

Professional UV disinfection solutions

VGE PRO: EXPERT IN UV DISINFECTION SOLUTIONS



WE'VE GOT YOU COVERED WORLDWIDE



UV Experts
since **1982**

Annual production
of **40,000 units**

Exporting to over
80 countries

Made in
The Netherlands

VGE Pro

The VGE Pro range consists of a complete selection of industrial treatment systems based on UV-C technology. Our UV-C systems can be used for water, surfaces and air treatment against bacteria, viruses, moulds, yeasts, spores, protozoa and algae. This makes VGE Pro the driving force in water, surface and air treatment installations.

UV disinfection solutions

When developing VGE Pro systems everything revolves around efficiency and ease of maintenance. The VGE Pro UV-C devices are equipped with unique Smart Pin Technology (SPT), Single-end Bayonet Technology (SBT) and Special Use Technology (SUT). These innovative technologies ensure that UV-C lamps are integrated into the UV-C treatment chambers efficiently and intelligently.

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OUR UV EXPERTS



Ruud van de Ven

ACCOUNTMANAGER

Expertise:

HORTICULTURE, LIVESTOCK FARMING



Rob van Esch

COMMERCIAL PRODUCTMANAGER

Expertise:

UV TECHNOLOGIST, SPECIAL APPLICATIONS,
PRODUCT DEVELOPMENT



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NEW BUSINESS DEVELOPMENT



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Expertise:

AQUACULTURE



Gies Leenders

SENIOR ACCOUNTMANAGER

Expertise:

SWIMMING POOLS AND SPA



Bas Tips

ACCOUNTMANAGER

Expertise:

SWIMMING POOLS AND SPA



UV SOLUTIONS IN FEATURED APPLICATIONS

Horticulture



- **Reusage of drain water**
- **Reduction of pesticides**
- **Inactivates all waterborn plant diseases**

In the field of horticulture, maintaining clean water is essential for cultivating healthy crops. A UV-C system from VGE Pro plays a crucial role in this process by inactivating harmful bacteria, viruses, and fungi, including

Pythium and Fusarium, without leaving any residue in the water. In closed irrigation systems, where water often circulates, pathogens can easily spread through the water. When this water is reused for crop irrigation, it must be treated with a VGE Pro UV system to eliminate potential threats to plant health and ensure a safe growing environment.

Aquaculture



- **Healthy aquatic life**
- **Lower mortality rate**
- **Higher Yields**
- **Reduced Medicine costs**

Pollution, food residues, and animal waste create a breeding ground for bacteria, impacting water quality and animal well-being. VGE Pro UV systems ensure the health of aquatic life by keeping potentially harmful

microorganisms in check. The direct benefits of good bacterial control in aquaculture systems are: higher density, lower mortality rate, higher yields and reduced medicine costs. Our UV systems make water healthy and visibly clear in both professional aquaculture and public aquariums.

Swimming pool and Spa



- **Effective chloramine reduction**
- **Non selective disinfection**
- **Energy efficient**
- **Easy to install and service**

For residential applications the UV Pro systems provide excellent water disinfection, also against chlorine resistant microorganisms. At commercial pools the VGE Pro systems effectively reduces the chloramine

levels together with non-selective disinfection, including the inactivation of chlorine resistant organisms like Cryptosporidium and Giardia lamblia. The wellness feeling is optimised.

Drinking water



- **Chemical free UV-C disinfection**
- **No Disinfection-By-Products**
- **Reliable water disinfection**
- **Proven technology**

The VGE Pro UV systems are designed for a reliable disinfection of water. Not only microorganisms but also viruses and even chlorine resistant microorganisms are being treated effectively. The last step in

a drinking water treatment process, UV-C treatment makes water safe to use. UV-C intensity monitoring gives the assurance for a trustworthy disinfection result.

Industry and Cooling systems

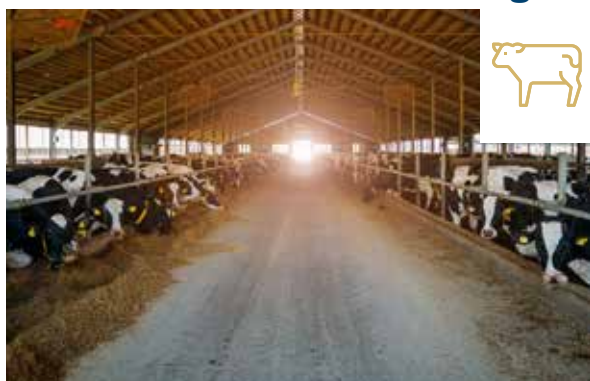


- Reduction of biocides
- Legionella prevention
- Less maintenance

Biofouling is one of the biggest problems in cooling tower systems. Not only the cooling capacity is reduced but also system corrosion can be accelerated. Amongst many other microorganisms also the growth

of Legionella, causing Legionnaires' disease, due to the water temperature. Legionella spread can be contained by using VGE Pro UV systems for disinfection of the water. It also reduces the use of chemicals and increases the service interval.

Intensive Livestock Farming



- Improve animal welfare
- Reduce biofilm formation
- Reduce antibiotics

In intensive livestock farming, water quality is vital to the well-being of animals. Cows and pigs consume substantial amounts of water, making it essential to provide safe drinking water and maintain hygiene

in the environment. VGE Pro UV-C systems ensure high water quality by inactivating microorganisms without leaving any residues. By disinfecting the water, the risk of disease transmission is reduced, and the welfare of livestock is enhanced. Clean and safe drinking water is a sustainable way to promote animal health in livestock farming.

Maritime



- Compact designs for installation
- Effective drinking water disinfection
- Disinfection for waste water

Water tanks in maritime environments can harbor pathogens such as legionella bacteria, posing risks to guests and staff. VGE Pro UV-C disinfection systems are utilized to treat water and eliminate these

microorganisms, providing safe and clean water for consumption. Furthermore, VGE Pro UV-C systems are effective in disinfecting wastewater before it is discharged into the ocean, ensuring compliance with strict regulations in the shipping industry.

