

:: CHEMICAL-FREE DISINFECTION

**BAKERY:** 

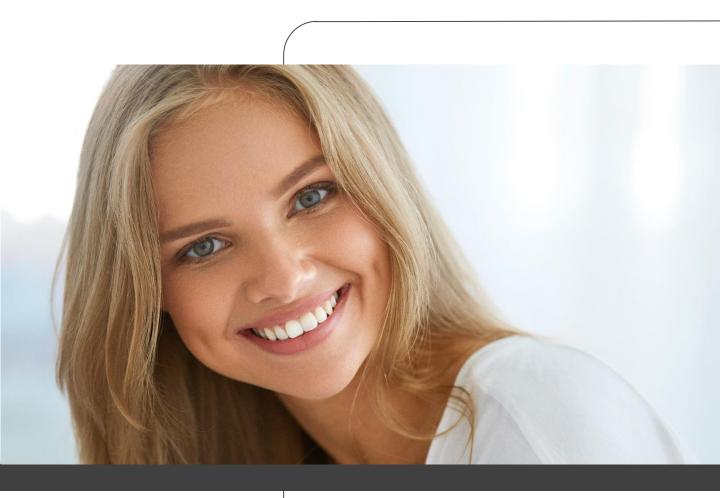
**CONFECTIONERY::** 



### **Trade brochure::**

### Total control over the hygiene chain ::

Consistent hygiene in all production sectors ::



Secures your product quality Reduces cleaning costs Ensures satisfied customers



A brand of the company uv-meyer gmbH

### The power :: of ultraviolet light ::

- UVC disinfection is efficient at wave lengths from 200 to 300 nm.
- UVC radiation output is highly bactericidal.



- Kills bacteria, viruses and yeasts within seconds
- No taste or odour impairment
- No formation of health hazards or by-products
- No adding of chemicals
- Low-maintenance process and easy handling
- Low purchasing and operating costs
- Highest operational safety
- Easy to retrofit
- Plants specifically designed for your requirements

- It is absorbed by the DNA, destroys its structure and inactivates living cells.
- Microorganisms such as viruses, bacteria, yeasts and fungi are rendered harmless within seconds by UV radiation.
- With sufficiently high irradiation intensity the UV disinfection is a reliable and environmentally friendly method since you do not need to add any additional chemicals.
- Microorganisms cannot develop resistance to UV rays.

**Cool storage cells ::** 

Fermentation chambers ::

Fermentation retarders ::

Climate chambers for cream ::

for cold storage and fermentation chambers a cost efficient and effective solution for optimum product quality



- Germs in the ambient air are eliminated by **up to 99.9%** and the germ load on surfaces is also drastically reduced
- High reduction of spoiling germs considerably **extends the shelf life** of your stored goods
- Simple installation does not require any special knowledge (Plug & Play)
- Constant reduction of biofilm formation reduces the necessary expenditure for daily hygiene





The UV-REFLEX-SC/B-NX was specially developed to disinfect the ambient air in cool stores. The air is decontaminated by irradiation with ultraviolet light. The low microbiological contaminated air generated provides excellent conditions for the storage of dough, dairy products, fruits of any kind as well as other easily spoiled refrigerated products. Due to the continuous circulation of the air over the UVC radiator the germ content is continuously reduced and the shelf life of the products extended.

Over time there are high **invisible germ loads** (e.g. listeria or black mould) in your cooled or air-conditioned storage rooms. This contamination will be transported to your product via the air. This germ transmission creates a high risk to your production and causes product spoilage and considerably reduces minimum shelf life.

