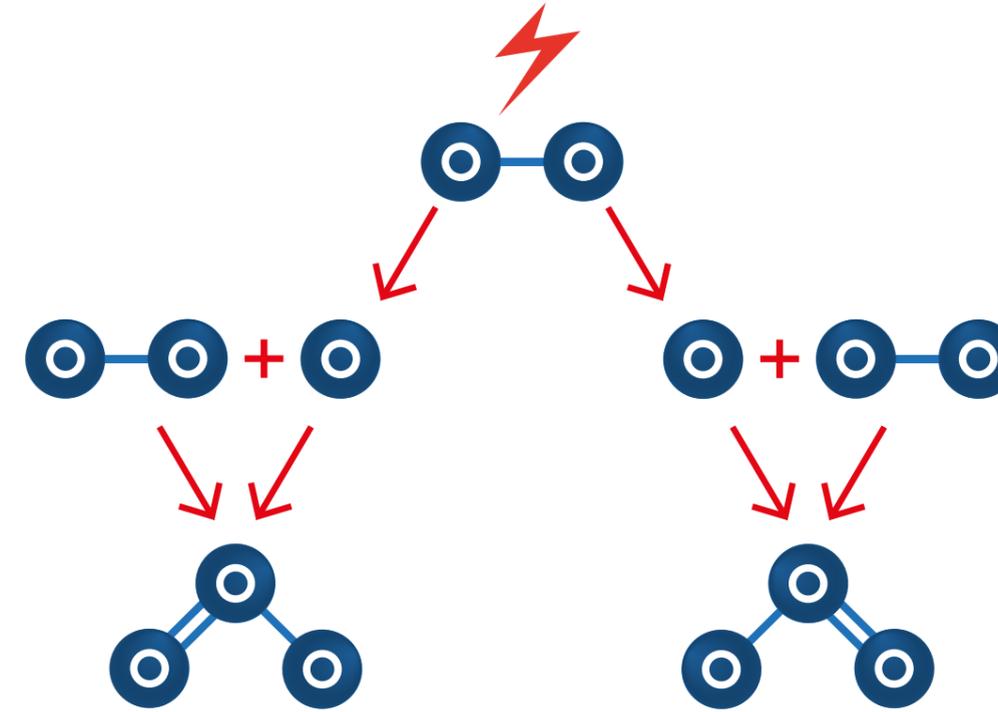
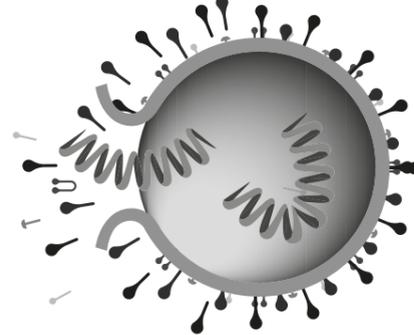
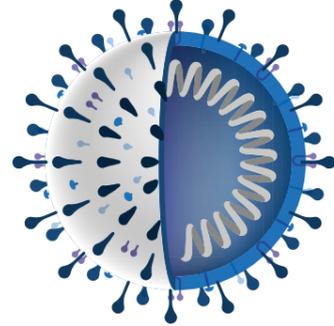


→ MECTRON OZOACTIVE AEROSOL DISINFECTION

THE SAFE WAY TO REDUCE AEROSOL RISK



→ AEROSOLS ARE INEVITABLE

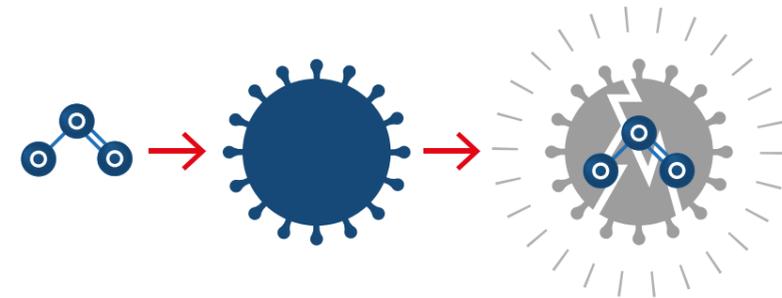
Most commonly used dental equipment generates aerosols, i.e. turbines, micromotors and ultrasounds. To protect both clinicians and patients it is imperative to have a system to prevent the spread of aerosols in the dental practice, especially under the current Covid emergency.

→ INHIBIT SARS-COV-2

SARS-CoV-2 has a similar structure to the older SARS-CoV-1 virus. Both need an intact capsid and lipid viral envelope to infect cells. Common disinfectants including alcohol, detergents, soaps or ozone can disrupt the lipid envelope and its components, destroying the ability for the virus to infect.

