



**Healthy water  
wherever you  
need it**





## Your partner for safe, healthy drinking water

AQUAFIDES offers the most reliable UV disinfection systems on the market and deep water treatment expertise. Our passion for innovation, highly experienced team, and in-house development and production enable us to deliver products and services with the highest quality, reliability, and efficiency.

Customer satisfaction is our top priority. Our guiding principle is to empower customers to produce sustainable, healthy drinking water with innovative, environmentally friendly, and cost-efficient solutions.

### We offer:

- UV disinfection systems for water
- Professional advice
- UV lamps from our production line
- Fast spare parts supply
- UV system service and maintenance
- Regional support through local distributors

### Elevating UV innovation and solving water challenges

A proud affiliate of Trojan Technologies, AQUAFIDES is focused on developing and producing innovative water treatment systems that help municipalities worldwide manage microbial risks and meet disinfection requirements. Our certified low-flow, closed-vessel UV systems meet stringent requirements for drinking water.

AQUAFIDES joins Trojan Technologies and its brands, TrojanUV, Aquafine, and VIQUA, in the pursuit of delivering better technologies and UV water treatment solutions that help solve the complex challenges facing the world's water supply.

**AQUA**

Water

**FIDES**

Trust, loyalty, reliability (lat.)

**DES**

Disinfection

# UV disinfection

With decades of experience across our developers, service technicians, and sales professionals, AQUAFIDES engineers UV disinfection systems that set the standard for quality. Designed with optimal installation dimensions, minimal energy consumption, easy maintenance, and long-term durability, our systems deliver the high reliability our customers expect.

## UV disinfection systems

Our UV disinfection systems for municipal drinking water supply are certified according to leading European standards for flow rates from 1 m<sup>3</sup>/h to 2,000 m<sup>3</sup>/h and meet the highest requirements in terms of performance and quality.

### Physical basics

Ultraviolet light is high-energy electromagnetic radiation that occurs in the natural spectrum of light emitted by the sun. The earth's atmosphere protects us from the short-wave, particularly strong, UV-C component.

### Description of the UV-C disinfection process

UV-C disinfection is a purely physical process inspired by the sun. The basic disinfection effect of ultraviolet light on microorganisms is based on the effect of the 254-nm (nanometer) wavelength. The UV-C light damages the DNA of microorganisms, bacteria, and viruses present in the water, rendering these pathogens inactive.

For decades, chlorine was the most important disinfectant and disinfection method. The formation of organohalogen compounds and the significant decline in acceptance of chemical substances in the food chain led to the search for alternative disinfection methods. Disinfection of drinking water with ultraviolet light in the UV-C range emerged as a viable option because the natural taste, smell, and mineral composition of the water are not altered.

### UV-A light

Provides spontaneous and quick tanning of the skin, which does not last very long. The skin does not build up a protective layer.

### UV-B light

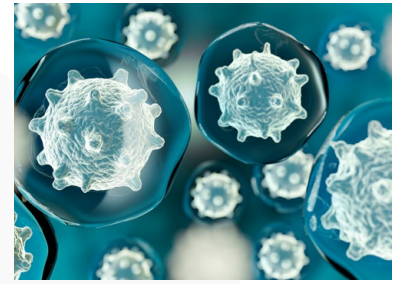
Is responsible for the skin's natural sun protection. The cornea becomes thicker, and the skin's protection is increased by a factor of 5.

### UV-C light

Damages the genetic information of the DNA of microorganisms, preventing reproduction.

AQUAFIDES provides customers with a comprehensive package for UV disinfection that encompasses expert advice, dimensioning, a wide range of UV systems, attentive service, and easy maintenance.





## Effect of UV-C light

UV-C light affects microorganisms due to the high-energy radiation of the 254-nm wavelength. The light passes through the cell wall into the microorganism and reacts with the DNA, breaking the carbon bond in the molecules of the microorganism. The harmful germs are inactivated in a matter of seconds, as their cells can no longer divide or metabolize.

