

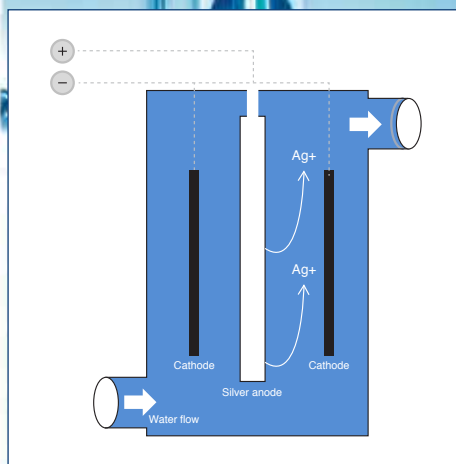


**AQUAFIDES**

**ELECTRO-KATADYN  
IONISATION SYSTEMS**

**WATER TREATMENT YOU CAN TRUST**

## SWISS-ENGINEERED QUALITY, CUSTOMIZED TO YOUR NEEDS



### THE SCIENCE OF SILVER

In the Aquafides Electro-Katadyn system, microorganisms are destroyed by catalysis, using very small amounts of dissolved silver. The silver ions are added into the water using an electrolytic process – the practical application of Faraday's Law of Electrochemical Equivalents – which causes a bacterial action that maintains disinfected water without changing the taste. The effect is long-lasting, which makes the system ideal for long-term drinking water storage applications like marine vessels and platforms.

### PROVEN BACTERIAL EFFECT

Over the years, a number of scientists have studied the effect of silver ions on water. Dr. Lee at the Centre for Applied Microbiology of the U.K. Public Health Service examined the effect of silver ions on legionella a water-borne bacteria that become airborne via showers or air conditioning systems. By breathing them in, people contract Legionnaire's Disease, a type of pneumonia. Lee's tests showed that legionella bacteria are killed by silver ions, and that the silver remains effective in water for weeks, at low and high temperatures.

### SOLUTIONS FOR YOUR SPECIFIC NEEDS

Aquafides Electro-Katadyn systems have been used successfully in a variety of applications for decades. Our sales and distribution partners can help determine the size and model that is correct for your particular needs. Whether designing a water bottling process, thinking about safe water storage, or prevention in hot water systems we can provide guidance on using the Electro-Katadyn system in a primary or bypass loop layout. No moving parts and a small design footprint provide flexibility for your overall system architecture.



## MAINTAINING SAFE WATER FOR A RANGE OF APPLICATIONS



### MARINE VESSELS & PLATFORMS: DRINKING WATER STORAGE

The Aquafides Electro-Katadyn systems are used on ships, platforms and other vessels where large amounts of drinking water need to be safely stored for significant periods of time. The process starts with filtration, followed by a treatment process, such as UVC Certified Disinfection. For durability, silver ions can be added to the water during the final treatment step. The water will remain bacteria-free for a minimum of six months, even in cases of extreme temperature fluctuation.



### HOT WATER SYSTEMS: PROVEN AGAINST LEGIONNELLA

Warm water provides good conditions for bacterial growth. This can affect institutions such as Hospitals or long term care facilities such as retirement homes that have a higher concentration of vulnerable patients or residents. Effectively maintaining the hot water systems to avoid associated outbreaks requires a preventative strategy. Silver ionization has been repeatedly proven as effective against the bacteria that cause Legionnaire's Disease, which can be a significant risk in larger systems.



### FOOD, BEVERAGE AND INDUSTRIAL: NO CHLORINE TASTE

In various locations, Aquafides Electro-Katadyn systems are used by the food and beverage industry and integrated into their manufacturing process to ensure product quality and system safety while enhancing storability. Our systems require less space and complexity which adds flexibility for the process design. This increases efficiency while reducing risks associated with additional chemical handling. For the same reason, in many areas without access to safe public water infrastructure, the Electro-Katadyn system is used for storing table water or food equipment rinsing.

### SYSTEM SIMPLICITY

Simple dosing principle makes treatment process fast and straightforward. Our silver ionization process does not have a corrosive effect, so storage mechanisms will stay intact for safe, long-lasting containment. The Electro-Katadyn system is trusted by companies around the world. Robust construction and Swiss quality ensure excellent, dependable, long-term performance.