#### Features:

- Selectable size, cascadable
- Deflection grid irradiation guidance
- Stainless steel housing
- Electronic ballast
- All components are UV-C stable
- Easy installation
- CE sign (LVD, EMC, MD, RoHS)
- Can be delivered to be HACCP compliant

UV-REFLEX	E40H-SC/B-NX E75H-SC/B-NX			
Item No.	A003528	A003508		
Power consumption (W)	40	75		
Voltage (V/Hz)	230 / 50	230 / 50		
Protection class	IP55	IP55		
Length of the connection cable (m)	2.5	2.5		
Dimensions (mm)	530 x 118 x 120	986 x 118 x 120		
Recommended room volume (m³)	2030	4566		
Recommended floor area (m²)	710	1522		
Recommended lamp replacement after (h)	9,000	9,000		
Spare lamp/ Item No.	1 x A003389	1 x A003926		

Price calculator

Technical documentation



**Production::** 

Dry storage ::

**Public areas::** 

**Recreation areas::** 

For better air quality uncontaminated with germs, viruses and odours.



- Germs in the ambient air will be continuously reduced by up to 99.9%
- Unpleasant organic odours will be converted into oxygen by the integrated TIOX filter
- Strong reduction of germ load will considerably extend the shelf life of your goods
- Simple installation does not require any special knowledge (Plug and Play)
- The UV-FAN is designed for 24h operation, in the presence of people.





:: MOULD - BACTERIA UV-FAN Series

www.uv-fresh.de



Chemical and ozone-free air disinfection with simultaneous reduction of odours.

The UV-FAN is designed to be used in rooms in which people are present and can be used in continuous operation (24h). The UV FAN is also equipped with a TIOX filter (TiO<sub>2</sub> - photocatalyst) to reduce odours. Unpleasant odours caused by humans and organic compounds are reduced. The treated air will simultaneously be enriched with oxygen.

The continuous disinfection of the air is an important function to avoid the formation of mould and other pathogenic agents. If it is not possible to ensure the aeration and ventilation due to structural restrictions, the risk of infestation with black mould will massively increase. Employee Health problems and general hygiene issues in these areas are the consequence.

#### Features:

- Selectable lamp output
   Adapted to the room size
- Aluminium housing Powder-coated
- All components are UV C stable
- Low installation effort
- Can be operated on a 220 V outlet
- Optical monitoring
- Optional mobile base frame
- (M2/95-HP-ST)
- Optional additional outdoor spotlight (M2/95-HP-BD-ST)
- Available with remote control
- CE sign (LVD, EMC, MD, RoHS)
- Equipped HACCP compliant

UV-FAN	M1/40H	M2/40H	M2/95-HP	M2/95-HP-ST	M2/95-HP-BD	M2/95-HP-BD-ST
Item No.	A002811	A003090	A002820	A002821	A002822	A002823
Electrical power (W)	70	110	220	220	220+95	220+95
Voltage (V/Hz)	230/50	230/50	230/50	230/50	230/50	230/50
Connection cable (m)	2.5	2.5	2.5	2.5	2.5	2.5
Dimensions (cm)	95x26x13	95x26x13	104x32x13	123x32x13	104x40x13	123x40x13
Air flow (m³/h)	70	70	150	150	150	150
Recommended floor area (m²)	15	15	40	40	40	40
Recommended room volume (m³	40	40	100	100	100	100
Recommended lamp replacement (h)	9000	9000	9000	9000	9000	9000
Spare lamp (internal)	1 x A003389	2 x A003389	2 x A003926	2 x A003926	2 x A003926	2 x A003926
Spare lamp (external BD)	-	-	-	-	1 x A007860	1 x A007860

Price calculator

Technical documentation



**Production::** 

Storage areas without ventilation ::

Hygiene lock ::

Continuously reduces the risk of infestation of black mould in all areas, if no ventilation is available.



- The germ load in the ambient air will be reduced by **up to 99.9%**.
- The shelf life of stored goods can be considerably extended
- The transmission of germs will be drastically reduced
- Simple installation
- Reliably **avoids** the new formation of **black mould.**





#### Advantageous fields of application

The UV-FLOW is utilised in storage rooms, air locks, offices, and recreation rooms, where a high germ content may continuously be created by staff or movement of goods. It is mounted indoors above 2.2 m in order to continuously ensure the total germ content of bacteria, spores, moulds and viruses remain at very low levels in the presence of people. Due to the clever upward irradiation guidance (radiation zone) any UV health hazard is excluded. The natural convection of the air ensures that the loaded ambient air is continuously directed into the radiation area of the lamp, where the air is continuously disinfected.