## Benefits of UV disinfection

- No addition of chemicals
- Environmentally friendly and purely physical
- No change in water contents
- No formation of byproducts and residuals, especially no halo formation
- Odorless and tasteless
- No formation of corrosive substances
- No risk of overdosing
- Easy to use and minimal maintenance
- Validated and certified according to European standards such as ÖVGW, DVGW, and SVGW



# Compact series

Water disinfection, especially the disinfection of drinking water, requires great trust in the systems used. The certified performance and outstanding quality of the AQUAFIDES Compact series have been proven for over a decade. Thousands of Compact UV disinfection systems are used worldwide for municipal water treatment in major cities.

## Flexible and economical

The Compact series is characterized by very low pressure losses ( $< 0.05$  bar) and extremely short installation lengths. The flexible installation layout and U and Z shapes can address even the most demanding installation conditions. In addition, the UV disinfection systems are easy to maintain and extremely user-friendly, thanks to UV lamps and quartz tubes that can be installed on both sides.

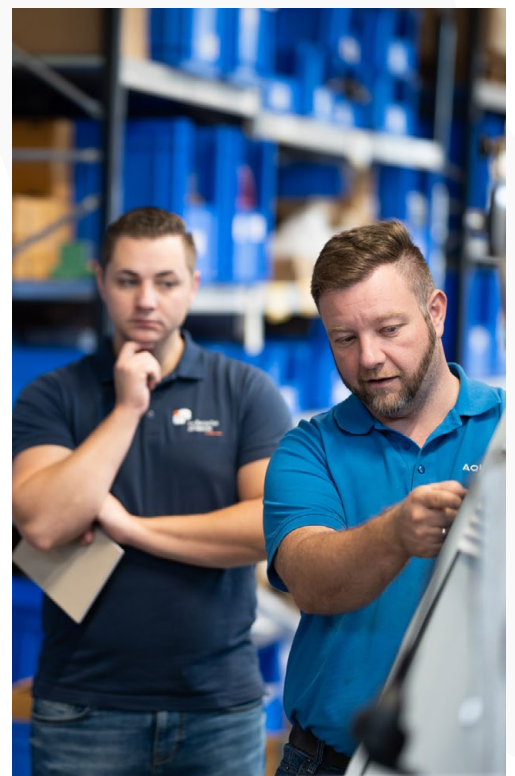
The type-tested Compact series, certified in accordance with ÖNORM M 5873 (DVGW, ÖVGW and SVGW), is equipped with a calibrated standard UV radiometer (UV sensor). The use of powerful, dimmable 300W and 400W amalgam UV lamps ensures maximum efficiency at all levels.

### Disinfection made to measure

AQUAFIDES UV disinfection systems are built in Austria with added value in Europe and certified in accordance with recognized European standards. This guarantees the highest product quality and best customer service at all times. A high level of UV expertise, in-house development, and tailored advice enable us to find a solution that will address your specific needs and requirements completely.

### Key features:

- Certified performance
- Proven quality
- Short installation lengths
- Country-specific certifications
- Readily available spare parts
- Ease of service and maintenance
- Functional 4-line display





## Intelligent control

Excellent user comfort, simple adjustment of system parameters, and system-wide monitoring of the operating status characterize the control system of the Compact series. Specially developed and optimized control cabinets with a 4-line display ensure maximum functionality and operational reliability. The optional innovative 7-inch graphic display ensures maximum operating convenience and an extended range of functions.



# OptiLon® series

OptiLon is a validated and certified\* UV series from AQUAFIDES. With patented wiper technology, it sets new standards in the field of UV water disinfection. Thanks to its high disinfection performance and the innovative HybridWiper® system, the OptiLon series is also suitable for lower water qualities and transmissions, such as wastewater, rainwater, and water reuse. Dynamic power control, a revolutionary 7-inch graphic display, and user-friendly service and maintenance options characterize OptiLon.

