FOOD PROCESSING: Dry Aged Meat Production Facilities

A case study about meat processing, dry aging and EU Directive 2024/1141

At a glance

Dry aging processes demands **strict environmental conditions**. **Air reuse is essential** for maintaining precise environmental control and achieving energy efficiency, **but** it **requires continuous cleaning** to eliminate microbial contaminants.

The Market

Dry-aged and cured meats and cheeses are premium products achieved through controlled aging or curing processes.

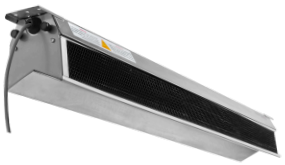
Key metrics include **moisture loss** (critical for texture and shelf stability), **pH levels** (to ensure microbial safety and flavor development), and **enzymatic or microbial activity**, contribute to the characteristic aroma and taste profiles.

CHALLENGES

EHW and FIX, two prominent meat processing companies in Albania, faced significant challenges in maintaining product quality and safety due to mold contamination, particularly in their sausage products within their facilities located in Tirana, Durres, Porche and Paquin.

SOLUTIONS

To address these challenges, UVL Albania, in collaboration with Light Progress, introduced advanced UV-C disinfection technology tailored for the meat processing industry. The proposed solution involved the installation of UV-C devices from the **UV-FLOW-WL** and **UV-REFLEX** series, designed to eliminate mold spores and other pathogens effectively. A trial period of 2-3 weeks was conducted, during which the UV-C devices were installed and tested within the clients' facilities. Both EHW and FIX, equipped with their microbiological laboratories, rigorously assessed the effectiveness of the devices during this period.



BENEFITS

1

Improved Product Safety:

Our devices consistently controlled the microbial load throughout the production and storage, ensuring the delivery of safer, high-quality meat products—particularly sausages.

2

Shelf-Life Extension:

in addition to improving microbial control, they significantly extend the shelf life by reducing surface contamination and maintaining a cleaner aging environment.

3

Marketing Advantage:

The implementation of UV-C disinfection technology added value to the clients' companies, enhancing their brand reputation

Regulatory Reference

The **EU Directive 2024/1141** highlights the importance of maintaining hygienic conditions during processing, storage, and transport of meat, **with UV-C light explicitly recognized as** a reliable **method for air decontamination during dry aging** procedures.

OUR EXPERTISE

With **decades of experience in UV-C technology**, Light Progress has honed a deep understanding of the **unique needs of the meat processing industry**.
Our team works closely with clients to **implement tailored solutions** that enhance both operational efficiency and product quality.

From **device selection** to **installation** and **testing**, we provide comprehensive support to ensure **seamless integration into any facility**.
Our solutions go beyond addressing microbial control challenges.

Facilities Evaluation

Commisioning the Project

Installation and Testing

We introduce significant operational advantages, such as reducing the need for frequent equipment maintenance or the washing and brushing of finished meat products, saving time and resources while maintaining high hygiene standards.

Implementing our UV-C systems for hygienic air treatment is a **straightforward process**, yet **highly customizable** to meet the specific requirements of each facility.

We begin by **analyzing the type of space—processing areas**, **cold storage**, or **dry-aging rooms**—performing **risk assessments** and **evaluating environmental conditions**.
Understanding airflow patterns, including inlets, outlets, and evaporators (whether single-flow or dual-flow), is critical to **optimizing system placement** and ensuring **maximum decontamination efficiency without disrupting** airflow or product storage.

Facility size is another **key consideration**. Using **advanced calculation software**, we **scale our UV-C solutions** to cover areas of varying sizes and volumes. Larger spaces require either a greater number of devices or more powers, ensuring **comprehensive coverage and effective microbial control**.

This **adaptable**, **easy-to-install approach** underscores Light Progress's commitment to delivering seamless, innovative, and reliable solutions that uphold the highest hygiene standards while enhancing meat preservation and quality.

Our mission is to elevate industry standards and provide the tools meat processors need to operate efficiently and safely.