If it is not possible to ensure the aeration and ventilation due to structural restrictions, the risk of infestation with black mould will massively increase. Employee Health problems and general hygiene issues in these areas are the consequence.

#### Features:

- 2 selectable sizes
- Cascadable relative to room size
- Deflection grid (irradiation guidance)
- Electronic ballast
- Stainless steel housing
- All components are UV C stable
- Easy to install,
- CE sign (LVD, EMC, MD, RoHS)
- Can be delivered HACCP compliant

UV-FLOW-C-NX	E/40H-C-NX	E/75H-C-NX
Item No.	A002834	A003088
Power consumption (W)	40 W	75 W
Voltage (V/Hz)	230 / 50	230 / 50
Protection class	IP55	IP55
Length of the connection cable (m)	2.5	2.5
Dimensions (mm)	530 x 109 x 151	986 x 109 x 151
Recommended room volume (m³)	From 20 to 25	From 35 to 50
Recommended floor area (m²)	From 6 to 8	From 12 to 15
Recommended lamp replacement (h)	9000	9000
Spare lamp/ Item No.	A003389	A003926

Price calculator

Technical documentation



# Refrigerated counters with circulated cooling::

Reduces the risk of germ contamination, listeria or black mould in refrigerated or food counters.



- Any germs on the displayed products are reduced by up to 99.9%.
- Due to this low germ load the shelf life of the products are extended up to 30%.
- Simple installation can be quickly performed by a refrigeration engineer.
- The reliable reduction of biofilm formation reduces the expenditure for daily hygiene





Chemical and ozone-free air disinfection with simultaneous reduction of biofilm on the cold evaporator.

Due to structural restrictions, it is not normally possible to ensure continuous air circulation in your refrigerated and sales counters. Due to this, the risk of mould spores and formation of a biofilm in your counters are greatly increased. Cleaning costs will be high; employee health problems, general hygiene issues and early spoiling of goods are therefore issues of concern

This compact UVC radiator is used in perishable food display cabinets to disinfect the ambient air and avoid cross contamination. It is often necessary to remove displayed food once it doesn't appear fresh, its colour changes and it ages prematurely. The cause for this rapid spoilage can be traced back to germs (microorganisms such as bacteria, moulds, spores and others), which are transferred through air surrounding the food within these displays. The UV-PIPE is installed in the cooling channel or in the refrigerated counter and direct UV visual contact with the public is prevented.

#### Features:

- 7 selectable UV C lamp lengths
- Easy to install,
- Can be operated via a 220 V outlet
- External control board with Electronic ballasts
- CE sign (LVD, EMC, MD, RoHS)
- Can be delivered HACCP compliant

UV-STYLO F	F-11	F-16	F-40H	F-60H	F-75	F-90H	F-120H
Item No.	A00560	A005865	A005866	A005867	A004282	A005868	A005869
Power consumption (W)	11	16	35	60	75	85	100
Voltage (V / Hz)	230/50	230/50	230/50	230/50	230/50	230/50	230/50
Protection class	IP68						
Length of the connection cable (m)	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Illuminated length (mm)	161	261	353	475	1473	811	1069
Total length ( mm)	229	305	433	580	1541	891	1171
Recommended lamp replacement (h)	9000	9000	9000	9000	9000	9000	9000
Spare lamp/ Item No.	A007850	A006199	A007851	A007853	A004283	A005976	A007855

