.

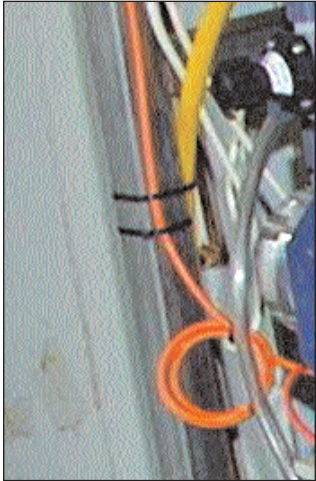
A range of economical chlorine dioxide generators are available causing less damage to the environment than pure chlorine. Problem-free production from diluted hydrochloric acid and sodium chlorite.

It is important to ensure that the dosing is monitored and controlled such as for pH or disinfection. ProMinent offer a wide range of monitoring and control systems, the Dulcometer range.

Gamma Dosing Pump



Chlorine Dioxide Generator



Dulcometer™ Measurement & Control Systems

Dulcometer Measuring Probes



Dulcometer Measurement and control systems from ProMinent offer maximum process reliability in a wide range of applications. The measuring control system can feed back to the growers own system for accountability and monitoring. Measuring and monitoring is very important in recycled systems is essential as it prevents build up of any disinfectants taking place so that subsequent dosing is related to the recycled water.

Dulcometer Control System

