

MedKlinn<sup>TM</sup>  
INNOVATIVE SOLUTIONS

greenpages  
malaysia



**O<sub>3</sub> Hydro**  
ozonewater system

# OZONE WATER

✓ **REDUCES ENERGY COST** by eliminating the use of hot water

✓ **REDUCES CHEMICAL COST**

✓ Leaves **NO RESIDUAL** or harmful by-products

✓ **DISSOLVES OIL AND GREASE**

✓ **FDA AND USDA APPROVED** for use in food processing

As consumers become increasingly health conscious and eco-friendly, there is a compelling need for various industries, especially healthcare, hospitality and food processing to seek chemical-free solutions.

Ozone water is one of nature's most powerful and safe disinfectant. It is the most ecologically friendly disinfection method as ozone is a natural gas that breaks down into oxygen and leaves no residual or harmful chemical by-products. **Ozone is an FDA and USDA approved**

**antimicrobial agent for use in the treatment, storage and processing of food.**

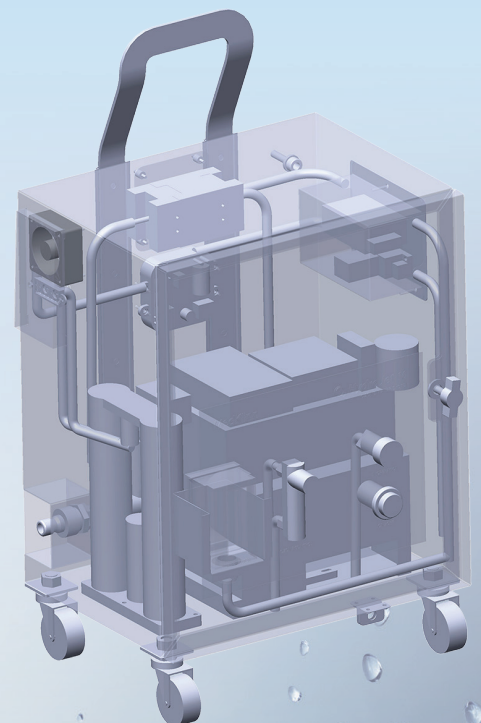
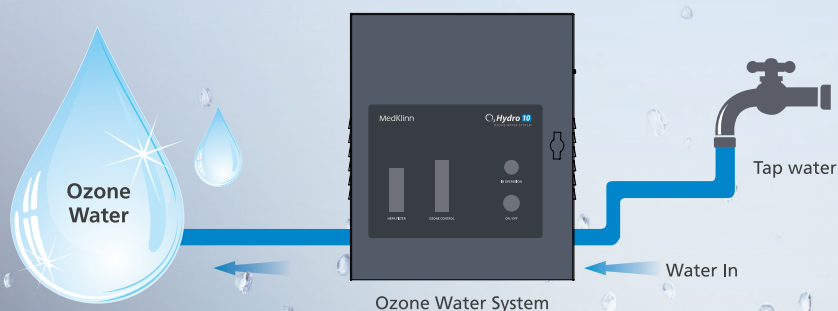
Traditionally, most industries use a combination of chemical based detergents and/or chlorine, hot water and steam for disinfecting surfaces such as food processing equipment, utensils, kitchen appliances and floors. **Ozone eliminates the use of hot water and reduces the use of chemicals.** Therefore, ozone water helps to save energy and reduce water consumption. Ozone can kill bacteria 3,100 times faster and is 50 times more effective than other disinfectants, such as chlorine.

**Ozone water breaks down oil and grease**, making it easy to remove and therefore eliminate biofilm build-up on surfaces, including floors. As biofilm is a major and constant source of contamination, its elimination would be a compelling requirement for the food industry.

Ozone water offers a **cost effective, eco-friendly and powerful method of disinfection** as it has the ability to eliminate the broadest range of microorganisms than chemicals.

## MedKlinn ozonewatersystem

The Medklinn O<sub>3</sub> Hydro Ozone Water System uses a proprietary process to infuse highly concentrated ozone into normal tap water to produce ozone water. A sophisticated design and control feature ensures the efficient production of ozone water with high and precise level of concentration to cater for various applications. To achieve this, ozone flow rate is adjustable to the water pressure, ensuring that its concentration is maintained for varying water pressure, provided it is above a specified minimum. While portable, it is also designed for quick deployment and ease of use – just attach a hose to a normal tap and a power point, and it is ready for use.