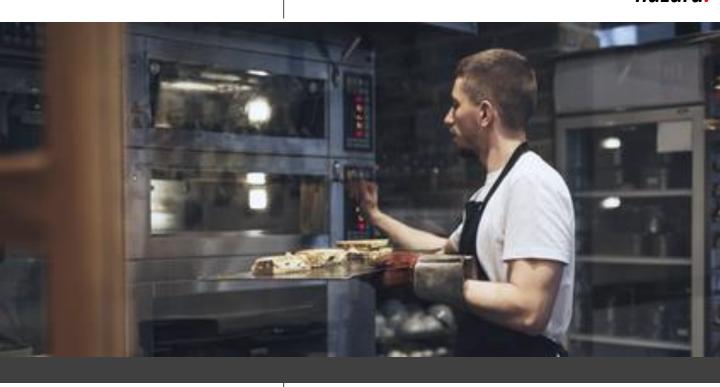
Price calculator

Technical documentation



### **Extractor hoods and ventilation ducts::**

Significantly reduces odours. Reduces fat deposits and any consequential fire hazard.



- Frying or roasting odours will be reduced by up to 90 %.
- Compliance with Authority Regulations.
- Significant reduction of fat deposits extends the cleaning intervals of the plant by about factor 3
- Simple installation quickly performed by ventilation technicians
- Constant reduction of greasy film formation greatly reduces expenditure to maintain daily hygiene.





The "UV-Extract" is used in kitchens, where it is all about reducing fat deposits and odours.

It is installed in extractor hoods or in ventilation ducts and can also work in combination with filters. The "UV-Extract" is resistant against fats and oils and can also be used at high temperatures. The device works with specially designed UV lamps which also generate ozone in addition to the UV-C disinfection effect. Ozone has the property of splitting fats and eliminating odours.

As an option nanostructured titanium dioxide (TiO2) filters can be installed. This is an extraordinary catalyst in combination with the powerful UVC light which splits pollutants, organic and inorganic compounds (e.g. NOx and VOC).

"UV-Extract" reduces fats and odours in the exhaust air already present during cooking; this results in a considerably lower formation of fat deposits in the exhaust air ducts. The risks of resulting duct fires, any potential growth of moulds, development of unwanted odours and maintenance will be reduced.

#### Features:

- 6 selectable module sizes
- Low assembly effort
- Can be operated at 220 V
- Stainless steel
- External control module (master)
- CE sign (LVD, EMC, MD, RoHS)
- Can be delivered HACCP compliant

UV-SMELL-SQ ozone-	4/40H-	4/90H-	4/120H-	6/40H-	6/90H-	6/120H-
generating	OZ	OZ	OZ	OZ	OZ	OZ
Item No.	A006892	A006893	A006894	A006895	A006896	A006897
Power consumption (W)	160 W	320 W	400 W	240 W	480 W	600 W
Voltage (V/Hz)	230 V	230 V	230 V	230 V	230 V	230 V
Dimensions of the module (LxWxH, mm)	594x253 x175	1052x253 x175	1332x253 x175	594x358 x175	1052x358 x175	1332x358 X175
Protection class	IP55	IP55	IP55	IP55	IP55	IP55
Max. air flow (m³/h)	100%100 0	2400	3200	1600	3600	4800
Length of the interconnecting cable (m)	3	3	3	3	3	3
Dimensions of the control	314x394	314x394x1	314x394	314x394	314x394	314x394
board (LxWxH mm)	x128	28	x128	x128	x128	x128
Recommended lamp replacement (h)	6000	6000	6000	6000	6000	6000
Spare lamp Item No.	A006325	A006113	A007849	A006325	A006113	A007849

Price calculator

Technical documentation

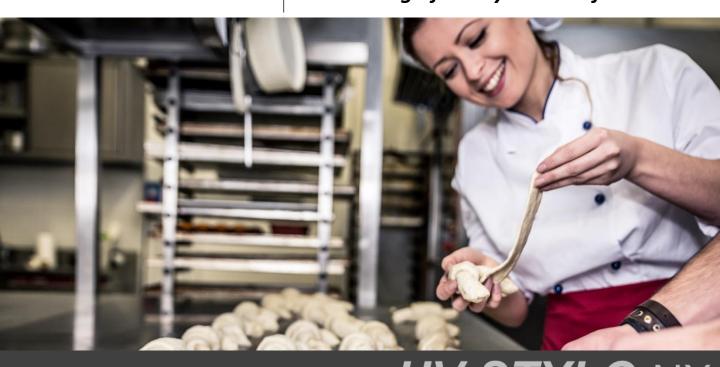
FAO



## UV treatment for Conveyor belts in food production::

Continuously controls mould and germ growth on conveyor belts.

