

Since the beginning of the COVID crisis, Tecno-Gaz has carried out many trainings and product presentations with the aim of informing his distributors and customers, and marketing our STERIL AIR PRO air treatment device. We have also organized many digital and press advertising campaigns, including social media.

This new communication aims to help those who are undecided in selecting the appropriate air treatment device, and also is oriented to achieve effectiveness in protecting users and patients from the risks of contamination. ATTENTION: Medical personnel are the most exposed. Even if your choice is for the STERIL AIR PRO or another device, we invite you to take into consideration the following key points and request from your suppliers the certificates that prove the efficiency of the device offered.

- **UVC tube technology:** The germicidal activity of UVC tubes has been proven for many years. The WHO, in its 20th March release, has shown the effectiveness of UVC rays in the fight against COVID. Many prestigious universities like Harvard, Toronto, Santa Barbara, Cornell ..., develop devices based on UVC radiation, to successfully fight against viruses contained in the air.
- **Form of the device:** It is not enough to use a device with UVC tubes to achieve the expected result, that is, the destruction of bacteria and viruses contained in the air flow to be treated. The air flow must spend a sufficient time against the radiation of the tubes, and this duration is precisely detailed in the scientific reference document Ultraviolet Germicidal Irradiation Handbook (Springer-Verlag Berlin Heidelberg 2009.)
- **Power of the tubes:** Likewise, the radiation from the UVC tubes must be sufficient to ensure the total destruction of bacteria and viruses contained in the air flow. The proper power is also detailed in the cited document.
- **Positioning in the room:** Other parameters will affect the effectiveness of the device. The position near or within the immediate diffusion zone, clearly identified in dentistry for many years as an almost perfect circle of 2 to 3 meters around the patient's mouth. A very precise study on air treatment devices in a dental treatment room clearly demonstrates the effectiveness depending on the chosen position. (The effectiveness of an air cleaner ... in the indoor environment of dental clinic - Royal Society Journal).
- **Certification:** In order to guarantee the effectiveness of the device, any serious company must submit its results for tests in an independent laboratory. This test must be representative of the conditions of use, that is, the recommendations given by the manufacturer for the use of your device, and the environment in which it will be used. The dental clinic in this case. Tecno-Gaz has had its devices tested and certified with the independent EUOFINS laboratory and the certificate, confirming the effectiveness of the device (99.2% bacteriological destruction in 30 '), was updated on 14th May 2020.
- **Safety:** The radiation from UVC tubes is harmful to the skin and eyes. Contained in a hermetic device, external radiation is zero. To avoid any risk, an internal double skin in the form of a labyrinth further reinforces the sealing of the product with respect to any radiation. Each product must follow a series of external radiation controls, tests that must be filled and presented to the user who requires it. Tecno-Gaz has the control tests of each device available to its clients.
- **Experience:** One does not improvise an air treatment specialist in a dental clinic. The projection of particles by rotating instruments is a determining feature of this work environment, and a considerable vector of contamination. Since the 1970s, a training on cross contamination (WHAT IF SALIVA WERE RED, Youtube) demonstrates the projection of 400,000 particles per minute out of the patient's mouth. An efficient device in the hospital does not have to be effective in a dental clinic. The reverse is true as well. The equipment and devices used by dentists have been developed after studying the limitations of the profession.

Tecno-Gaz has the documents mentioned in this article available to all. Backed by our experience of more than 20 years in the treatment of air in dental clinics and the commercialization of 3 generations of Steril Air, it seems essential to us to promote a professional and ethical activity, especially in the current context.

It is not just about buying an air treatment device, but also about your health, and that of your employees and patients.