Food and Process Industry



- Chemical free UV-C disinfection
- No Disinfection-By-Products
- Reliable water disinfection
- Proven technology

Maintaining water quality is essential for food safety in the food and process industry. VGE Pro UV-C disinfection inactivates pathogenic microorganisms, ensuring product safety and reducing the risk of

contamination. VGE Pro UV systems also allow for water reuse, which not only saves costs but also increases sustainability. Additionally, VGE Pro UV-C disinfection can be applied to disinfect surfaces, such as conveyor belts and packaging, further enhancing hygiene in food processing and ensuring the quality of products. It's an effective way to meet quality standards and maintain the safety of water used in various food and beverage processes.

INOX LOW PRESSURE UV LAMP SYSTEMS



SINGLE LAMP SYSTEMS

- High corrosion resistance
- Easy to install
- UV radiation reflection
- 16,000 hour lamp life

INOX 40-76



Connection:	3/4" BSPT
Hydraulic capacity:	3 m³/h
Number of lamps	1 x 40 W
Power:	0.05 kW

INOX 75-76



Connection:	1 1/2" BSPT
Hydraulic capacity:	12 m³/h
Number of lamps	1 x 75 W
Power:	0.08 kW



Benefits INOX UV systems

The high quality 316L stainless steel treatment chamber of the VGE Pro INOX series have been designed to perform. After the high quality welding process the units are leak tested. They get a pickling and passivation treatment which drastically improves the corrosion resistance and lifetime of the unit. Another last treatment with glass pearls (shot peening) gives the units a nice, matt grey surface.

All VGE Pro INOX systems are fitted with low pressure UV-C lamps with 16,000 hours of lamp life. The complete range consists of single-lamp systems with threaded connections, up to 6 lamps with DN flanges. The stainless steel chamber ensures a pressure resistance of 6 bar. VGE Pro INOX systems come with SPT lamps, ensuring easy maintenance and lamp swaps without tools, even while the system is under pressure. All systems have connection ports to install UV and temperature sensors.

INOX 140-76



Connection:	2" BSPT
Hydraulic capacity:	12 m³/h
Number of lamps	1 x 140 W
Power:	0.16 kW

INOX 75-114



Connection:	2" BSPT
Hydraulic capacity:	22 m³/h
Number of lamps	1 x 75 W
Power:	0.08 kW

INOX 140-114

Connection: **2" BSPT**
 Hydraulic capacity: **22 m³/h**
 Number of lamps: **1 x 140 W**
 Power: **0.16 kW**

INOX 200-76

Connection: **2" BSPT**
 Hydraulic capacity: **22 m³/h**
 Number of lamps: **1 x 200 W**
 Power: **0.23 kW**

INOX 200-154

Connection: **DN65**
 Hydraulic capacity: **37 m³/h**
 Number of lamps: **1 x 200 W**
 Power: **0.23 kW**

INOX 400-54

Connection: **DN25 Tri Clamp**
 Hydraulic capacity: **5.5 m³/h**
 Number of lamps: **1 x 400 W**
 Power: **0.47 kW**

INOX 400-76

Connection: **2" Tri Clamp**
 Hydraulic capacity: **22 m³/h**
 Number of lamps: **1 x 400 W**
 Power: **0.47 kW**



The Netherlands, Aquaculture - INOX 200-154

INOX LOW PRESSURE UV LAMP SYSTEMS



MULTI LAMP SYSTEMS

- High corrosion resistance
- Easy to install
- UV radiation reflection
- 16,000 hour lamp life

INOX 400-204

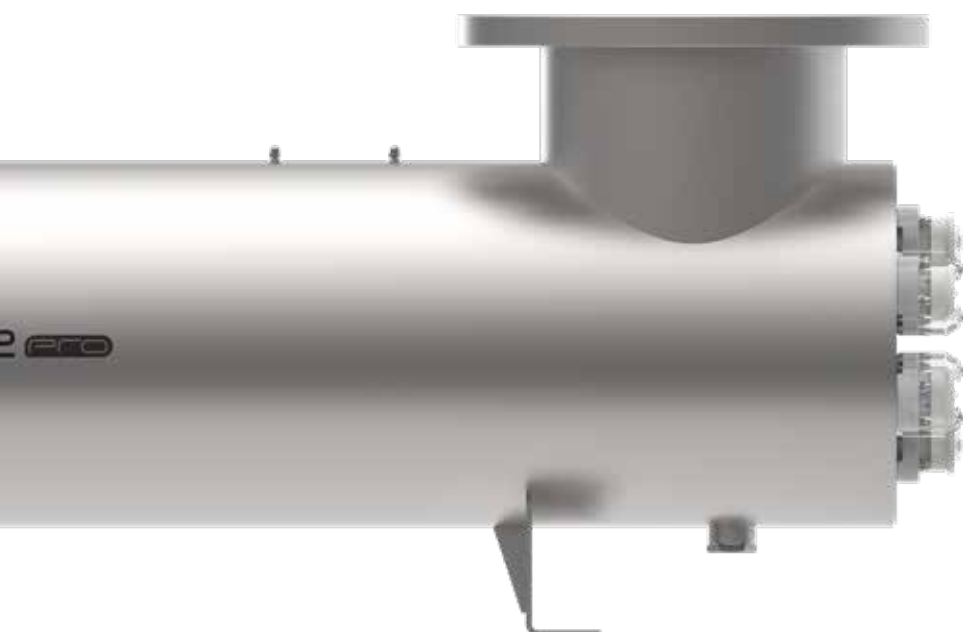


Connection: **DN100**
Hydraulic capacity: **85 m³/h**
Number of lamps **2 x 200 W**
Power: **0.45 kW**

INOX 420-168



Connection: **3" BSPT**
Hydraulic capacity: **49 m³/h**
Number of lamps **3 x 140 W**
Power: **0.47 kW**



INOX 600-219

Connection: **DN125**
 Hydraulic capacity: **133 m³/h**
 Number of lamps: **3 x 200 W**
 Power: **0.68 kW**

INOX 975-306

Connection: **DN250**
 Hydraulic capacity: **531 m³/h**
 Number of lamps: **3 x 325 W**
 Power: **1.11 kW**

INOX 1950-306

Connection: **DN250**
 Hydraulic capacity: **531 m³/h**
 Number of lamps: **6 x 325 W**
 Power: **2.21 kW**



Malaysia - Food and Process Industry - INOX 600 - 219

OPTIGUARD UV SYSTEMS



THE MOST OPTIMIZED UV DESIGN POSSIBLE

- Hydraulically optimised
- Full lamp length usage
- High humidity resistant
- Design Pressure: 12 bar / 175 psi

OptiGuard 2.4



Connection:	DN150 / 6" ANSI
Hydraulic capacity:	191 m³/h 840 USGPM
Number of lamps	6 x 400 W
Power:	2.7 kW

OptiGuard 4.0



Connection:	DN200 / 8" ANSI
Hydraulic capacity:	339 m³/h 1494 USGPM
Number of lamps	10 x 400 W
Power:	4.4 kW

Benefits OptiGuard UV systems

The OptiGuard UV systems are designed for optimal protection, to realize the best biosecurity. Thanks to their unique hydraulic design, utilizing the entire length of the lamp, they deliver the best disinfection results. Because of this, these systems are highly suitable for intake water projects where water with a low UV transmittance passes through the system only a single time and a high UV dose is required.



