

# Automated Decontamination For Greenhouses



**Built-in, Automated, Touchless Solutions**



**We engineer and install the world's  
most effective decontamination systems.**

What makes us the best?

**1 TOUCHLESS AUTOMATION**

During 15-minute treatment cycles, an accurate concentration of aerosol dry mist decontaminates air and surfaces, reliably achieving 100% coverage.

**2 UNPARALLED EFFICACY**

Up to 8-log bioburden reduction eliminates 99.999999% of bacteria, viruses, fungi, and mold. Chemical toxins and odors are neutralized and broken into nontoxic, biodegradable components.

**3 COST SAVINGS**

Affordable upfront costs and lower operational expenses recoup initial investment in approximately twelve months.



# Eliminating Toxic Problems In **Greenhouses**

## **AIR & SURFACE DECONTAMINATION**

Eliminate bacteria, viruses, mold, fungi, spider-mites, exoskeleton bugs, and chemical toxins such as VOCs.

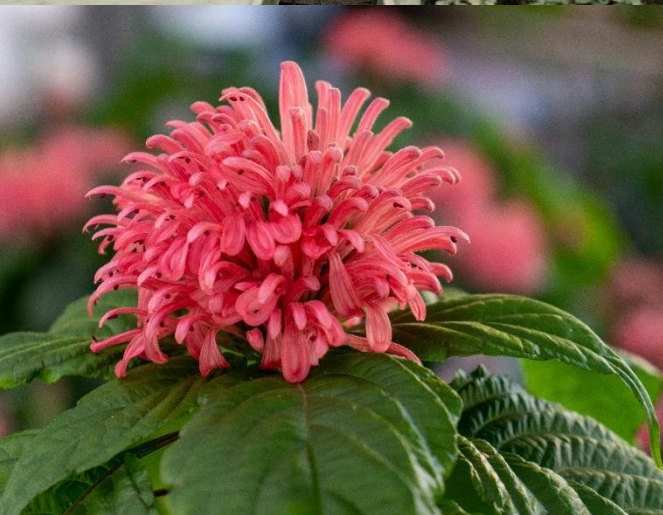
**COVERAGE** Reliably achieve 100% coverage of air and surfaces with a 10 micron dry mist aerosol, reaching areas that wipes, vapor, and UV light can't.

**EFFICACY** Effectively eliminate up to 99.999999% (8-log) of biological pathogens. Neutralize chemical toxins. Remove odors.

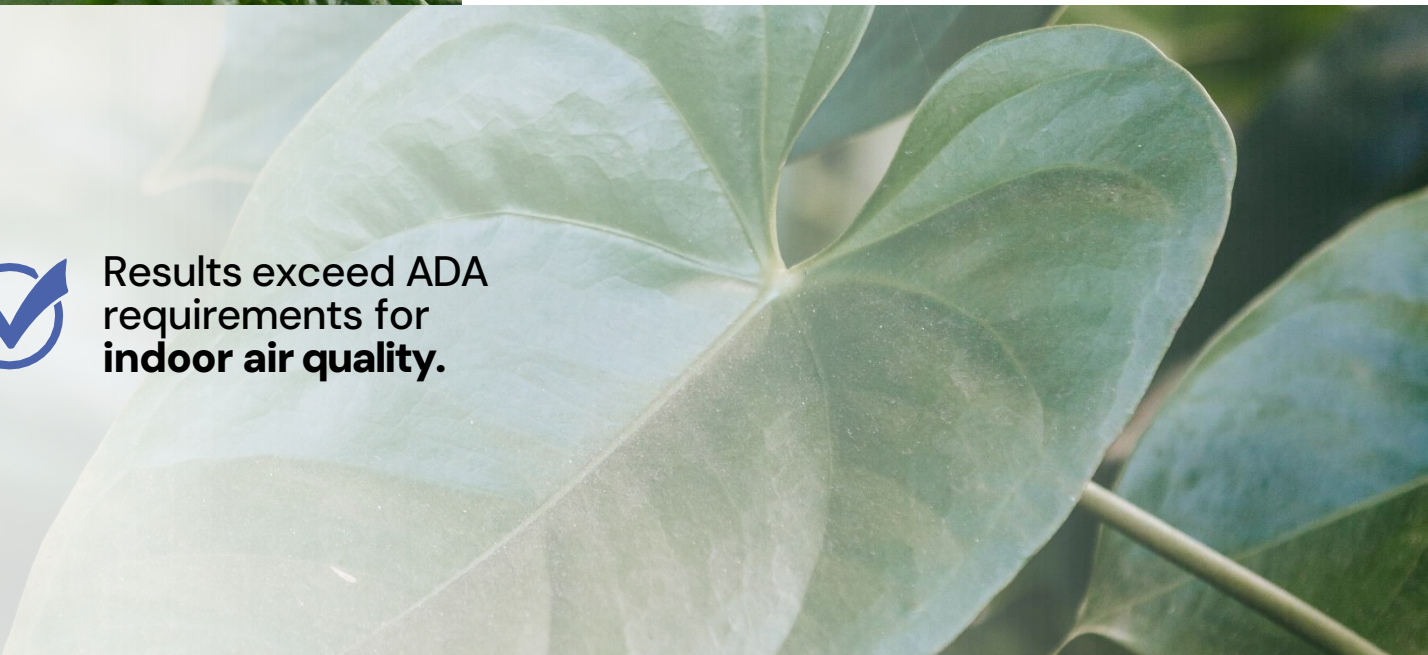
**SPEED** Access treated areas immediately after the 15-minute cycle is complete. No wiping necessary.

