



MONTAGNA

ULTRAVIOLET SYSTEMS

UV-AirTube

We keep the environment safe.



**Air and
surfaces**

✓ **QUALITY**

Top quality materials: AISI304L stainless steel reactor body, ceiling installation devices, state-of-the-art high-performance UV C lamps designed on MONTAGNA specification by World Leaders manufacturers to guarantee very high performances.

✓ **EFFICIENCY**

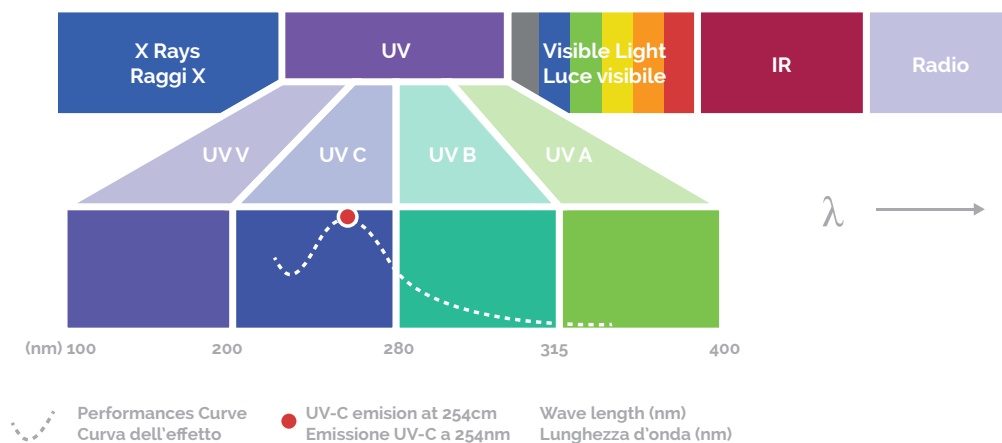
Precise and punctual calculation together with a mechanical design resulting from studies and tests allow to obtain a very high level of efficiency ensuring the complete coverage of the air circulating in the environment;

✓ **SAFETY**

The dedicated design takes into account the geometries and emissions to avoid uv leakage and direct radiation, allowing to keep the unit on duty even in the presence of people inside the rooms;

UV-AirTube

Light emission at the particular wavelength of 254 nm is the base of disinfection systems with ultraviolet light UV C treatment. It's, in fact, this particular wavelength that allows to inactivate the DNA of microorganisms by inhibiting their ability to proliferation and therefore contamination online



The UV light, in general, is a part of the natural spectrum of sunlight emission. UV radiation is then divided into four sub-categories according to the radiation wavelength: UV-A, UV-B, UV-C and UV-Vacuum.

Among the wavelengths of UV light, the one to which the DNA of living organism is most sensitive, is the UV-C one. Living organisms do not have adequate protection mechanisms against ultraviolet rays, as they have been always protected from the ozone layer.

UV-C disinfection systems exploit the effects of this radiation on DNA whose helical chain is interrupted by preventing the replication of the genetic code and therefore, basically, the possibility of the formation of bacterial colonies: the affected microorganism is then inactivated, preventing its reproduction.

The correct design of a UV treatment system therefore focuses on the intensity produced within a finished reaction volume and the contact time in which microorganisms are exposed to radiation.

Mission

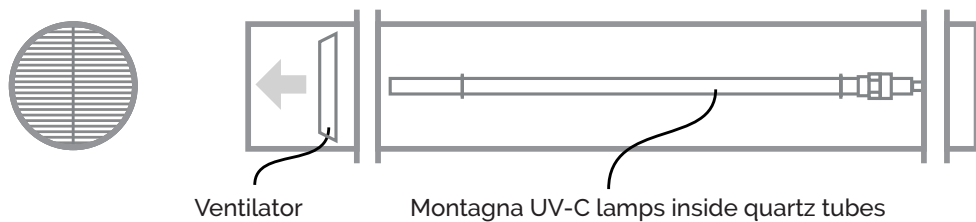
**To keep the environment sterile
in the premises, simultaneously
with the people presence!**

Because we strongly believe that our technology can unequivocally limit the chances of contagion, Montagna has developed a system that can improve the safety of each individual without altering their daily life.

... How does it work...

By means of an axial fan installed directly on the unit, the air is conveyed into the reactor chamber in which the UV lamps are positioned according to our design. The air, crossing the body of the equipment for the entire length, is subject to disinfection and subsequently returned into the environment, free from microbiological pollutants. At the ends of the reactor grids filter elements are positioned so to have the dual purpose: retaining microorganisms and preventing the escape of radiation from the UV unit (harmful to eye contact).

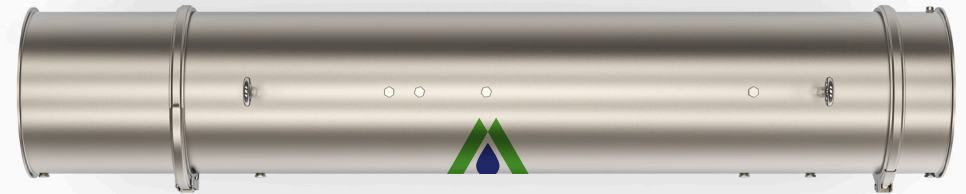
The different components of the disinfection unit and their geometry (fan type, reactor body diameter, type and number of lamps) have been suitably sized to ensure that the ratio of air speed to radiation power can guarantee a UV dose capable of eliminating yeasts, mold, spores, bacteria and viruses.



Sectors

The very high efficiency and small footprint allow the UV-AirTube to be installed in every application that requires safe disinfection.

**"WE LOOK
AT THE AIR UNDER
A NEW LIGHT"**



The UV-AirTube product line is divided into different sizes that differ according to the amount of air that needs to be treated.



6MX041 - UV-AirTube

FEATURES		
Maximum Air Flow	800	[Nm ³ /h]
Number of lamps installed	6	[-]
UV-C wavelength	254	[nm]
Absorbed power	300	[W]

Treatment times for room disinfection

Surface [mq]	Volume [mc]	Recirculation time [h]
320	800	1
640	1600	2
950	2400	3
1.250	3200	4



4MX041 - UV-AirTube

FEATURES		
Maximum Air Flow	500	[Nm ³ /h]
Number of lamps installed	4	[-]
UV-C wavelength	254	[nm]
Absorbed power	200	[W]

Treatment times for room disinfection

Surface [mq]	Volume [mc]	Recirculation time [h]
200	500	1
400	1000	2
600	1500	3
800	2000	4



2MX041 - UV-AirTube

FEATURES		
Maximum Air Flow	250	[Nm ³ /h]
Number of lamps installed	2	[-]
UV-C wavelength	254	[nm]
Absorbed power	100	[W]

Treatment times for room disinfection

Surface [mq]	Volume [mc]	Recirculation time [h]
50	125	0,5
100	250	1
200	500	2
300	750	3



1CX017 - UV-AirTube

FEATURES		
Maximum Air Flow	35	[Nm ³ /h]
Number of lamps installed	1	[-]
UV-C wavelength	254	[nm]
Absorbed power	30	[W]

Treatment times for room disinfection

Surface [mq]	Volume [mc]	Recirculation time [h]
7,2	18	0,5
14	35	1
28	70	2
42	105	3