Evaporator cooler disinfection – innovative solutions for the food industry and beyond

Evaporator cooler disinfection – innovative solutions for the food industry and beyond. Evaporator coolers have by their very nature a huge lamellar surface, which, of course, is not without risks. Perspiration water and dust particles with organic constituents are deposited on them, thereby forming a perfect breeding ground for micro-organisms. Certain cold-tolerant micro-organisms are able to reproduce even at low temperatures. These are then carried in the flow of air into the cold storage room, where they come into contact with products, causing accelerated spoilage.

Evaporator cooler disinfection – tailor-made solutions

However, hygiene can be optimised by means of UV-C technology. The number of germs can be permanently reduced by using UV-C light with a wavelength of 253.7 nm. This wavelength has a lethal effect on all micro-organisms, such as bacteria, moulds, yeasts and viruses. UVT uses low-pressure emitters that do not produce ozone to generate this short-wave UV-C light. These emitters exhibit a particularly high level of UV-C radiant efficiency. The primary light they emit yields a spectral line of almost exclusively 253.7 nm.

Evaporator cooler disinfection = hygiene optimisation

A special interior coating of the quartz glass ensures an exceptionally long service life with minimal decline in radiative power. All lamps have a Teflon coating for insulation and protection against splintering. This thermal buffer also guarantees a high level of UV-C even at low operating temperatures. Devising tailor-made solutions is what we do every day. We look at what our customers require and respond with a functional solution. UV-C modules are produced for both compression and suction evaporator coolers. The modules are positioned directly in front of the air outlet. In the case of compression air coolers, the lamellae are also treated with germicidal UV-C light. Thanks to a special light trap on the outlet side of the module, which results in only a minimal loss in pressure, no dangerous UV-C light is able to escape.