



## H<sub>2</sub>O<sub>2</sub> DECONTAMINATION TECHNOLOGY

MCO-170AICUVH | MCO-230AICUVH |  
 MCO-170MUVH Series

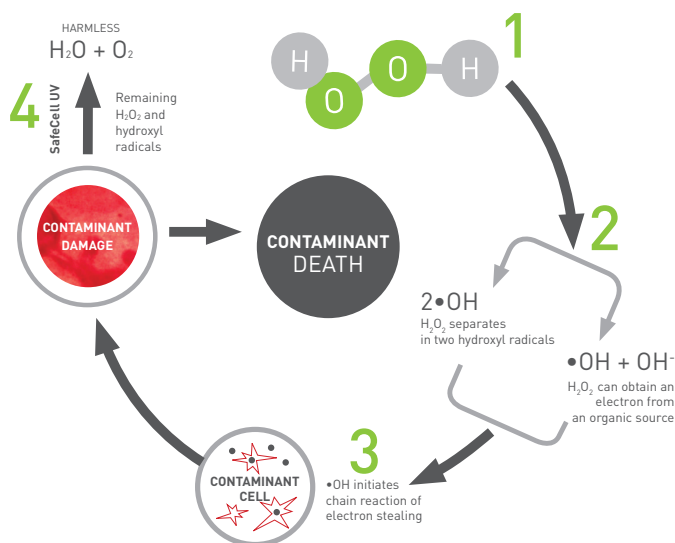


When initiated, Panasonic's unique high-speed decontamination system uses vaporized H<sub>2</sub>O<sub>2</sub>, offering time-saving and documented chamber decontamination with complete safety.

### How does it work?

1. Hydrogen peroxide (aqueous) is converted to vapour using high frequency ultrasonics. During this process, the fan motor remains active, ensuring H<sub>2</sub>O<sub>2</sub> vapour accesses every point of the chamber and the tubing to and from, and the inside of the CO<sub>2</sub> sensor.
2. The H<sub>2</sub>O<sub>2</sub> vapour breaks down into hydroxyl radicals naturally.
3. The hydroxyl radicals initiate a chain reaction of electron stealing.
4. This unstable internal environment leads to death of contaminants. Remaining hydroxyl radicals and H<sub>2</sub>O<sub>2</sub> are resolved to H<sub>2</sub>O (aqueous) & O<sub>2</sub> (gas).

Panasonic's H<sub>2</sub>O<sub>2</sub> decontamination achieves at least a 6 log reduction of major contaminants. The full decontamination process takes less than three hours.



DNA is very susceptible to oxidative damage. Since most bacteria have a single chromosome controlling all their life functions, this kind of effect can be detrimental to their normal function. Prokaryotic organisms often lack repair mechanisms to limit such damage, making them more prone to change.

## DECONTAMINATION CYCLE

H<sub>2</sub>O<sub>2</sub> Decontamination

High Heat  
 Decontamination



### STEP 1 Preparation Time: 10 - 15 minutes



1. Remove all interior components
  2. Wipe down the inside of the incubator
  3. Reposition interior components to specified locations for *in situ* decontamination
  4. Set up the H<sub>2</sub>O<sub>2</sub> generator (MCO-HP)\*
- \*Optional Accessory. H<sub>2</sub>O<sub>2</sub> reagent is required for this process.

### STEP 2 Decontamination Time: Approx. 135 minutes



1. Press the H<sub>2</sub>O<sub>2</sub> button. The chamber will warm up to 45°C for optimum results
3. H<sub>2</sub>O<sub>2</sub> vapour generation starts
4. Interior fan circulates vapor
5. UV lamp reduces H<sub>2</sub>O<sub>2</sub> to water and oxygen

### STEP 3 Finish Time: Approx. 10 minutes



1. Open chamber door
2. Wipe off remaining liquid with sterile cloth
3. Reposition interior components to normal positions