### DEVELOPING NATIONS: SAFE DRINKING WATER

Water-borne illness is a major problem in many developing countries; silver ion treatment is a cost-effective approach to providing safe drinking water and preventing disease in vulnerable populations. Lack of central distribution water systems can also cause the need for more local storage of water and the need to ensure that clean drinking water remains safe. The Aquafides Electro-Katadyn range of systems can help planners incorporate cost effective water storage into their strategy.

### SAFE AND ECO-FRIENDLY

Silver ionisation is an effective methodology that works in extremely small amounts. Typical levels are in the parts per million (ppm). This, combined with a process that doesn't require a toxic reaction to prevent bacterial growth, minimizes environmental impact and maximizes health. The Aquafides Electro-Katadyn system use of Silver anodes means operators aren't constantly adding new chemical mixtures to the process and reduces the chances of under or over dosing the water in normal operation. This reduces the amount of handling and packaging required for operating the system.



### ELECTRO-KATADYN TECHNICAL DATA

TYPE	EK-4	EK 2-24	EK 3-24	EK 4-24	EK 6-24
<b>Application</b>					
Drinking Water 0.02 ppm	20 m <sup>3</sup> /h	40 m <sup>3</sup> /h	60 m <sup>3</sup> /h	80 m <sup>3</sup> /h	120 m <sup>3</sup> /h
Rinse Water 0.5 ppm	0.8 m <sup>3</sup> /h	1.6 m <sup>3</sup> /h	2.4 m <sup>3</sup> /h	3.2 m <sup>3</sup> /h	4.8 m <sup>3</sup> /h
Disinfection Water 1.0 ppm	0.4 m <sup>3</sup> /h	0.8 m <sup>3</sup> /h	1.2 m <sup>3</sup> /h	1.6 m <sup>3</sup> /h	2.4 m <sup>3</sup> /h
Treatment volume with 1 anode	20'000 m <sup>3</sup> (at 0.01 ppm Ag) 10'000 m <sup>3</sup> (at 0.02 ppm Ag)				
<b>Housing</b>					
No. Of Anodes, Type E 1	1	2	3	4	6
Housing material	316 Stainless steel 1.4301				
Maximum Pressure (bar)	6				
Weight (dry) kg	5.8	15.8	16.2	16.6	17.3
<b>System Dimensions</b>					
Height mm	500	605			
Diameter mm	64	140			
Connections (Inlet/Outlet)	G 3/4"	G 1"			
Installation Mounting	Vertical				
<b>Control Box</b>					
Dimensions (LxHxD) mm	280 x 240 x 150				
Weight kg	2,3				
Supply Voltage	230/115 V 50/60 Hz				
Power Consumption (nominal)	40W				
Protection Class	IP54				
<b>Contacts</b>					
Alarm contact	1 dry contact (voltage free)				
Solenoid Contact	230/115 V 50/60 Hz output				





## **AQUAFIDES. CLEAN WATER, STORED SAFELY.**

### **Water is life.**

It quenches our thirst, flushes out toxins, and ensures our bodies stay hydrated and healthy. But without proper disinfection and storage, it can do the exact opposite. The Aquafides Electro-Katadyn treatment is an effective method for maintaining the disinfection and preservation of water in process and storage systems. It ensures stored water stays safe, and protects us against dangerous water-borne viruses.

**Founded in 2008 in Switzerland**, Aquafides develops and manufactures water treatment technologies for communities and organizations around the world. Our experts have decades of experience with Electro-Katadyn Filtration, Multifilter Systems and UV Treatment.

We offer a range of filtration, storage and disinfection options including:

- UVC disinfection systems
- Microfiltration with ceramic filters
- Water conservation with silver ion systems
- Spare parts and UV lamps
- Consulting, installation and maintenance services

**AQUA** (water)  
**FI** (filtration)  
**DES** (disinfection)  
**FIDES** (reliability, confidence)

**Protect your customers and your community with Aquafides**

To find out more about our Certified UVC Disinfection Systems and how they can meet your safe water supply needs, please visit our website for a dealer or distributor near you or contact us directly.

# AQUAFIDES

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