Significantly reduces food waste.



- Continuous disinfection of your conveyor belts efficiently controls the transmission of pathogens of any
- Costs for intensive cleaning and disinfection will be drastically reduced
- Constantly controls the formation of black mould and germs of up to 99.9 %.
- Simple installation





The UV-STYLO-NX is perfect for the disinfection of conveyor belts in order to destroy black mould and bacteria during the production process. Any additional installation of UV units, will significantly increase the disinfection rate. The UV-STYLO-NX is very compact and can be delivered in different lengths, in order to comply with different user requirements. The path of rays would ideally only be directed in the direction of disinfection by a 3-sided reflector. The control and energy supply will be performed via an external control box.

Special materials and the protection class IP 68 allows the use in aggressive or wet environments.

#### Features:

- 7 selectable UVC lamp lengths
- Spotlight in the water-tight Quartz glass immersion pipe
- Electrical connection from the outside
- Material UVC resistance tested
- Supply and control via an external control box
- Electronic ballasts
- CE sign (LVD, EMV, MD, RoHS)
- Can be delivered HACCP compliant

UV'-STYLO	NX-11	NX-16	NX-40H	NX-60H	NX-75	NX-90H	NX-120H
Item No.	A005870	A005871	A005873	A005874	A005872	A005875	A005876
Power consumption (W)	11	16	35	60	75	85	100
Voltage (V / Hz)	230/50	230/50	230/50	230/50	230/50	230/50	230/50
Protection class	IP68						
Length of the connection cable (m)	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Illuminated length (mm)	161	261	353	475	1473	811	1069
Total length ( mm)	235	311	444	587	1548	898	1178
Recommended lamp replacement (h)	9000	9000	9000	9000	9000	9000	9000
Spare lamp/ Item No.	A007850	A006199	A007851	A007853	A004283	A005976	A007855

Price calculator

Technical documentation



## UV treatment for Conveyor belts in food production ::

Continuously controls mould and germ growth on conveyor belts.

Significantly reduces food waste.



- Continuous disinfection of your conveyor belts efficiently controls the transmission of pathogens of any kind
- Costs for intensive cleaning and disinfection will be drastically reduced
- Constantly controls the formation of black mould and germs by up to 99.99 %.
- Simple installation

### UV-TEAM





Wherever hygiene sensitive products, such as food are produced, sorted or packed, the highest level of sterility is important.

With a sufficient level of UV-C disinfection, it is possible to create a microbiologically non-hazardous environment throughout the entire production process.

Resulting in higher product quality with extended minimum shelf life.

UVC irradiation has a highly effective germ-killing effect in ambient air and on surfaces.

Due to targeted lamp orientation directed onto the surfaces to be treated, they will be effectively disinfected via direct UVC exposure.

#### Features:

- Different power levels can be delivered in length and width
- Completely made of stainless steel
- All components are UV-compliant
- Low installation effort
- Control board (Master) including different control tools
- Optionally with a shutter system
- CE sign (LVD, EMC, MD, RoHS)
- Can be delivered HACCP compliant



