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Ultraviolet Technology for Hydroponics & Agriculture



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HORTICULTURE









ATG UV TECHNOLOGY ARE MARKET LEADERS IN THE CUSTOM DESIGN. PRODUCTION. INSTALLATION AND MAINTENANCE OF ULTRAVIOLET TREATMENT SYSTEMS FOR A RANGE OF APPLICATIONS.

CLEAN, SAFE & HIGHLY EFFECTIVE

atg UV's state-of-the-art Ultraviolet technology ensures effective disinfection without the use of harmful chemicals.



experience atg UV Technology are market leaders, whose state-of-theart UV product range has provided a product rejection, crop failure and the vast range of industries with advanced technology solutions for a variety of "emerging" pathogens now displaying applications worldwide.

With a number of units specially designed and developed for hydroponics and agriculture, atg UV's treatment systems eliminate all types of water borne microorganisms.

With over twenty five years of industry atg UV Technology's leading Ultraviolet treatment systems are used in a number of key areas to vastly reduce the risk of spread of disease. With a number of increased resistance to traditional methods of disinfection, Ultraviolet treatment is now the preferred and accepted method of disinfection over traditional chemical methods.



atg UV Technology are experts in the application of Ultraviolet light, offering both medium pressure and low pressure amalgam lamp technologies, allowing for tailored and cost efficient solutions for a variety of agricultural production applications.

Flexible designs ensure *atg UV* can provide advanced technology solutions for both new installations and retrofits of existing units, in a range of difficult and challenging environments. Additionally atg UV's manufacturing experience allows for systems to be designed and manufactured for use within Zone 1 and Zone 2 hazardous areas.

FULLY AUTOMATED DESIGN

The Spectra control system from *atg UV* is designed for fully automated continuous or batch processes. The system can be integrated with most on site process control software, enabling nutrient dosing following the UV system. UV system performance is recorded using on board data logs that provide a real time and auditable record of disinfection. A UV monitor is used to measure the UV system performance, and proven wipers keep the optical components free from fouling.

ULTRAVIOLET FOR HYDROPONICS

Abstract dispersal of root pathogens is a major concern in closed hydroponic cultures. To limit dispersal, Ultraviolet disinfection technology has been used to remove pathogens, viruses, moulds, bacteria and algae avoiding the costly ramifications associated with crop failure and product recall.

If your system is simply wick based, uses a Nutrient Thin Film (NFT) or is a state of the art Aeroponic system, UV light can effectively ensure that the Rhizosphere is not infected by Pythium, Verticillium, Phytophthora or Fusarium.

CHEMICAL FREE | Several of the species that inhabit the Rhizosphere now demonstrate multiple resistivity against antibiotics. These include Enterobacter, Pseudomonas, Ralstonia and Staphylococcus. None of these species can or is able to develop resistance to UV light.

PROCESS WATER | Equipment such as sprayers and heat exchangers, which rely on recirculating water, will benefit from water supplies purified by Ultraviolet light, as the technology will effectively prevent slime formers infesting pipes and blocking nozzles.

WATER REUSE | As water supplies become more stressed, and the rate of water consumption exceeds availability, hydroponic growers will turn to re-use and reclaimed waste water. Often this water will need to have chlorine or chloramines removed before it is suitable for hydroponic use.

PESTICIDES | Our leading UV technology is used to photolyse a variety of pesticide species from water, it can also remove Pharmaceutical and Personal Care Products (PPCP) from municipal mains water as well as from reclaimed water.

QUALITY ASSURANCE | atg UV Technology's attitude to design and manufacture is driven by a 'quality first' approach. As an ISO 9001 company you can be assured all atg UV Technology products are consistently built to the highest standards.

Determined to succeed together





HYDROPONICS | The only appropriate method of disinfection is by UV treatment. UV will not affect the ph or chemistry of water fed to the Rhizosphere, and unlike Hydrogen Peroxide it will not affect organic additives or be carried over and affect germination or seedling development.

STORAGE TANKS | During emptying and venting of sterile holding tanks, airborne bacteria can enter the vessel. atg UV Technology's leading Ultraviolet systems are designed to fit easily into the head space and are ideal in reducing this potential means of infection.















