

UVC disinfection for transfer locks: the final stop for germs

G. Bianchi AG, one of Switzerland’s best-known fine food suppliers, has equipped a goods transfer lock with a UVC solution from sterilAir. The objective: to continuously disinfect the floor area used daily by staff and drivers in order to minimise the risk of cross-contamination – including the introduction of *Listeria*. The installation of a single sterilAir module now ensures a demonstrably lower microbial load in the transition zone between the external and production areas. The system operates chemical-free, requires minimal maintenance, and contributes to food safety 24/7 – a strong example of how UVC technology effectively complements conventional hygiene concepts.

Initial Situation

For decades, G. Bianchi AG has supplied the gastronomy and hospitality sector with fresh fish, seafood, meat and delicacies. Their white delivery vans with the red crab are a familiar sight across the country – and are synonymous with uncompromising freshness. A particularly sensitive area in daily operations is the zone where drivers arriving from outside meet internal staff from order picking: the dispatch area. Here, microorganisms can be introduced via shoes, wheels or particles and may, in the worst case, spread into production via normal process flows. Previous attempts to use disinfectant-soaked mats proved not only labour-intensive and ineffective but also generated significant operating costs.

Objective of the installation

In August 2025, a sterilAir ETS module was installed on the wall of the transfer lock. The UVC system disinfects the moist floor surface precisely where drivers and staff pass through. The goal: continuous decontamination of this contact area – without chemicals, without consumables and without



A single sterilAir module ensures reduced microbial load in the transition zone

disrupting operations. The system supplements daily cleaning procedures and ensures consistent hygiene protection.

Measured results and efficacy

The effectiveness of the installation was assessed by G. Bianchi AG’s quality management team in collaboration with sterilAir. Contact plate analyses revealed almost no microbial growth on irradiated areas; only surfaces at greater distances from the module showed isolated colonies. Supporting calculations demonstrated that *Listeria monocytogenes* reaches a log-5 reduction within approximately 30 minutes, while *Escherichia coli* is inactivated in under 2 minutes. The microbial load in the passage area is therefore significantly and sustainably reduced.

Occupational safety ensured

By mounting the device on the wall and using a defined opening in the

protective housing of the sterilAir module, a controlled radiation window is created on the floor without exposing personnel to risk. A safety assessment in accordance with EU Directive 2006/25/EC confirmed that maximum permissible exposure limits for staff in the relevant area are not exceeded.

A sustainable alternative

In contrast to soaked mats or disinfectant baths, UVC technology relies entirely on a physical mode of action. It operates without chemicals, forms no residues and does not contribute to resistance development. The system can run continuously, requires only an annual (or less frequent) tube replacement, and integrates seamlessly into existing workflows. With minimal effort, it provides an effective additional layer of protection – a sustainable investment in hygiene, quality and food safety.

Verification of the UVC lamp			
Results for yeasts & moulds			
Sample no.	Distance to lamp	Position	Note
1	10 cm	left	No growth
2		center	No growth
3		right	No growth
4	40 cm	left	No growth
5		center	No growth
6		right	No growth
7	100 cm	left	No growth
8		center	No growth
9		right	No growth
10	140 cm	left	> 10 colonies
11		center	No growth
12		right	1 colony

Analysis of contact plate samples