**EASE OF USE** Program routine room or zone decontamination in regular intervals or initiate on-demand treatments via mobile app.

**SAFETY** Protect workers and visitors. Environmentally friendly, and safe for all surfaces and electronic equipment.



Results exceed ADA  
requirements for  
**indoor air quality.**



# Total Reset Technology™

## How does it work?

**Total Reset Technology combines precision dry misting with the most effective, nontoxic decontaminant ever created.** Superior efficacy and ease of use make it the most comprehensive and cost-effective decontamination solution available.

①

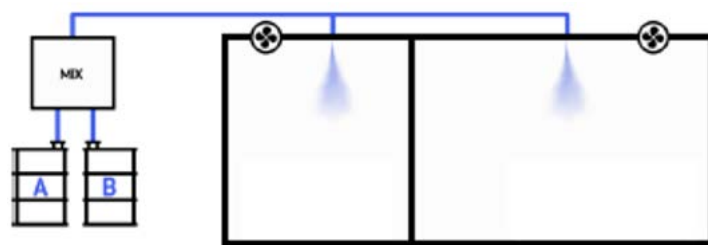
Control panel and chemical supply are installed in a utility room, piping and dry mist nozzles in the ceiling. **Little to no labor is required after setup.**

②

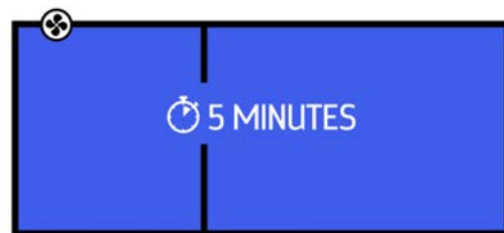
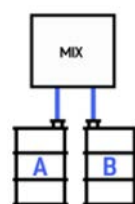
**Treatments can be scheduled or initiated on-demand** for individual rooms or zones using a mobile app.

③

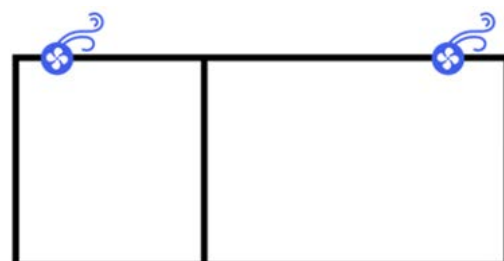
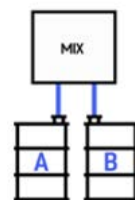
**Air and surfaces are disinfected, decontaminated, and ready for use—** a vast improvement in efficiency and efficacy compared to conventional processes.



*Emitters evenly distribute a precise amount of decontaminating dry mist.*



*After 5 minutes of saturation, dry mist is evacuated and replaced with fresh air.*