The treatment chamber is constructed from stainless steel 316L, which not only reflects UV-C radiation, but it also guarantees a maximum pressure of 12 bar ensuring long-term durability and reliability.

Each OptiGuard UV systems is equipped with low pressure UV-C lamps of 400 W and 16,000 hours lamp life. In total there are 5 models, varying with 6 up to a total of 34 lamps. All lamps are fitted with SUT (Special Use Technology) outdoor connectors with an IP67 rating, providing protection against water and dust.

OptiGuard 7.2



Connection:	DN250 / 10" ANSI
Hydraulic capacity:	530 m³/h 2334 USGPM
Number of lamps	18 x 400 W
Power:	7.9 kW

OptiGuard 9.6



Connection:	DN300 / 12" ANSI
Hydraulic capacity:	763 m³/h 3361 USGPM
Number of lamps	24 x 400 W
Power:	10.5 kW

OptiGuard 13.6



Connection:	DN350 / 14" ANSI
Hydraulic capacity:	1727 m³/h 7603 USGPM
Number of lamps	34 x 400 W
Power:	14.8 kW



Ecuador - Horticulture - 2x OptiGuard 13.6

HDPE LOW PRESSURE UV LAMP SYSTEMS



PROFESSIONAL HDPE CHAMBERS

- UV-C radiation resistant
- Non corrosive treatment chamber
- 16,000 hour lamp life

HDPE 40-75 SUT



Connection:	1 ½" BSPT
Hydraulic capacity:	12 m³/h
Number of lamps	1 x 40 W
Power:	0.05 kW

HDPE 80-75 SUT



Connection:	1 ½" BSPT
Hydraulic capacity:	12 m³/h
Number of lamps	1 x 80 W
Power:	0.08 kW



Benefits of HDPE UV lamp systems

HDPE treatment chambers guarantee a long lifetime, as HDPE is resistant to UV-C radiation and highly corrosive water. Because of its unique benefits, these systems are ideal in saltwater applications.

All VGE Pro HDPE systems are fitted with low pressure amalgam UV-C lamps with 16,000 hours of lamp life at continuous use. The amalgam lamps allow disinfection in low, moderate and high temperature applications up to a water temperature of 45 °C.

The HDPE chambers are designed to have minimal pressure loss at maximum flow capacity. These systems are safe to use at operational pressures of up to 6 bar (type 975 and 1950 max. 4 bar).

HDPE 75-110



Connection:	2" BSPT
Hydraulic capacity:	22 m³/h
Number of lamps	1 x 75 W
Power:	0.08 kW

HDPE 140-110



Connection:	2" BSPT
Hydraulic capacity:	22 m³/h
Number of lamps	1 x 140 W
Power:	0.16 kW

Depending on the model, VGE Pro HDPE systems come with SPT or SUT lamp systems, ensuring easy maintenance and lamp swaps without tools, even while the system is under pressure. All systems have sensor ports for optional temperature and UV sensors.



HDPE 200-110



Connection: **2" BSPT**
 Hydraulic capacity: **22 m³/h**
 Number of lamps: **1 x 200 W**
 Power: **0.23 kW**

HDPE 600-225



Connection: **DN125**
 Hydraulic capacity: **129 m³/h**
 Number of lamps: **3 x 200 W**
 Power: **0.68 kW**

HDPE 200-160



Connection: **DN65**
 Hydraulic capacity: **37 m³/h**
 Number of lamps: **1 x 200 W**
 Power: **0.23 kW**

HDPE 975-315



Connection: **DN250**
 Hydraulic capacity: **445 m³/h**
 Number of lamps: **3 x 325 W**
 Power: **1.11 kW**

HDPE 400-200



Connection: **DN100**
 Hydraulic capacity: **79 m³/h**
 Number of lamps: **2 x 200 W**
 Power: **0.45 kW**

HDPE 1950-315



Connection: **DN250**
 Hydraulic capacity: **445 m³/h**
 Number of lamps: **6 x 325 W**
 Power: **2.21 kW**



Libya - Drinking water - HDPE 600 - 225

INOX MEDIUM PRESSURE UV LAMP SYSTEMS



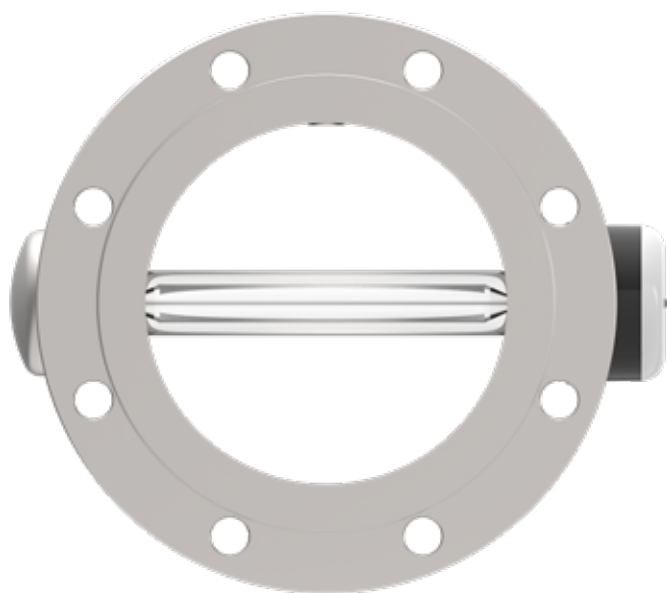
HIGH QUALITY 316L STAINLESS STEEL

- Easy-to-install single-ended lamp
- Compact design for high water flow rates
- Working pressure 10 bar
- Electronic lamp power supply

MultiMax



Connection: **2" BSPT**
Hydraulic capacity: **22 m³/h**
Number of lamps **1 x 400 W**
Power: **0,43 kW**



Benefits of medium pressure UV lamps

VGE Pro's product range includes systems based on both low pressure and medium pressure UV lamps. Medium pressure UV lamps emit a broad spectrum of ultraviolet (UV) radiation, providing excellent disinfection results and being well-suited for photolysis applications, such as reducing chloramine in pool applications. The single-ended lamp, combined with the Single-end Bayonet Technology (S.B.T.) and the visual lamp indicator on the chamber, makes VGE Pro UV systems extremely user-friendly. For optimal results, optional mechanical cleaning is available to address against fouling of quartz sleeve(s) and UV sensors.