## The new benchmark

Specially developed, high-performance UV lamps with an output of 640W provide a new performance dimension in the AQUAFIDES universe. Significantly increased flow rates and sufficient disinfection performance down to very low transmissions are possible. Dynamic power control through lamp dimming ensures economical operation at all times.

As a wiped system with our patented HybridWiper® wiper system, OptiLon is predestined for use with bad water quality and low transmissions. Thanks to the simple adaptation of the modular cleaning system, optimum results are achieved with a wide variety of coatings. The innovative flow concept supports optimal disinfection even under the most difficult conditions.

### HybridWiper® technology

The patented wiper system of the OptiLon series is a modular design and can be configured according to customer requirements. In the standard version, a double rubber lip removes soft, organic soiling, while a stainless-steel ring brush effectively removes inorganic, hard coatings. The entire cleaning process is fully automated and requires no manual operation.

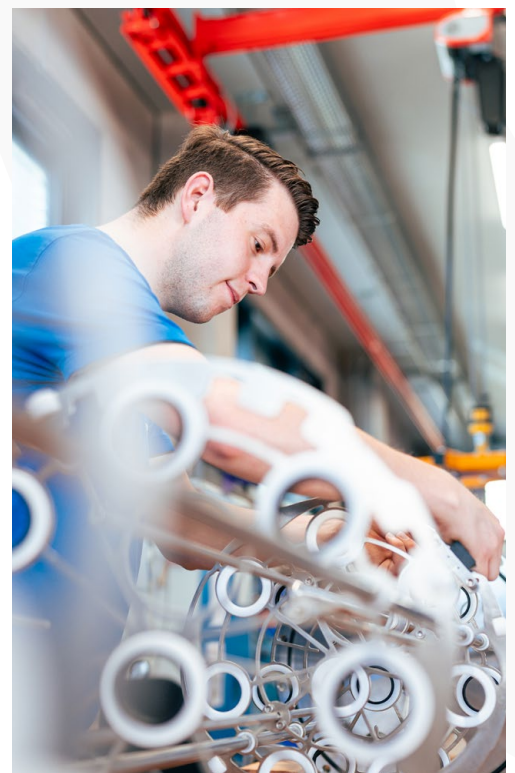
\*Validations according to DIN 19294-1:2020 and ÖNORM M 5873-1:2020 successfully completed, recognized European certifications expected soon

### Key features:

- Validated and certified\* according to European standards
- Innovative, patented wiper system
- L shape
- Flexible installation
- Easy maintenance
- Comfortable 7-inch graphic display

## OptiLon advantages at a glance

- Validated and certified\* UV systems for drinking water, wastewater, rainwater, and more
- Increased disinfection performance for higher flow rates and poor water qualities
- Patented wiper system that removes any residue from the quartz tubes and sensor window
- Innovative, high-performance flow concept
- Patented UV lamp technology with dimming mode for economical operation
- Easy to clean and maintain





## Advanced control

UV disinfection systems in the OptiLon series come with a standard 7-inch graphic display that offers structured menu navigation and revolutionary control and regulation options. Excellent ease of use simplifies the control and monitoring of your system, even under difficult environmental conditions such as moisture and dirt. Simple, intuitive operation and a perfect overview are the results of decades of experience.



# Service and maintenance

Our expert team is known for their decades of experience in water treatment and UV disinfection. Through our innovative spirit and passion for sustainable water treatment, we are a single-source solution for everything from professional advice and proven UV disinfection systems to maintenance and service support.

## Certified service performance

We are here to help you find the right solution for your water treatment needs. Our goal is to provide fair advice and build long-term relationships with our partners and customers.

Our UV systems are manufactured and tested in Austria before being shipped. Our team and network of authorized partners and distributors offer service and maintenance for AQUAFIDES UV disinfection systems around the world.

