

# O3 HYDRO

Turn Water into a  
**SAFE & POWERFUL Disinfectant**

Sustainable & Chemical-Free



Turn Water into a  
**SAFE, POWERFUL  
Disinfectant**



Reduce Use of  
Hot Water,  
Chemical, Labour  
& Water



3,100 Times Faster  
& 50 Times More  
Effective Than  
Chlorine



Chemical Free,  
No Residues &  
No Harmful  
By-products



Remove  
Bad Smells



Extend Shelf Life  
of Fresh Produce

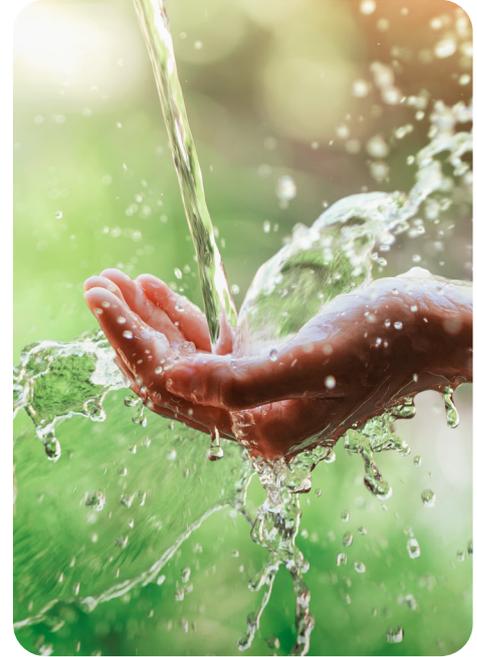
O3 Hydro, powered by Cerafusion™ Technology is a plug and play equipment that turns your water into a safe & powerful disinfectant. Commonly known as Ozone Water, it is proven to effectively and efficiently reduce the use of hot water, chemical, labour & water to achieve a higher standard of hygiene and customer experience.

# 6 Reasons Customers Choose Medklinn O3 Hydro System:

## 1 Turn Water into a SAFE, POWERFUL Disinfectant

Cerafusion™ Technology infuses ozone into water to produce Ozone Water which effectively disinfects various types of pathogens including bacteria, fungi, moulds, yeasts, viruses up to 99.9%. It is also an effective emulsifier of fat/grease, reducing biofilms as well as grease draining into pipes.

Ozone water is a SAFER and more effective alternative to chemical disinfectants, naturally destroying harmful microorganisms and compounds through oxidation. It leaves no residues and harmful by-products in the water unlike chlorine. USDA and FDA have also approved of the use of ozone as a disinfectant in the cleaning, processing, packaging and storing of food.<sup>1</sup>



1. U.S. FDA Regulatory Approval of Ozone as an Antimicrobial Agent 

## 2 Reduce Use of Hot Water, Chemical, Labour & Water

O3 Hydro can significantly reduce the use of hot water and chemicals in the cleaning process as it emulsifies fat/grease on utensils, equipment, surfaces and floors. Additionally, labour cost and water consumption is reduced as O3 Hydro speeds up the cleaning process and reduce the frequency of cleaning. Deploying O3 Hydro can lead to savings of up to 90% in energy cost and up to 60% in chemical cost.



Save on  
Water Usage  
**10% - 20%**



Save on  
Chemical Usage  
**25% - 60%**



Manpower  
Savings  
**10% - 20%**



Return on  
Investment (ROI)  
**10% - 20%**



Energy  
Savings  
**85% - 90%**



Reduce the use  
of Hot Water

## 3 3,100 Times Faster & 50 Times More Effective Than Chlorine

O3 Hydro can produce Ozone Water at various levels of concentration depending on the application. Ozone water can kill bacteria 3,100 times faster and is 50 times more effective than chlorine and other disinfectants.<sup>2</sup> As Oxygen is the basic component of Ozone (O<sub>3</sub>), it reverts back to Oxygen if unused, making ozone sterilization a highly **SUSTAINABLE** technology.

2. Wastewater Technology Fact Sheet Ozone Disinfection 



## 4 Chemical Free, No Residues & No Harmful By-products



A combination of hot water and detergent are commonly used in the food industry for cleaning and chlorine is used to disinfect food. Routine exposure to these hazardous chemicals over time can cause adverse effects on employee's health and wellbeing leading to chronic respiratory problems, skin irritation and serious illnesses.<sup>3</sup>

More importantly for food processing and cleaning, unlike chlorine and detergent which leave harmful residue by-products, Ozone Water is **SAFE** and **ENVIRONMENTALLY FRIENDLY**. It has a half-life of 20 minutes, reverting to oxygen if not used leaving no residue. Moreover, it can also render chemical residues on meats, poultry, shellfish, seafood, fruits and vegetables harmless.<sup>4</sup>

3. Chemical Hazards and Toxic Substances 

4. Ozone in Food Processing Applications 

## 5 Remove Bad Smells

Exposure to unpleasant odours tend to leave a lasting impression on customers and have a negative impact on business. Smell plays an incredibly crucial role in how customers perceive value of service and product, which ultimately affects buying decision. Our customers has found that O3 Hydro is effective in eliminating unpleasant odour improving customer experience.



## 6 Extend Shelf Life of Fresh Produce

One of the major challenges of the fresh produce industry is the loss from rotting of fruits and vegetables caused by fungus and bacteria. Chemical is commonly used to extend shelf life, increasing the risk of disease for customers.

Ozone is approved and recognized by United States Department of Agriculture (USDA) and the U.S. Food and Drug Administration (FDA) as an antimicrobial agent for the treatment, washing, processing, and packaging of foods.<sup>5</sup>

O3 Hydro provides chemical-free way to wash and disinfect fruits and vegetables, improving shelf-life and in gaseous form, ozone helps to sterilize the air and prolong shelf-life of fresh produce during transportation and storage while preventing cross-contamination.<sup>6</sup>



5. Ozone Treatments for Preserving Fresh Vegetables Quality: A Critical Review 

6. A Review into the Effectiveness of Ozone Technology for Improving the Safety and Preserving the Quality of Fresh-Cut Fruits and Vegetables 