The short and powerful medium pressure lamps, which are positioned perpendicular to the flow, ensure a compact treatment chamber design which makes it easy to retrofit in existing water treatment systems. Due to the high UV-C power produced, a single lamp can treat large water capacities in combination with a minimal pressure drop.

INOX MP 600-85



Connection: **DN80**
Hydraulic capacity: **22 m³/h**
Number of lamps **1 x 600 W**
Power: **0,66 kW**

INOX MP 1000-104



Connection: **DN100**
Hydraulic capacity: **44 m³/h**
Number of lamps **1 x 1000 W**
Power: **1,30 kW**

Features

- Cross-flow stainless steel (SS 316L) treatment chamber design with low pressure loss
- Flange range from DN80 to DN300
- Medium pressure UV lamps ranging from 400 W to 3500 W
- Visual lamp indicator in the lamp head

Even the systems with a cleaning mechanism can be serviced from one side. The whole innerpart can easily be removed from the treatment chamber making service very easy and simple.



INOX MP 1500-168



Connection:	DN150
Hydraulic capacity:	162 m³/h
Number of lamps	1 x 1500 W
Power:	1,83 kW

INOX MP 1500-168 MW



Connection:	DN150
Hydraulic capacity:	162 m³/h
Number of lamps	1 x 1500 W
Power:	1,83 kW

INOX MP 2000-219



Connection:	DN200
Hydraulic capacity:	285 m³/h
Number of lamps	1 x 2000 W
Power:	2,36 kW

INOX MP 2000-219 MW



Connection:	DN200
Hydraulic capacity:	285 m³/h
Number of lamps	1 x 2000 W
Power:	2,36 kW

INOX MP 2500-256



Connection:	DN250
Hydraulic capacity:	428 m³/h
Number of lamps	1 x 2500 W
Power:	2,88 kW

INOX MP 2500-256 MW



Connection:	DN250
Hydraulic capacity:	428 m³/h
Number of lamps	1 x 2500 W
Power:	2,88 kW

INOX MP 3000-306



Connection:	DN300
Hydraulic capacity:	640 m³/h
Number of lamps	1 x 3000 W
Power:	3,41 kW

INOX MP 3000-306 MW



Connection:	DN300
Hydraulic capacity:	640 m³/h
Number of lamps	1 x 3000 W
Power:	3,41 kW

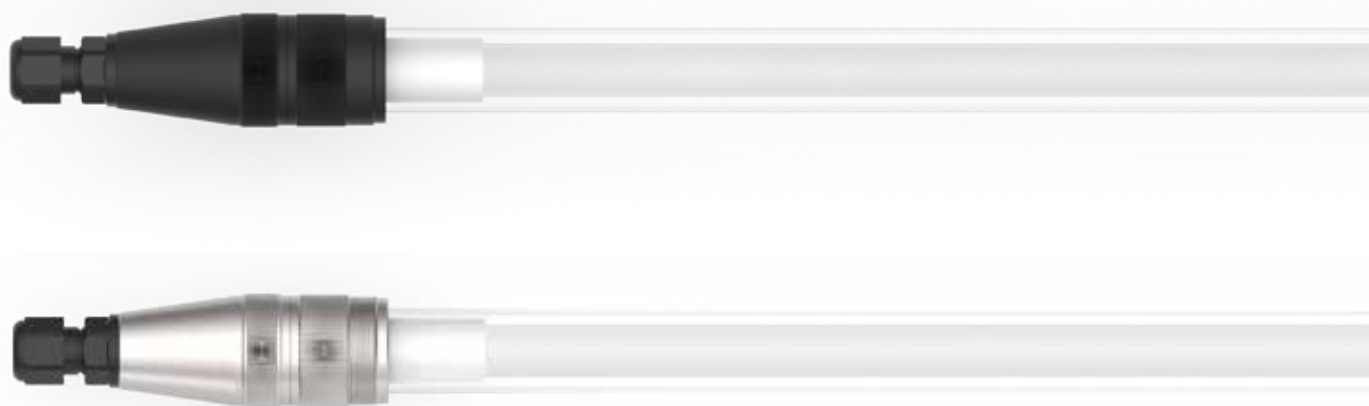


The Netherlands – Swimming pool and Spa - INOX MP 2000-219

Installation

Medium pressure UV lamp based systems can be installed in both vertical and horizontal piping systems, just make sure that the lamp itself stays horizontal. With the single-ended lamps the systems can be integrated in almost every piping system even close to a wall. Glass beads blasting gives the units a nice, matt grey surface. The high quality 316L stainless steel treatment chamber of the VGE Pro INOX series have been designed to perform. After the high quality welding process the units are leak tested.

