

AQUACULTURE

Your protection against infectious 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.

Residual ozone destruction; Sometimes ozone is being used to improve the water conditions and remove any odours or discolorations in the water. However ozone can be extremely toxic to the fish and needs to be removed before it flows back to the tanks. UV light can destroy ozone in the water very quickly.

Advanced Oxidation Process (AOP); Using AOP in aquaculture can help reduce or eliminate remaining residuals or contaminations (geosmin, MIB, pharmaceuticals). It can be removed either with direct photolysis or in combination with an oxidator such as H₂O₂ or ozone to form hydroxyl radicals. Hydroxyl radicals are the strongest oxidator that can be applied in water environments.

Contact us for your perfect UV treatment solution and one of our specialists will advice you about the best solution for your application.

VGE Pro UV systems

Overview VGE Pro UV INOX or HDPE system

The VGE Pro UV systems can be equipped with either a stainless steel 316L reactor or made from polyethylene (HDPE). Various control systems are available ranging from a basic version with just an electronic ballast up to an advanced control which can also monitor UV intensity/water temperature and advanced communication through ModBus and/or different alarm outputs.



HDPE Series	75-110	140-110	200-110	200-160	400-200	600-225	975-315	1950-315
Capacity (m ³ /h)*	9,5	17	23,1	34,5	82,8	123,5	277,9	544,1
Lamp power	1x 75 W	1x 140 W	1x 200 W	1x 200 W	2x 200 W	3x 200 W	3x 325 W	6x 325 W

INOX Series	40-76	75-114	140-114	200-154	400-204	600-19	975-306	1950-306
Capacity (m ³ /h)*	2,6	9,7	19,9	338,3	85,3	129,5	306,1	600,4
Lamp power	1x 40 W	1x 75 W	1x 140 W	1x 200 W	2x 200 W	3x 200 W	3x 325 W	6x 325 W

* Capacity based on 40 mJ/cm², T10 mm @ 254 nm = 98 %, MPSSM-average intensity

Overview VGE Pro UV INOX IMMERSION

The VGE Pro UV-C Immersion system can be delivered with several UV-C lamps, varying in power from 40 watt up to 325 watt. The lamp is installed in a protective quartz sleeve and can withstand vibrations and strong water flows. The UV-C lamps are based on amalgam lamp technology with a lamp life of 16.000 hours.

These units can very easily be integrated in an open channel system, inserted in different filter tanks or as a component for drumfilters. Multiple lamps can be controlled by one control cabinet.



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