

About Us

BioSure Professional ozone disinfection products are developed based on revolutionary electrolytic ozone generation technologies, patented by BES Group — providing safe and effective ozonated water generation. Established by Gavin Hsu in 2004, BioSure Professional products are designed to be easy to operate and maintain.

Case Study : Dentistry | United States

Ozonated Water Cuts Disinfection Costs and Helps Safeguard a Dental Clinic Against Covid-19

Background

What: Dental Clinic Disinfection & Sanitization
Where: Summerville, South Carolina, USA
Who: Dr. Jim Muscott, BSME, DDS

Problem

In the midst of the Covid-19 pandemic, the Simmons & Muscott Dental Clinic in South Carolina was looking to restore confidence in safety for both patients and staff, critical to continued operations and providing care. Their challenges were to achieve an environment where they can eliminate cross-contamination safely with minimal use and exposure to chemicals. They needed to adequately sanitize surfaces and disinfect their dental clinics.

Solution

The Simmons & Muscott Dental Clinic chose the BioSure Professional solution primarily for the safety and simplicity of using water as the source for oxygen, as well as the stability and safety of applying the aqueous ozone solution when other people are around, including dental staff, patients, and others. Additionally, they chose the BioSure Professional because it has the highest concentration of ozone available in this configuration. They chose ozone systems instead of a traditional solution like chlorine because of several factors:

- A desire to limit human exposure to chemicals
- Ozone is a more powerful oxidizer in neutralizing pathogens
- Unlimited availability and convenience of using water and electricity
- Elimination of waste
- Return on investment
- Friendlier to surfaces and materials where other chemicals are degrading them quickly

The cost was secondary because the primary factor was to create the safest environment by eliminating pathogens and minimizing toxic exposure to chemicals.

Given BioSure Professional ozone system's payback period of five to six months, it provides a significant cost advantage over consumable disinfectant products. The clinic is saving an average of \$USD 500 to \$700 per month in chemicals and has achieved in excess of \$3,500 in labor efficiencies by shortening the time to turnover operatories and exam rooms.



Environmental impact was also important. Creating a safe, clean environment is their first priority. This not only means eliminating pathogens but also limiting the amount of toxic chemical exposure from packaged disinfectants. In addition, a major benefit was the avoidance of waste-related used chemical products and their packaging that goes to landfills.

They learned about ozone technology through the introduction of BES Technologies by BNA. In addition, there is an extensive amount of useful information in the public domain that is well documented from credible sources. Customer understanding of ozone technology is limited but improving. Developing a clear understanding of the science of ozonated water is the great hurdle to overcome. Once this is achieved, it becomes much easier to create a higher valuation and appreciation of BES Technologies.