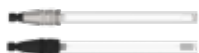
IMMERSION UV SYSTEMS



HIGH QUALITY 316L & PVC FITTING

- No pressure loss
- 9 Meter long cable
- Easy to install/ Ideal for retrofitting/ Wet and dry install possible
- Withstands vibrations and strong water flows

INOX / PVC 40 W



Number of lamps **1 x 40 W**
Power: **0.05 kW**

INOX / PVC 75 W

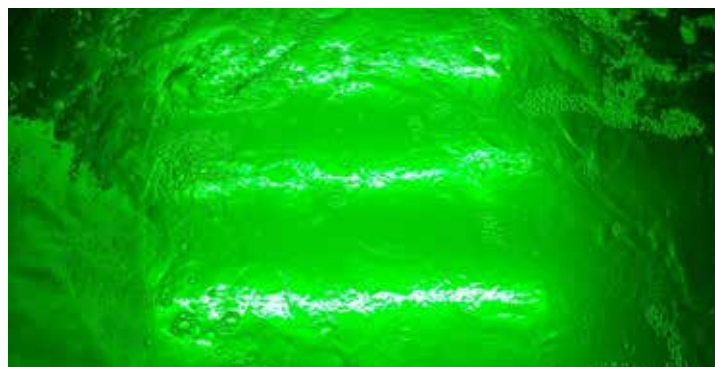


Number of lamps **1 x 75 W**
Power: **0.08 kW**

INOX / PVC 80 W



Number of lamps **1 x 80 W**
Power: **0.09 kW**



The Netherlands - Aquaculture - 3x INOX 200 W



Benefits Immersion UV Systems

No pressure loss is a great advantage of the VGE Pro UV Immersion series, because these systems are integrated inside your water installation without an irradiation chamber. The socket holders are made of high-quality stainless steel or durable corrosion free PVC. The Immersion UV systems can be positioned in a vertical or horizontal way. They are perfect for installation in for instance open channels where they can be installed perpendicular or longitudinal to the flow direction.

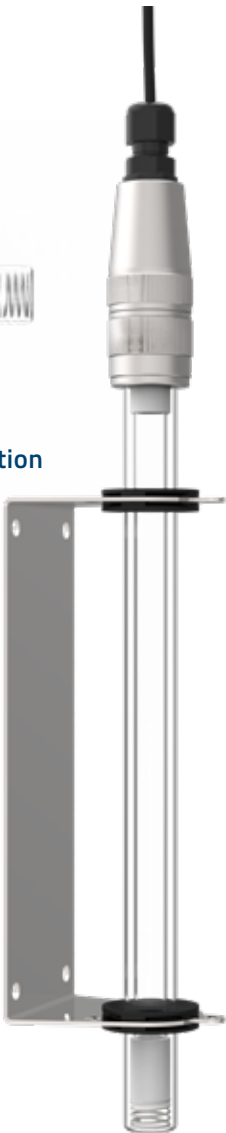
Since UV-C radiation is harmful for the environment, animals and people, avoid unwanted exposure!



