

# UVC Lock Disinfection Lock



for surface disinfection of fruit and vegetable products as well as packaging material, boxes, crates, tools etc.

The **UVC** Lock has been developed in close cooperation with sterilAir® (CH-Weinfelden) for surface disinfection of fruit and vegetable products\* as well as of packaging materials such as boxes, crates and tools etc. The UVC Lock is equipped with the latest UVC technology and is optimized in regards to hygiene, usability and easy maintenance.

As a standard the UVC Lock includes 12 or 20 ET 2236-4H tubes. Optionally it is available with hybrid tubes and a configuration from 6 to 26 tubes.

An adequate sterility of products as well as of packaging materials and storage boxes is one major requirement for the shelf life and hygiene of food, especially in the salads, vegetables and fruit processing industry.

UVC treatment with sterilAir® components disinfects in a highly effective, safe and reliable way: without heat, undesirable additives and residues – and within very short times.

\*Use with foods depends on the legislation in the country of the user.

Log Reduction Sample Calculation for Listeria LD90	$(LD = 7.68 \text{mJ/cm}^2)^{-1}$
Product size (LxWxH):	600 x 400 x 145 mm
Belt speed:	0.10 m/s
Throughput capacity per hour:	ca. 400 pcs/h
Log Reduction ET 2236-4H tubes 12 or 20:	Log 3,58 or 5,18
Log Reduction ET 2236-4NA tubes 12 or 20:	> Log 6

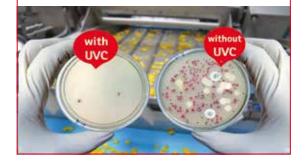
 $<sup>^{11}</sup>$  Kim et al, "Effects of UV irradiation on selected pathogens in peptone water and on stainless steel and chicken meat", 2002; sterilAir®, 2018

### Technical specifications UVC Lock (12 ET tubes)

Voltage:	230 V, 50/60 Hz, 1 Ph
Electrical power:	1,2 kW
sterilAir® UVC components:	IP 65 protection
Product size range (WxHxL):	50x20x50 mm -
	550x300x"variable" mm
Infeed + outfeed height:	750 mm
Dimensions (LxWxH):	3044 x 960 x 1286 mm
OPTIONS:	Remote maintenance
individual configuration of UVC tubes (6-26 pcs.)	

#### **Effective Disinfection**

The DNA of germs is destroyed by the UVC treatment, i.e. contact and smear infections can be prevented effectively.





## Benefits at a glance:



#### Latest UVC technology of sterilAir®

The UVC Lock offers high throughput capacity and is highly efficient in killing germs. As a standard it is equipped with 12 or 20 ET 2236-4H tubes. **Optionally** the UVC Lock is available with a range from 6 to 26 tubes and high-performance hybrid tubes.

Due to the efficient positioning of the UVC tubes an irradiation almost of the entire area is guaranteed. The UVC technology of SterilAir® features long lifetimes of the UVC tubes, exemplary low energy consumption and low surface temperature. Short contact times within the UVC Lock allow for applications with heat-sensitive products, too.



#### Flexible application and monitoring

All materials with a size from  $50 \times 50 \times 20$  mm to  $550 \times 300$  mm can be locked through gently. **Optionally** an adjustable speed control is available.

A simple tube control is possible by using the inspection windows at the front and rear side of the UVC Lock. **Optionally** each single UVC tube can be monitored via switch box. Group and individual data can be read out on a computer or mobile device. By this means, the tubes' performances and replacement interval can be identified. Besides, further machine status data can be collected (e.g. runtime or speed).



#### Easy, safe operation

The fully enclosing UVC Lock casing with hood cover is made of stainless steel and guarantees safe use of UVC radiation. A switch panel allows easy operation, there is no display panel neccessary. **Optionally** a display is offered, which can be covered during the cleaning process.

Just as the staff at the infeed belt, the staff at the outfeed side also has the option to stop the UVC Lock's conveyor belt. The according switch box can be installed flexibly at the wall in the high care. When stopping the belt, it continuously runs until the belt is completely cleared and free of products. The lateral protection flap at the belt's inlet and outlet guarantees the staff's safety.



#### Optimum, hygienic design

A perfectly designed interior and a base made of round tubes allows quick and easy cleaning and guarantees maximum hygiene. **Optionally** a base with castors is available as well (see picture).

The UVC Lock is equipped with a hood cover and a saftey locking device ensuring the safe operation of the machine. The handholds, which the hood cover can be closed and locked with at the same time, are attached in an ergonomic distance.

The FDA approved shatter protection meets highest demands and safety regulations.

#### **FURTHER BENEFITS**

- Input of unwanted microorganisms into sensitive production areas is reduced
- Shelf life of products is increased and added value is enhanced
- Drying of containers (such as after spray disinfection) is no longer neccessary
- The UVC Lock is ideally suited for separation of two rooms, e.g. low and high care
- It is also suitable for extreme application areas with wet cleaning and for all temperature ranges



#### KRONEN GmbH

Römerstraße 2a 77964 Kehl am Rhein Deutschland

Tel.: + 49(0)7854/9646-0 Fax: + 49(0)7854/9646-500

info@kronen.eu