*Staff can immediately enter to complete preparations. No wiping required.*

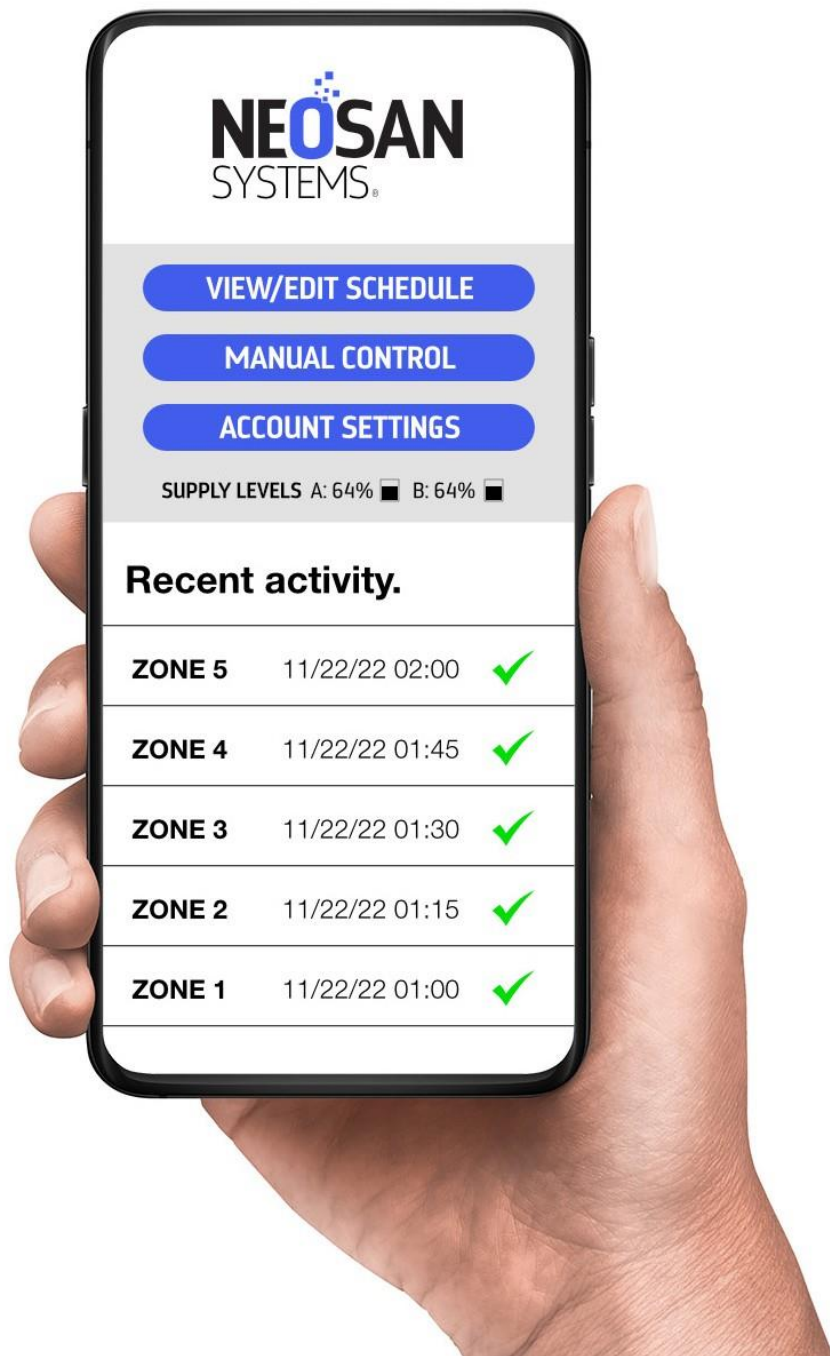
**COMPLETE**

Air & Surface Decontamination



**In Only 15 Minutes!**





## Control Everything With A Mobile App.

Safe, accurate,  
and convenient.

- Easily manage the system via mobile devices
- Preprogram regular decontamination intervals
- Initiate on-demand treatment cycles
- Schedule room or zone treatments
- Track cycles
- Receive supply level alerts and maintenance notifications

# What we're spraying.

Originally developed for military-grade biological and chemical decontamination, Total Reset™ has been commercialized by NeoSan Systems for dry mist automation.

## NeoSan Systems Total Reset™

EPA-registered, full-spectrum antibacterial, algacide, mildewstat, decontaminant, deodorizer, fungicide, virucide, disinfectant, and cleaner.

**Effective Against:** *Staphylococcus aureus*, *Staphylococcus epidermidis*, *Listeria monocytogenes*, Influenza Type A (H1N1) & B, *Pseudomonas aeruginosa*, *Klebsiella pneumoniae*, *Enterobacter aerogenes*, *Escherichia coli* (O157:H7), *Clostridium difficile*, *Salmonella enterica*, *Proteus mirabilis*, *Bacillus subtilis*, *Bacillus anthracis*, *Yersinia Pestis*, Norovirus, MRSA, ESBL, Vancomycin-resistant *Enterococcus faecalis*, Monkeypox, and COVID-19.