UV_TEAM-CL	2/40H	4/40H	6/40H	8/40H	2/90H	4/90H	6/90H	8/90H
Item No.	A005902	A005903	A005904	A005905	A005912	A005913	A005914	A005915
Power consumption (W)	80	160	240	320	180	360	540	720
Voltage (V / Hz)	230/50	230/50	230/50	230/50	230/50	230/50	230/50	230/50
Protection class	IP55	IP55	IP55	IP55	IP55	IP55	IP55	IP55
Length of the connection cable (m)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Dimensions	518x154	518x250	518x378	518x472	1003x154	1003x250	1003x378	1003x472
(LxWxH mm)	x107	x107	x107	x107	x107	x107	x107	x107
Recommended lamp replacement (h)	9000	9000	9000	9000	9000	9000	9000	9000
Spare lamp/ Item No.	A003389	A003389	A003389	A003389	A003926	A003926	A003926	A003926

Price calculator

Technical documentation



# Cold and cryogenic store :: Maturation and fermentation cells ::

Continuously avoids the formation of biofilm on the evaporator and any germ transmission. Continuously reduces energy consumption.



- Continuous disinfection of the cold evaporator saves energy costs of **up** to 20 %.
- No more cleaning and disinfection costs accrued.
- Constantly controls the formation of mould, germ and biofilm formation by up to 99.9 %.
- Simple installation by your refrigeration engineer







The UV-STYLO-RP can be used on all cold and combined evaporators, which can be difficult to access. UV-STYLO is very compact, with a diameter of only 29mm and is available in different lengths.

The protection class IP 68 allows it to be installed in aggressive or wet environments. In the unlikely case of lamp breakage, no glass fragments can escape thanks to the patented "UVLON" splinter protection. In order to attain a better disinfection level, it is possible to combine several units. Spring steel brackets are used in order to install the UV-STYLO-RP. The electrical ballast is mounted outside the cell or cabinet and controlled by the fan control.

A recurring problem in the cold storage cells, combined cells or also in climatic chambers for cream, is the clogging of the piping by the melted water from the cold evaporator. Over time, the cold evaporator will become clogged with a biofilm of aerosols and dust. After each defrosting operation, the biomass will gather in the piping. Consequently

the heavily contaminated air will be conveyed by the fan into the cooling unit and colonise on dough or food products.

#### Features:

- 5 selectable lengths
- Easy installation
- External control module (Master)
- CE sign (LVD, EMC, MD, RoHS)
- HACCP-compliant

UV-STYLO-RP-	11	16	40H	60H	90H
Item No.	A007787	A007788	A007789	A007790	A007791
Power consumption (W)	11	16	35	60	90
Voltage (V / Hz)	230/50	230/50	230/50	230/50	230/50
Protection class	IP68	IP68	IP68	IP68	IP68
Length of the connection cable (m)	2	2	2	2	2
Evaporator width (mm)	300	400	500	700	1000
Recommended lamp replacement (h)	9000	9000	9000	9000	9000
Spare lamp/ Item No.	A007863	A007864	A007865	A007866	A007867

Price calculator

Technical documentation



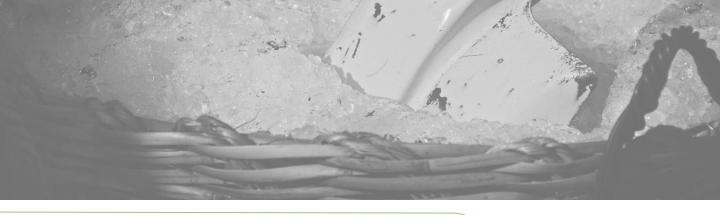
## Water for production and ice making machines ::

Destroys bacteria and germs in ice production. No chemical cleaning.



- Continuous disinfection of all water in your production will save energy costs of up to 20 %.
- No more unpleasant deposits will accumulate in your water conveying devices, expensive cleaning and disinfection costs will be drastically reduced.
- The formation of a biofilm will be reliably prevented, germs and black mould will be eliminated by up to 99.9 %.





Suitable for all water withdrawal points such as ice machines, fog systems in fermentation cells or fermentation cabinets, and production water.

The UV-WATER reactors serve to disinfect water (cold or hot), the water flowing through will be disinfected by the integral UVC lamp, without chemical additives, odour and pH neutral, without ozone formation.

