

# process water





## rinsing

**problem**: Germs from the air and surfaces collect in the rinse water and multiply exponentially. This leads to biofouling and slagging, especially when chemical additives have to be avoided due to the rinsing of threated surfaces.

**consequence**: Increased costs, odor emissions, quality losses, risk to employees

#### **E-series installation system**

**solution:** The modular kit system allows for direct integration of UV-C units into the existing facility, optionally silicone free. The water is disinfected physically in treatment plants without altering additives.

- disinfection without residue
- extends service intervals
- increases process security
- efficient and sustainable operation
- no foam formation

## cooling

**problem:** The microbial load in the cooling water increases rapidly, thus it is treated with biocides to prevent biofilm formation and minimise microbial contamination.

**consequence:** Risk to employees when handling corrosive substances, high costs for chemicals, plastic waste, corrosion, development of resistance to biocides

#### **AQD-ST** process water treatment

**solution**: By integrating a UV-C reactor into the cooling circuit, microorganisms are rendered permanently harmless. No biocides are required and the heat transfer remains efficient as designed.

- reduces biofilm formation
- efficient heat transfer
- extends cooling water usability
- saves on biocide usage
- disinfection without corrosion



## cooling tower

**problem:** Cooling water is subject to continuous microbiological contamination. The hazardous to health Legionella and Pseudomonas multiply and are spread through aerosols in the environment.

**consequence**: Health hazards, high costs for biocides, wastewater disposal, laboratory analyses, and cleanings, formation of resistance

#### **AQT** immersion emitter

**solution**: Immersion emitters disinfect water and surfaces, preventing germ growth/biofouling in the cooling tower: a cost-effective and efficient alternative to biocides. Highly effective against pathogenic bacteria such as Legionella or Pseudomonas.

- easy integration
- replaces the use of biocides
- Iower maintenance costs
- sustainable method
- helps comply with requirements of guidelines VDI 2047 / 42. BlmSchV