Flange installation option

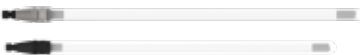


Bracket installation option



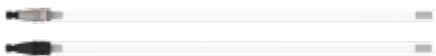
INOX / PVC 130 W

Number of lamps **1 x 130 W**
Power: **0.17 kW**



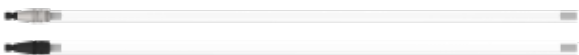
INOX / PVC 200 W

Number of lamps **1 x 200 W**
Power: **0.23 kW**



INOX / PVC 325 W

Number of lamps **1 x 325 W**
Power: **0.37 kW**



FLOAT UV SYSTEMS



HIGH QUALITY 316L FITTING



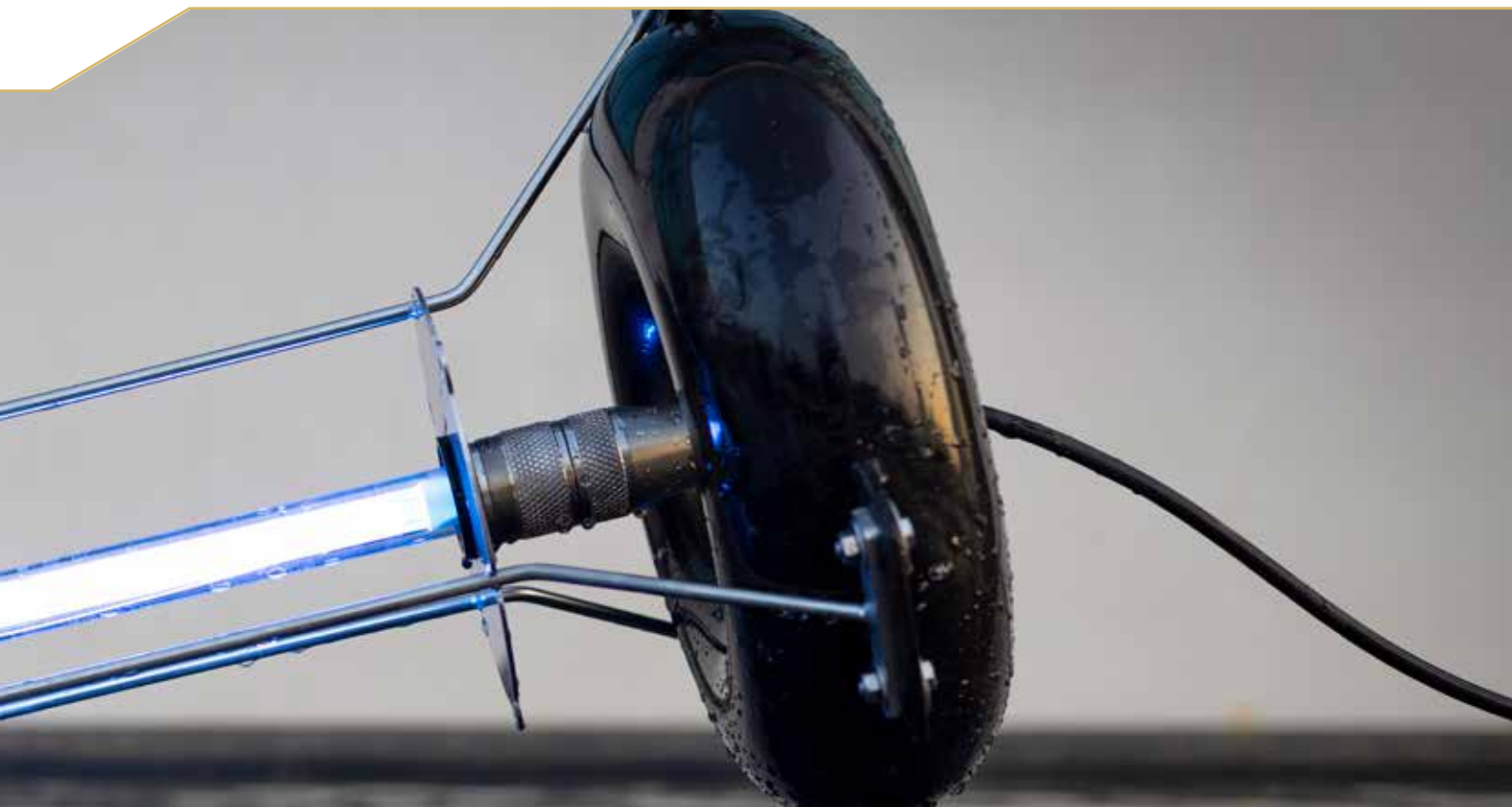
Benefits Float UV systems

The combination of an Immersion UV systems with a floating device creates the VGE Pro UV Float systems. Due to the floating device, which is floating on the water surface, the UV lamps are always submerged and are ideal for applications in for instance water tanks where the water level varies. Depending on the maximum and minimum available water level a specific Float UV system can be selected. For tanks with a large water surface multiple Float UV systems can be used which can be interconnected so they stay in position ensuring a reliable disinfection. The UV lamp and quartz sleeve are protected with a stainless steel frame.

Float 40 W



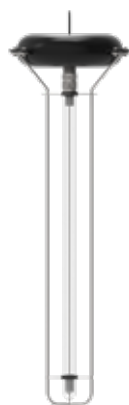
Number of lamps	1 x 40 W
Power:	0.05 kW
Min. water height:	480 mm

**Float 80 W**

Number of lamps **1 x 80 W**
 Power: **0.09 kW**
 Min. water height: **725 mm**

Float 200 W

Number of lamps **1 x 200 W**
 Power: **0.23 kW**
 Min. water height: **1270 mm**

Float 130 W

Number of lamps **1 x 130 W**
 Power: **0.17 kW**
 Min. water height: **975 mm**



MEDIUM AND LOW PRESSURE UV LAMPS



SBT, SPT & SUT TECHNOLOGY



Medium pressure Single-end Bayonet Technology (SBT)

The lamp base is equipped with a bayonet technology closure for easy and fast lamp (re)placement and a lamp function indication. The lamp itself is single-ended which not only makes it easy to install and replace but also requires service space at only one side of the treatment chamber.



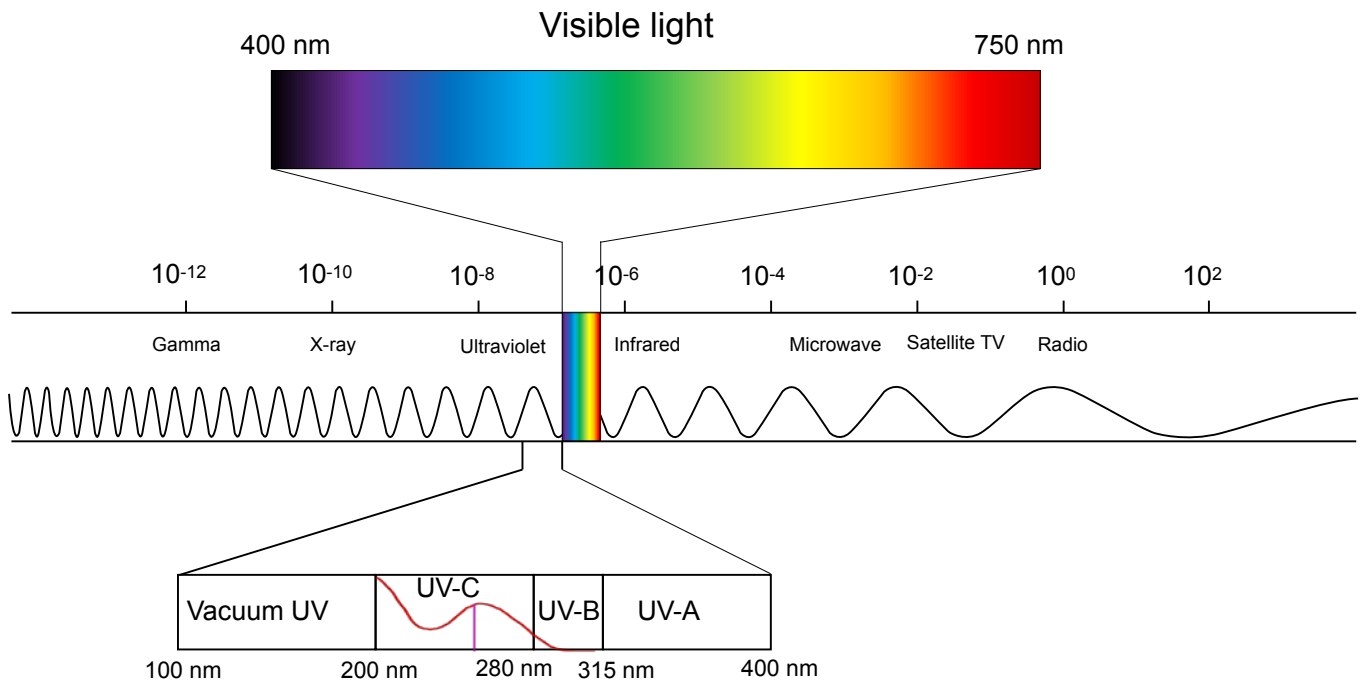
Low pressure Smart Pin Technology (SPT)

The VGE Pro low pressure UV systems are equipped with the unique Smart Pin Technology (SPT). This innovative system is a reliable way to (re)install the UV-C lamp(s) in a safe, efficient and smart way in the chamber. The SPT lamp head has an intergrated visualisation for lamp function indication.

Low pressure Special Use Technology (SUT)

This lamp connection makes it possible to use the UV system in severe environmental conditions with high humidity and/or high dust content due to the IP67 design/protection.

The SUT is designed in such a way that lamp (re)placement is easy and fast and that no special tools are required when dismantling a quartz tube.



UV-C TREATMENT

UV radiation can be divided in four main categories, UV-A, UV-B, UV-C and Vacuum UV. The UV-C spectrum (200 to 280 nanometers) is the most lethal range of wavelengths for microorganisms. UV-C radiation has the ability to cause permanent damage to microorganisms.

Each type of microorganism requires a specific UV-C radiation exposure rate to successfully complete the disinfection process.