A major problem in the supply of fresh water is a continuously increasing number of multi-resistant germs - in spite of the massive use of chlorine and different chemical additives.

Therefore, in order to achieve a higher product quality with maximum shelf life, UV treatment is indispensable to achieve the highest possible quality of the used service water.

#### Features:

- 5 different models
- (from 3,000 l/h to 24,000 l/h)
- Housing is made of stainless steel
- Fully wired (Plug & Play)
- All components are UVC stable
- Easy installation
- Control unit included
- Can be operated with 230 V
- 50/60 Hz
- Protection class IP 55 class II
- CE sign (LVD, EMC, MD, RoHS)
- HACCP-compliant

UV-WATER	-40H	-90H	-2/90H	-3/90H	-4/90H
Item No.	A006468	A006469	A007142	A007143	A007144
Power consumption (W)	40	90	180	270	360
Voltage (V / Hz)	230/50	230/50	230/50	230/50	230/50
Length of the connection cable (m)	2	2	2	2	2
Flow rate (I)	3,200	8,000	13,000	18,000	24,000
Flow rate (I/s)	0.9	2,2)	3.6	5.0	6.6
Display Lamp defective	Yes	Yes	Yes	Yes	Yes
Display Lamp replacement	Yes	Yes	Yes	Yes	Yes
Water connection On/Off	3/4"	1"	2"	2"	2"
Dimensions (L/D mm)	580 x 100	1060 x 100	1040 x 160	1040 x 160	1040 x 160
Recommended lamp replacement (h)	9000	9000	9000	9000	9000
Spare lamp/ Item No.	A007659	1xA005976	2xA005976	3xA005976	4xA005976

Price calculator

Technical documentation



Ice machines ::
Dispensers ::
Reservoirs ::

Avoids the biofilm and mould on your ice production.



- Keeps ice machines reservoirs and dispensers hygienically clean
- Considerably reduces cleaning and disinfection costs
- Avoids the formation of biofilms
- **Simple installation** Maintenance-free and retrofit.





Ice machines, fog systems in fermentation cells or fermentation cabinets

UV-ICEZONE reactors inhibit the growth of mould, biofilm and other contamination.

With UV-ICEZONE your device will achieve a very high level of cleanliness and it will keep it free from harmful contamination for a long period of time. Cost-intensive cleaning intervals can be considerably extended.

For the trouble-free operation of your ice maker, fermentation cells, etc. you should set highest standard regarding the air quality which flows over all internal surfaces and through air-conveying rooms. Interior spaces which are heavily contaminated by the user with a continuously increasing number of multi-resistant germs contaminates the air and surfaces.

Subsequently, there will be a very high germination rate in your devices within shortest time and a hazardous biofilm of mould and fungi spores will develop on all surfaces.

#### Features:

- Compact design
- Can be integrated into your device
- Can be mounted externally
- Easy to retrofit
- Delivery as complete kit Including connection kit
- CE sign (NSF, UL, RoHS)
- HACCP-compliant

UV-ICEZONE	IceZONE X-10
Item No.	A007868
Power consumption (W)	9.6 W
Voltage (V / Hz)	100-240/50-60
Power supply unit (V)	12
Length of the connection cable (m)	2
Dimensions (LxWxH mm)	302x108x31
Recommended lamp replacement (h)	12,000
Spare lamp/ Item No.	A007869



CHEMICAL-FREE ::

**COST-EFFICIENT ::** 

**ENVIRONMENTALLY FRIENDLY::** 



Fraunhofer Institut
Verfahrenstechnik und Verpackung

 $\textbf{uv-fresh}^{\text{\tiny{\$}}}$  is a brand of the company:

#### uv-technik international Itd

Hart House Business Centre,

Kimpton Road,

Luton,

Bedfordshire.

LU2 OLA

Tel: +44 (0) 1582 522 345

www.uv-technik.co.uk