# Highly Effective and Efficient Plug and Play



## APPLICATIONS



Washing and general cleaning



Surface sanitation



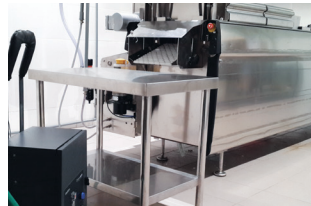
Kitchen utensils and equipment



Grease trap and sewage



Food preparation and sanitation



Food processing equipment



Toilet



Beverage and water bottling

## BENEFITS



**REDUCES ENERGY COST BY ELIMINATING THE USE OF HOT WATER**



**ENVIRONMENTALLY FRIENDLY**



**REDUCES CHEMICAL COST**



**DISSOLVES OIL AND GREASE**



**REDUCES WATER CONSUMPTION DUE TO LESS CHEMICAL USAGE**



**REMOVES MICROORGANISMS AND PREVENT BIOFILM BUILD-UP**

## TEST RESULTS

### RESULTS OF HYGIENE TEST

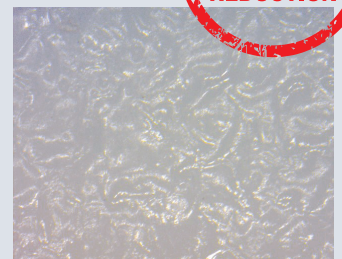
Test Condition : O<sub>3</sub> Hydro was used to wash chopping board  
 Equipment : 3M Clean-Trace Surface ATP  
 Cleaning Method : Green Sponge

Before Cleaning (RLU)	After Cleaning for 1 min (RLU)	After Cleaning for 2 min (RLU)
182217	62	59

Chopping board surface conditions under 200X microscope:



Before cleaning



After cleaning



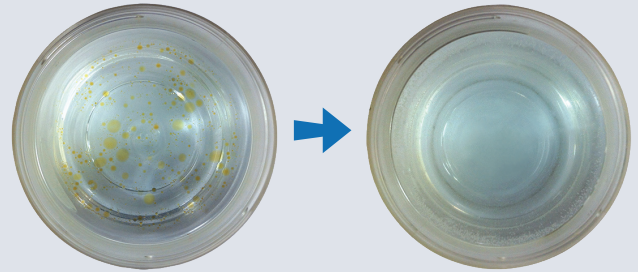
## TEST RESULTS

### RESULTS OF BACTERIA TEST IN GENERAL CLEANING

**Test Condition** : O<sub>3</sub> Hydro was used to wash different surfaces  
**Test Report by** : BP Healthcare Group  
**Results** : Total bacteria count reduced significantly after subjecting to O<sub>3</sub> Hydro

Test Location	Total Bacteria Count Reduction (%)
Basin	99.95
Floor	99.97
Wall	99.99

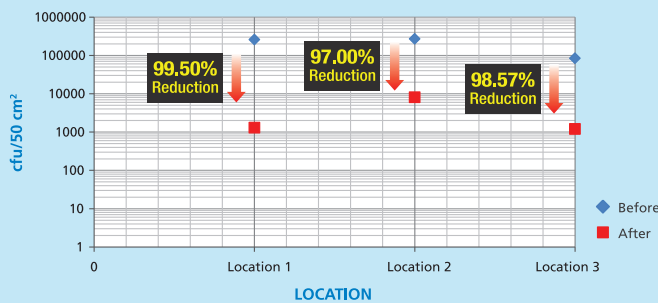
### DISSOLVES OIL/GREASE



**Normal Water:** Oil remains undissolved in water

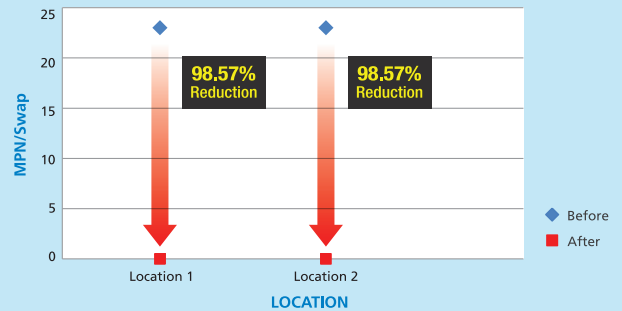
**Ozone Water:** Oil is dissolved for ease of cleaning