# NeoSan Systems Total Reset™



### 8-Log Kill Rate

Kills up to 99.999999% of bacteria, viruses, fungi, and mold



### Neutralizes Chemical Toxins

TICS, formaldehyde, VOC's, and toxic residues left by other cleaners



### Destroys Odors

Eliminate odors without the use of encapsulating agents or fragrances



### Nontoxic & Ecofriendly

Safely breaks down toxins into nontoxic, biodegradable components



### Noncorrosive & Nonflammable

Safe for all industrial surfaces, screens, and sensitive equipment



### Creates A Fungistatic Barrier

Protects surfaces from recolonization for over 21 days

## Nontoxic & eco-friendly.

Biodegradable.

Noncorrosive.

Eliminates irritants that can cause asthma, allergic reactions, and chemical sensitivity.

No formalin, chlorine, carbolic acid, or heavy metals.

Noncarcinogenic.

Dye & fragrance-free.

Will not damage screens or electronic equipment.

### **Safe for all industrial surfaces:**

Stainless steel, glass, aluminum, porcelain, granite, concrete, brick, asphalt paving, treated wood, butyl rubber, acoustic ceiling tile, commercial carpet, fabric-covered office partition panels, smooth latex painted wallboard, CARC painted metal, fabrics (cotton, polyester, microfiber, wool, acrylic, with elastomeric fibers).



# Understanding The Chemistry

Total Reset™ is based on the synergistic effect between two active ingredients:

**quaternary amines and hydrogen peroxide.** The formula also contains supporting compounds that enhance solubilization and reactivity, accelerate oxidation activity, increase bulk and surface viscosity, extend the shelf life of the formula, and control the chemical reaction and pH. All ingredients in the formulation, including water, are balanced in order to guarantee maximum efficacy under stable and safe conditions.



## Understanding Disinfection

*Kill Rate Per 1,000,000 Microorganisms*

- 1-LOG KILL (90%)** 100,000 Microorganisms Remain
- 2-LOG KILL (99%)** 10,000 Microorganisms Remain
- 3-LOG KILL (99.9%)** 1,000 Microorganisms Remain
- 4-LOG KILL (99.99%)** 100 Microorganisms Remain
- 5-LOG KILL (99.999%)** 10 Microorganisms Remain
- 6-LOG KILL (99.9999%)** 1 Microorganism Remains
- 7-LOG KILL (99.99999%)** .01 Microorganism Remains
- 8-LOG KILL (99.999999%)** .001 Microorganisms Remain

*That's best-in-class disinfection.*



## TRT 9000

- Control panel & chemical supply installed in utility room
- Piping and dry mist nozzles installed in the ceiling
- Customizable scheduling per room or zone
- Control via desktop or mobile app
- Single & multifloor installations
- Retrofit or new construction
- Consistent, 100% coverage
- 10 micron dry mist
- Amperage: 50-100 Amp
- Voltage: 240v or 480v



# How do we compare?

Touchless, automated decontamination systems remove or reduce reliance on operators and associated risks of human error relative to selection, formulation, distribution, and adhering to appropriate contact times. The most used systems use hydrogen peroxide vapor, aerosolized hydrogen peroxide, or ultraviolet (UV-C) radiation. These systems have important differences in their active agent, delivery mechanism, efficacy, process time and ease of use.

|                                            | Total Reset Technology™ | Fogging Robots | UV Light |
|--------------------------------------------|-------------------------|----------------|----------|
| Fast Treatments (Less than 30 minutes)     | ✓                       | ✗              | ✗        |
| Up To 8-Log Microbial Efficacy             | ✓                       | VARIES         | ✗        |
| Fully Automated Operation                  | ✓                       | ✗              | ✗        |
| Immediate Entry After Treatment            | ✓                       | VARIES         | ✓        |
| 100% Coverage                              | ✓                       | ✗              | ✗        |
| EPA Registered                             | ✓                       | VARIES         | ✗        |
| No Wiping Or Rinsing Needed                | ✓                       | ✗              | ✓        |
| Safe For All Surfaces, Equipment & Devices | ✓                       | VARIES         | ✓        |
| Neutralizes Chemical Toxins And Allergens  | ✓                       | ✗              | ✗        |
| Removes Odors                              | ✓                       | ✗              | ✗        |
| No Negative Effect On Indoor Air Quality   | ✓                       | ✗              | ✓        |
| Not Affected By Uneven Flooring            | ✓                       | ✗              | ✗        |



Automated Decontamination  
For Indoor Environments

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