UV disinfection systems from AQUAFIDES are validated and certified in accordance with recognized national standards. Regular maintenance by trained UV maintenance technicians is necessary to ensure that the system provides the required disinfection performance, even under challenging conditions. This also extends the system's service life, protecting your investment.

Preventive maintenance can significantly reduce the risk of breakdowns. Wear and maintenance parts are replaced or serviced. You can obtain original spare parts such as UV lamps quickly and easily from AQUAFIDES.

**We offer prompt availability of spare parts for AQUAFIDES UV disinfection systems. Contact our team for more information.**

### Our services

- Professional advice
- System dimensioning
- Project support
- Commissioning
- Maintenance
- Service
- Repair services
- Emergency services (24-hour telephone\*)

## ISO-certified quality and environmental management

In addition to our numerous product tests, AQUAFIDES is certified in accordance with ISO 9001. Our customers can always rely on the highest product quality. Our environmental management system is also certified to ISO 14001, underlining our sense of responsibility and focus on sustainability.



\*24-hour emergency service available in Austria and Switzerland

# Sustainability commitment

Through research, development, and continuous improvement, we are committed to providing sustainable products and solutions to achieve the Sustainable Development Goals (SDGs) defined by the United Nations in 2015 for good health, clean water and sanitation, and responsible consumption and production.

Our innovative products for safe, energy-efficient water treatment are helping to tackle global challenges like climate change, population growth, carbon footprint reduction, and resource scarcity. Ultraviolet light provides an environmentally friendly alternative to using chemicals like chlorine. Our advanced oxidation process (AOP) solutions also help clean and remove unwanted chemical components from drinking water and wastewater.

Along with our efforts to help improve health, safety, and water quality, we aim for high sustainability in our development and manufacturing processes by:

- Developing highly efficient UV systems that meet stringent quality and safety standards.
- Providing sustainable solutions that deliver superior energy efficiency, durability, and serviceability, and reduce customers' carbon footprint and total cost of ownership.
- Designing products for easy maintenance and serviceability with spare parts.
- Recycling metals, plastics, and other packaging materials.
- Collecting, separating, and recycling hazardous materials like UV lamps.



## Our state-of-the-art manufacturing facility features:

- The latest Austrian energy standards for buildings
- Solar panels on the roof for carbon-neutral energy production
- 100% LED lighting
- Heating and cooling with heat pumps



# Producing high-quality water, today and tomorrow

Thousands of AQUAFIDES UV systems are in use worldwide. We have a strong history of helping customers manage microbial risks and meet disinfection requirements in their water. Now as an affiliate of Trojan Technologies, we will continue to apply our deep expertise, customer-friendly service, and spirit of innovation to solve complex water problems and improve lives around the globe.

Visit [AQUAFIDES.com/en](https://www.aquafides.com/en) or contact us at [info@aquafides.com](mailto:info@aquafides.com) to learn how AQUAFIDES can help you achieve your water quality objectives.

## World of AQUAFIDES

In use all over the world, our innovative UV disinfection systems make important contributions to ensuring clean water. This map provides a rough overview of selected locations where our systems are successfully installed.



## About AQUAFIDES

AQUAFIDES – an affiliate of Trojan Technologies – designs, manufactures, and supports UV water treatment systems that meet the stringent requirements for drinking water. Decades of water treatment experience coupled with a strong focus on innovation ensure our systems are reliable, easy to operate, and efficient. Driven by an unwavering commitment to customer satisfaction, our team provides expert advice on UV treatment, comprehensive service and maintenance, and prompt delivery of spare parts. Our high-quality, fit-for-purpose systems and customer-friendly service enable municipal customers to meet their water quality objectives reliably and effectively. Learn more at [AQUAFIDES.com](https://www.aquafides.com).



To learn more about the brands and affiliates of Trojan Technologies, visit [www.trojantechnologies.com](https://www.trojantechnologies.com)