### RESULTS OF TOTAL BACTERIA COUNT IN A SUPERMARKET



**Type of Test:** Total Bacteria Count | **Test Method:** Surface swap using Spread Plate Method, Cfu/50 cm sq @ 37 deg. C, 48hrs, PCA | **Location:** Three different butchery sections in a Supermarket | **Product Tested:** MedKlinn Ozone Water System (O<sub>3</sub> Hydro) | **Test Report by:** BP Food Testing Sdn. Bhd.

### RESULTS OF ESCHERICHIA COLI IN A SUPERMARKET



**Type of Test:** Escherichia Coli | **Test Method:** Surface swap using MPN Method @ 44 deg. C, 48hrs, EC Broth | **Location:** Two different butchery sections in a Supermarket | **Product Tested:** MedKlinn Ozone Water System (O<sub>3</sub> Hydro) | **Test Report by:** BP Food Testing Sdn. Bhd.

## SPECIFICATIONS



Description	O <sub>3</sub> Hydro 3	O <sub>3</sub> Hydro 5	O <sub>3</sub> Hydro 10	O <sub>3</sub> Hydro 20
<b>Ozone Water Concentration</b>	0.4 - 0.8 ppm	0.4 - 0.8 ppm	0.8 - 1.5ppm	0.8 - 1.5 ppm
<b>Casing</b>	Powder coated galvanized steel	Powder coated galvanized steel	Powder coated galvanized steel	Powder coated galvanized steel
<b>Ozone Water Volume</b>	3 - 7 LPM	6 - 21 LPM	6 - 21 LPM	10 - 37 LPM
<b>Input Voltage</b>	220 - 240 VAC@50Hz	220 - 240 VAC@50Hz	220 - 240 VAC@50Hz	220 - 240 VAC@50Hz
<b>Input Current (max)</b>	0.15 amp	0.15 amp	0.5 amp	0.6 amp
<b>Power Consumption</b>	< 36 watts	< 36 watts	110 watts	115 watts
<b>Dimensions (mm)</b>	288 (W) x 417 (H) x 92 (D)	440 (W) x 562 (H) x 116 (D)	377 (W) x 655 (H) x 278 (D)	387 (W) x 655 (H) x 278 (D)
<b>O<sub>3</sub> Flow Rate (LPM)</b>	N/A	Adjustable 0 - 3 LPM	Adjustable 0 - 3 LPM	Adjustable 0 - 5 LPM
<b>In Operation Indicator</b>	No	No	Yes	Yes
<b>In Operation, Auto Switch</b>	Yes	Yes	Yes	Yes
<b>Water Pressure Monitor (Bar)</b>	No	No	No	Yes
<b>Installation</b>	Wall mount	Wall mount / Portable	Portable with wheels	Portable with wheels
<b>Weight</b>	5 kg	7.5 kg	16 kg	17 kg
<b>Maintenance Part(s)</b>	Air Dryer Media	Air Dryer Media	Hepa Filter	Hepa Filter

1. O<sub>3</sub> Hydro 3, O<sub>3</sub> Hydro 5 and O<sub>3</sub> Hydro 10 - inlet and outlet hose size is 1/2 inch (13mm). O<sub>3</sub> Hydro 20 - inlet and outlet hose size is 3/4 inch (19mm).

2. Ozone water concentration depends on water quality and temperature.

3. O<sub>3</sub> Hydro 3, O<sub>3</sub> Hydro 5 and O<sub>3</sub> Hydro 10 need a minimum water flow rate of 3 LPM to operate.

4. O<sub>3</sub> Hydro 20 needs a minimum water flow rate of 5 LPM to operate.

5. Hepa filter - estimated life span of 6 to 12 months depending on air quality.

For more info, please log on to [www.medklinn.com](http://www.medklinn.com)

Specifications, features and designs are subject to change without notice. Colour variations in products may occur due to printing considerations.