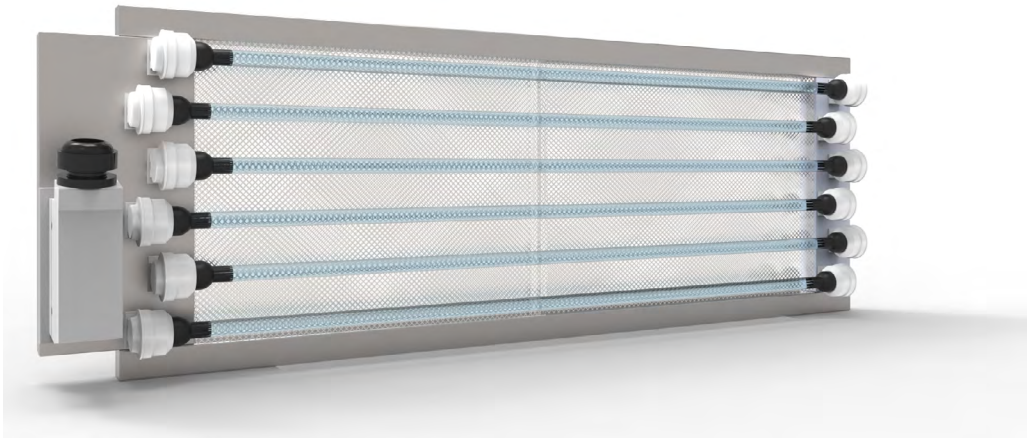


UV - SMELL - SQ

grease and odours reduction

In restaurants or industrial/ community kitchens, during food cooking phases, fats, pollutants and unpleasant smells are generated; this may be disputed by authorities and give often rise of legal issues with the neighborhood.

Applied inside kitchen hoods and aspiration systems, UV-SMELL-SQ contributes significantly to minimize these problems; fats are carbon and hydrogen compounds, with a structure made of complex chains. If fats are exposed to an intense UV-C irradiation, they absorb part of this powerful energy, and molecules, placed in a higher energy state, become more reactive. For this reason they recombine with oxygen present in the air.

This process causes a particular and immediate chemical reaction, the “cold combustion”. Results of this reaction are organic and odorless short chain gases, such as carbon dioxide (CO_2), water, etc.., normally present in air.

So the air filtered by UVSMELL- SQ during normal cooking, reduces the formation and deposits of fat and the consequent risk of fires, limiting also the growth of molds that feed usually on fats.

UV-SMELL-SQ reduces the need of aspiration system cleaning and maintenance, extend filters’ life but, more importantly, offers the possibility to work safely.

UV-SMELL-SQ uses UV-C lamps and/or UV-C+O3 (Ozone) lamps, and it is the firts device in the market that can handle ozone or ozone-free lamps, alternatively or even combined together, according to clients’ needs.

In these kind of applications, UV power is often enough to reach great results, but ozone, persisting in air for few seconds before turning in simple oxygen, maximizes UV-C performances.

WHAT ARE UV-C RAYS?

Light in a broad sense can be divided in visible, infra-red and ultraviolet rays.

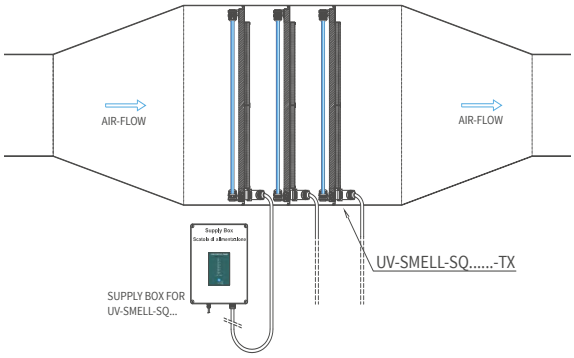
Ultra-violet rays (invisible) can be classified in:

- UV - A (with tanning properties)
- UV - B (with therapeutic properties)
- UV – C (with germicidal properties)

The germicidal effects of the UV-C radiation destroy DNA of Bacteria, Viruses, Spores, Fungi, Moulds and Mites avoiding their growth and proliferation.

UVGI technology is a physic disinfection method with a great costs/benefits ratio, it’s ecological, and, unlike chemicals, it works against every microorganisms without creating any resistance.

Application in a kitchen



Application scheme

TECHNICAL FEATURES

- Selective UV-C Light Progress lamp (emission peak at 253.7 nm./ +Oz 183 nm.) high efficiency, pure quartz.
- Body in STAINLESS STEEL AISI 304
- All materials are tested for resistance to intense UV-C rays and Ozone.
- Waterproof and dust-proof (IP 55).
- Powered by electronic ballasts specific for Light Progress UV-C rays lamps.
- Supply Box with Synoptic
- CE mark (LVD - EMC - MD - RoHS).

UV - SMELL - SQ
safe and innovative

Supply box

UV-SMELL-SQ can be installed directly inside the hood, providing a plenum (ducts enlargement) or directly inside the centralized apiration and filtration system.

The air flow must pass entirely through its “grid” of UV-C lamps placed on its Stainless Steel AISI 304 body.

Apart from the device, the Supply Box contains ballasts, a lamps’ LED Synoptic view, a digital hourcounter and the alarm check.

The module is designed to house also the TiOx® filter, a special Light Progress filter coated with nano-structured titanium dioxide and silver salts (optional) that, in combination with the very high UVC power emitted by lamps, is an excellent photo-catalyst that degrades pollutants and organic and inorganic compounds (SOV, NOx and VOC volatile organic compounds, nitrogen oxides).

TiOx® filter performs further oxidation of polluting particles, and contributes significantly to the deodorizing action of UV-C. The special materials used for UVSMELL-SQ ensures watertight (IP 55) protection, high temperatures (45/50 °C) resistance, as well as endurance to fats and oils.

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