The targeted microorganism must be directly exposed to the UV-C radiation long enough for the radiation to penetrate the microorganism's cell wall. However, it takes only a fraction of a second for UV-C radiation rays to inactivate waterborne microorganisms by breaking through the microorganism's cell wall and damaging their DNA. This often totally destroys the organism, or at the very least will impair its ability to reproduce.



CONTROL UNITS



CHOICE OF MULTIPLE CONTROLLERS

UV control units for medium pressure lamp systems

The VGE Pro medium pressure UV lamps systems can be controlled by two different type of controllers, the Compact and the Comfort controller.

The Compact controller is a simple plug & play system and the Comfort controller has full functionality with optional sensors. Both controller types are powering the UV lamps via high frequency and high efficiency lamp drivers.

Compact



In combination with the MultiMax and INOX MP 600-85, 1000-104 and 1500-168 systems.

Features:

- Plug & Play
- All cables are pre-connected
- IP64
- End of lamp life indicator

Comfort



In combination with the all INOX MP systems (except MultiMax)

Features:

- PLC based
- Full colour touch screen HMI
- Lamp power control
- Economy mode
- Optional UV sensor

(600-85 has a LCD display with keyboard and no dimming function)

UV control units for low pressure lamp systems

For the VGE pro systems based on low pressure UV lamps seven different types of control units are available. Depending on the needed functionality, simple on/off up to full function PLC based controllers can be selected.

All controllers are powering the UV lamps via high frequency and high efficiency lamp drivers.

Basic Controller



For low pressure single lamp systems with 40, 75 and 140 W UV lamps.

Features:

- Basic on/off functionality
- Compact aluminum housing
- Plug & Play

Basic Controller



For low pressure single and multi lamp systems with 140, 200 and 325 W UV lamps.

Features:

- Basic on/off functionality
- Closed ABS housing
- Input for lamp control

Control Timer



For low pressure single lamp systems with 40, 75 and 140 W UV lamps.

Features:

- As Basic Controller
- Closed ABS housing
- LED hours counter

Control Monitor



For VGE Pro UV low pressure single lamp systems with 40, 75, 140, 200 and the multi lamp 3 x 140 W systems.

Features:

- As Basic in Polycarbonate housing
- Lamp hours counter
- Multilingual (UK, DE & FR)
- Input for optional UV sensor
- Flow switch/temp switch port

Control Monitor Plus



For low pressure multi lamp systems with 140 and 200 W UV lamps.

Features:

- As Control Monitor in coated steel housing
- Multi colour 4 line LCD display
- Input for optional UV sensor
- Input for optional temperature sensor

PLC Touch



For low pressure multi lamp systems with up to 6 x 325 W UV lamps.

Features:

- As Control Monitor Plus
- Full colour touch screen HMI
- User interface for remote control

OptiControl



For low pressure multi lamp systems with 6 or more 325/400 W UV lamps.

Features:

- As PLC Touch
- Full colour touch screen HMI
- User interface for remote control

CUSTOM MADE SOLUTIONS



CUSTOM ENGINEERING AND DESIGN



Whether it's adapting the design of the treatment chamber, adjusting the number of UV lamps, or fine-tuning the control system, we are here to make it happen. Your requirements and preferences are at the heart of our process.

Our experienced team leverages their knowledge and expertise to provide you with a solution that not only meets your needs but also exceeds your expectations. We are not just flexible; we are your partner in UV disinfection solutions!

Custom solutions

At VGE B.V., we understand that each UV disinfection challenge is unique. We work closely with you to create the ideal solution. While our VGE Pro UV series offers outstanding standard systems for a wide range of applications, we recognize that sometimes a customized approach is the key to success.





CUSTOM ENGINEERING AND DESIGN

What makes the VGE Pro UV-C systems unique?

- VGE Pro UV-C units are equipped with a 316L stainless steel or a high quality HDPE treatment chamber
- Lamp can be replaced while unit is pressurised
- Each unit with a SPT or SBT lamp connection has a lamp function indicator at the lamp head
- VGE Pro units can be equipped with a UV-C sensor and/or temperature sensor
- Easy and safe lamp (re)placement can be done without disconnecting the lamp power cable
- Low pressure lamps with a lamplife of 16,000 hours for high performance levels with efficient energy usage
- Medium pressure lamps with a lamplife of 9,000 hours for high UV power applications with a compact design
- Single systems can handle flows ranging from 0.5 m³/h up to 640 m³/h
- Customization of the device to your own specifications is possible
- All the VGE Pro UV systems are using high frequency, high efficient electronic lamp drivers for optimized lamp control.



UV-C & TEMPERATURE SENSORS



SYSTEM MONITORING

UV measurement and control

VGE Pro UV systems can optionally be equipped with a UV-C sensor. The digital INOX UV sensor provides an absolutely calibrated measurement of the UV-C intensity in the INOX treatment chamber. For the HDPE system a corrosion resistant plastic UV-C sensor is available

The UV sensor measures the UV-C intensity inside the chamber to make sure that the required UV dose is realised for a specified flow rate through the chamber. The UV-C intensity can be affected by a changing water quality (UV transmittance), fouling of the system and ageing of the lamps.

INOX UV sensor



INOX UV sensor, optional with all Control Monitor, Control Monitor Plus, PLC Touch, Comfort and OptiControl Controllers. It measures the UV-C intensity inside the UV

treatment chamber and the controller signals if its value gets below the application specific setpoint. Two versions are available, one type for low pressure UV lamps and a second type for medium pressure UV lamps.

INOX UV sensor in Measuring window



INOX UV sensor in measuring window, the sensor is used in combination with the OptiGuard systems. The UV sensor is placed inside a measuring window which looks inside the treatment

chamber. The window can withstand a water pressure up to 16 bar and the UV sensor can be removed from the window without draining the treatment chamber. Functionally the same as the INOX UV sensor.

PTFE UV sensor



PTFE UV sensor, optional with all Control Monitor, Control Monitor Plus and PLC Touch Controllers. Typical for low pressure lamp HDPE systems.

Function wise the same as the INOX UV sensor.





SYSTEM MONITORING

Temperature measurement and control

VGE Pro UV systems can optionally be equipped with a temperature sensor. For the INOX systems “bolt-on” temperature sensors and switches are available to monitor the chamber temperature. The corrosion free HDPE systems can be equipped with a HPDE version which can be inserted in a socket to monitor the water temperature. The temperature switches and sensors monitor and protect the system against overheating due to no water in, or stopped flow through the treatment chamber while the UV lamps are in operation.

