

UV-C FOR AQUACULTURE

VGE B.V. is a Dutch company specialized in UV-C disinfection solutions. With over 35 years of experience in UV technology we are driven to deliver the best solution needed. VGE B.V.'s industrial brand is called VGE Pro. VGE Pro specializes in developing industrial UV-C solutions for different applications, such as Aquaculture.



PROTECTION AGAINST FISH DISEASES

Pathogens are the scourge of fish farmers and are often controlled with antibiotics. This has a negative impact on the water quality and thus also on the quality of the fish. UV-C radiation is safe and protects against fish diseases.

VGE Pro UV-C systems are therefore very cost-effective for the inactivation of many types of bacteria, viruses and parasite and provide healthy, clear and safe water that protects against infectious fish diseases. This results in a pure, untainted product: better and healthier fish, without residual medications. In addition, VGE Pro UV-C systems are suited to combat bacteriological and microbiological hazards and bring water to the quality level the sector is required to meet.

VGE Pro UV disinfection solutions are readily available for different markets;

- Fish Hatcheries
- Intake/discharge water
- Research facilities
- Aquaria
- Zoos
- Processing plants



MOST COMMON USAGES FOR AQUACULTURE

Disinfection; most UV systems are being used to inactivate dangerous pathogens. UV systems can greatly reduce the bacterial pressure and has been proven to be one of the most cost-effective disinfection technology without the formation of any by-products. Not only disinfection is an application for UV systems. When ozone is used to improve the water conditions by oxidation the remains of this toxic gas needs to be eliminated as this can cause harm to the fish. UV irradiation can destroy residual ozone in the water instantly, by breaking one of the oxygen bonds in the ozone molecule.

A final method for using UV is with Advanced Oxidation Process (AOP); Using AOP in aquaculture reduces micropollutants like geosmin and MIB which cause off flavour in the fat tissue of the fish. Through the combination with an oxidant such as hydrogen peroxide or ozone, hydroxyl radicals are formed. Hydroxyl radicals are the strongest oxidant that can be applied in water environments.