→ OZONE AGAINST SARS-COV-2

The use of ozone is proven to be effective against SARS coronavirus.^{1,2} The mechanism behind this is the disruption of the lipid envelope of the SARS virus, inhibiting its ability to attach to host cells.



Ozone dissolved in water can inactivate viruses

Ozone is a powerful oxidizing agent, which when dissolved in water produces a broad spectrum biocide that destroys all bacteria and viruses.

“The results of the study showed that ozone exposure reduced viral infectivity by lipid peroxidation and subsequent lipid envelope and protein shell damage. These data suggest that a wide range of virus types can be inactivated in an environment of known ozone exposure.”³

→ WHAT IS OZONE?

Ozone is a natural inorganic molecule with the chemical formula O₃. Each molecule contains three atoms of oxygen instead of two. It is a pale blue gas, with a pungent odor that is formed naturally in the atmosphere. For example ozone is formed by lightning discharges during a thunderstorm, giving the air its fresh and clean smell afterward.

→ HOW IS OZONE GENERATED?

A high voltage is passed across a gas stream containing oxygen - the energy of the high voltage causes a chemical reaction, splitting an oxygen molecule O₂ into two oxygen atoms O, which recombine with ordinary molecules of oxygen O₂ to form ozone O₃. Since ozone is highly reactive and has a short half-life, it is very difficult to store and transport: that is why it has to be generated on-site for immediate use.

→ OZONATED WATER AS DISINFECTANT

Ozone is a powerful oxidizing agent which produces a broad spectrum biocide that destroys all bacteria and viruses when dissolved in water. At the proper concentration, ozone can completely inactivate most enveloped viruses such as SARS CoV-2.

Ozone gas has a high oxidation potential which is 1.5 times greater than chloride when used as an antimicrobial agent against bacteria, viruses, fungi and protozoa.⁴

→ OZOACTIVE - THE OZONE INFUSER

→ MAXIMUM SAFETY WITH ULTRASOUNDS

OzoActive generates ozone gas for distribution into the irrigation lines of mectron PIEZOSURGERY® and ultrasound units, resulting in concentrations of ozonated water ranging from 0.011 mg to 0.079 mg per liter. At this concentration range ozonated water is proven to have biocidal effects.⁵

The flow of ozonated water minimizes the risk of the transmission of fungi, bacteria and viruses through aerosols without leaving chemical residues: within seconds the ozone is transformed into oxygen.

The OzoActive device is specially designed to generate ozonated water at a concentration range that is very safe for both patients and operators. It may be used at any device setting, even for your longest treatments.

A comprehensive package

The original packaging of the OzoActive contains

- Device body
- Multivoltage power adapter
- Foot-switch
- Instructions for use
- Setting sheet
- Three disposable irrigation set for PIEZOSURGERY®
- One irrigation set for prophylaxis ultrasound units
- Pump cover for prophylaxis ultrasound units



→ DEDICATED PROGRAMS

OzoActive can be used with mectron PIEZOSURGERY® *touch* or *white* units as well as with prophylaxis ultrasound units like *combi touch* or *multi piezo*. The corresponding program is indicated with *Oral Surgery* or *Prophylaxis*.



→ SYNCHRONOUS USE

The ozone level of OzoActive needs to be selected according to the specific irrigation level of Mectron devices. The irrigation levels of Mectron devices and ozone levels of OzoActive device are synchronized with this in mind: level 3 on PIEZOSURGERY® corresponds to level 3 on OzoActive.

→ DEDICATED FOOTPEDAL

As mectron PIEZOSURGERY® or ultrasound units need to be activated at the same moment as OzoActive, a dedicated footpedal with 2 connection cables is included with the original equipment.



→ OZOACTIVE COMBINATION WITH MECTRON UNITS



→ CONNECTION OF PROPHYLAXIS ULTRASOUND UNITS

OzoActive can be used with mectron multipiezo units and the ultrasound handpiece of combi *touch*, taking advantage of their independent irrigation lines.

A dedicated reusable irrigation set will combine both units. A new pump cover - with dedicated tube outlets - is included in the initial equipment too.

The OzoActive device connects between the pump and the water tank of the mectron unit.

→ CONNECTION OF PIEZOSURGERY® UNITS

OzoActive can be used with mectron PIEZOSURGERY® *touch* and *white* units.

A dedicated single use irrigation set will combine both units.

For the connection, the traditional pump tube is simply replaced by the new OzoActive irrigation set.



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