Bolt-on temperature sensor



Bolt-on temperature sensor, optional with all Control Monitor Plus, PLC Touch, Comfort and OptiControl

Controllers. If the measured chamber temperature reaches a first setpoint a warning signal will be activated, if a second higher setpoint is reached an alarm signal will be activated and the lamp(s) will be switched off.

HDPE temperature sensor



HDPE temperature sensor, optional with all Control Monitor Plus, PLC Touch, Comfort and OptiControl

Controllers. It has the same functionality as the Bolt-on temperature sensor but specifically for HPDE systems where it measures the water temperature.

Bolt-on temperature switch



Bolt-on temperature switch, standard present on the medium pressure lamp based systems and optional for INOX

low pressure lamp systems. This switch is used for protection against overheating and directly switches off the lamp(s) if a dangerous temperature is reached.

HDPE temperature switch



HDPE temperature switch, optional with all Control Monitor Plus, PLC Touch, Comfort and OptiControl

Controllers. It has the same functionality as the Bolt-on temperature switch but specifically for HPDE systems.

WORKING METHOD FROM IDEA TO CUSTOM UV UNIT



At VGE we believe in a transparent process and customized solutions that fully match your application.

Below you can read step by step how we work with you to create a perfectly tuned UV unit.

Step 1



Inventory of customer needs

We start with an intake interview in which we collect all relevant information together with you, such as:

- Purpose of the UV unit (disinfection, oxidation, etc.)
- Type of medium (air, water, process fluid)
- Flow rate and pressure
- Connections, construction type and available installation space
- Any specific standards or certifications

Result: A clear technical and functional overview of your wishes.

Step 2



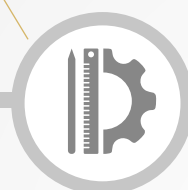
Technical advice and concept proposal

Based on the inventory, our engineers will draw up an initial concept proposal. We will take into account:

- The right UV technology (wavelength, dosage, type of lamp)
- Choice of materials (stainless steel, HDPE, etc.)
- Efficiency and maintenance aspects
- Integration with existing systems

Result: A non-binding sketch or 3D concept with technical explanation.

Step 3



Custom engineering and design

After approval of the concept, we work out a detailed design, including:

- CAD drawings and technical data sheets
- Simulations or calculations (such as UV dose or flow analysis)
- Prototype development if necessary

Result: A fully developed technical design, ready for production.

Step 4



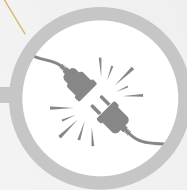
Production of the UV unit

The UV unit is manufactured in our own workshop or via certified partners. We provide:

- Strict quality control on all components
- Assembly according to applicable norms and standards
- Optional test and validation reports

Result: A high-quality, custom UV installation.

Step 5



Delivery, installation and commissioning

We deliver the unit ready for use and, if desired, also take care of the installation and commissioning on site.

Result: A working UV unit, correctly connected and tested.

Step 6



Aftercare, maintenance and service

We remain involved even after delivery. We offer:

- Maintenance contracts and inspections
- Replacement of lamps and parts
- Remote monitoring or onsite support

Result: Maximum lifespan and reliability of your UV system.

ABOUT VGE



THE PEOPLE BEHIND OUR SUCCESSES



VGE B.V. is the expert in the field of UV-C disinfection. With an international perspective, we closely follow the latest developments and technologies to contribute to a sustainable and future-oriented water industry. Driven by a passion for technology and extensive knowledge of UV-C, we develop innovative systems for swimming pools (Blue Lagoon), ponds (Xclear), and the professional market (VGE Pro).

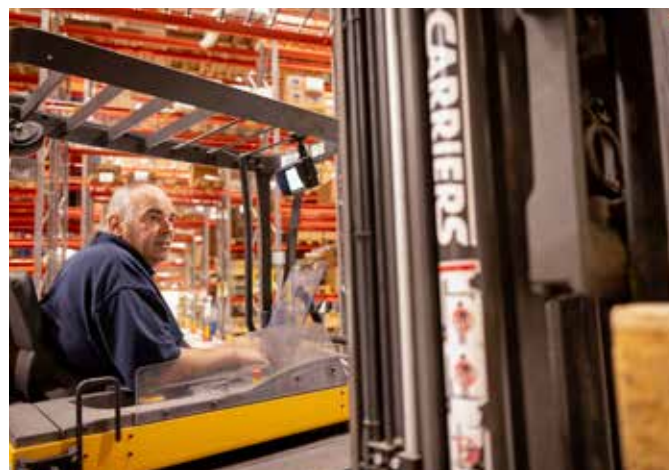
Clean Water Since 1982

Water and UV-C technology are at the heart of VGE. Since 1982, we have been developing and manufacturing UV-C technology for water disinfection.

Over 40 years of experience and an unparalleled passion for our products, we have grown into an international market leader with a global impact. From our modern headquarters in Schijndel, we export to more than 80 countries and provide customized solutions.

Sustainability and Innovation Under One Roof

Our facility is more than just a workplace, it reflects our core values of sustainability and innovation. With the construction of our new building in 2021, we made conscious choices, including the installation of 365 solar panels, making our building almost completely energy neutral. Additionally, our building operates entirely without natural gas, eliminating the need for fossil fuels.





ARE THE HEART OF OUR COMPANY

It stands as tangible proof that technology and sustainability can go hand in hand, directly contributing to a greener future.

Our People Make the Difference

At VGE, it's not just about technology, it's about the people who make our UV-C disinfection solutions possible. Our close-knit team of dedicated colleagues works passionately every day to create innovative solutions for clean and safe water. Thanks to our integrated approach and short lines of communication within the organization, we are flexible, solution-oriented, and reliable. Our people are what make VGE what it is, and we're proud of that.



Continuing to Innovate

Water is always in motion, and so is VGE. From optimizing existing products to developing entirely new systems, quality, reliability, and innovation form the foundation of everything we do. Our product developers ensure that our technology meets the highest market standards and complies with all applicable safety regulations.

With our experience, global customer base, and future-focused vision, we work every day on the next step forward.

Welcome to VGE!



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