

BÄRO AirStream V air disinfection unit

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 microorganisms. Certain cold-tolerant microorganisms 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 radiation with a wavelength of 253.7 nm. This wavelength has a lethal effect on all microorganisms, such as bacteria, moulds yeasts and viruses.

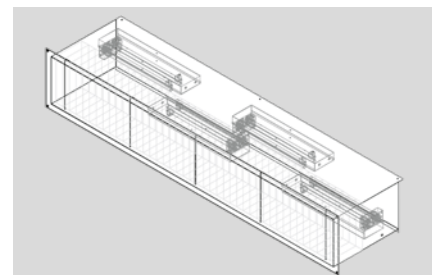
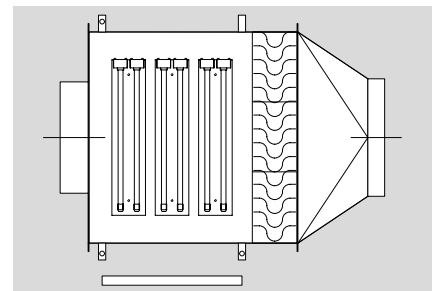
BÄRO uses low-pressure emitters that do not produce ozone to generate

this short-wave UV-C radiation. These emitters exhibit a particularly high level of UV-C radiant efficiency. The primary radiation 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 radiation. 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 radiation is able to escape.



Technical description	Example of AirStream V suction air cooler	Example of AirStream V compression air cooler
Evaporator cooler type	Unidirectional blowing	Bidirectional blowing
Air flow rate	5,000 m ³ /h	5,600 m ³ /h each side
Width	755 mm	1,793 mm
Depth of UV-C module	1,160 mm	400 mm
Height	562 mm	313
Number of UV-C emitters	12	16
Output per emitter	95 Watt	60 Watt
Power consumption UV-C emitter	1.26 kW	1.04 kW
Emitter product number	289503 (T)	286003 (T)
Emitter service life	8,000 hrs.	8,000 hrs.
Supply voltage	230 V ~ 50 Hz	230 V ~ 50 Hz
Casing material	Stainless steel 1.4301	Stainless steel 1.4301
Functional check	Inspection window (with UV protection filter)	Inspection window (with UV protection filter)
Service	Annual replacement of emitters	Annual replacement of emitters
Access to modules	Inspection lid	Inspection lid

BÄRO
Air hygiene

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