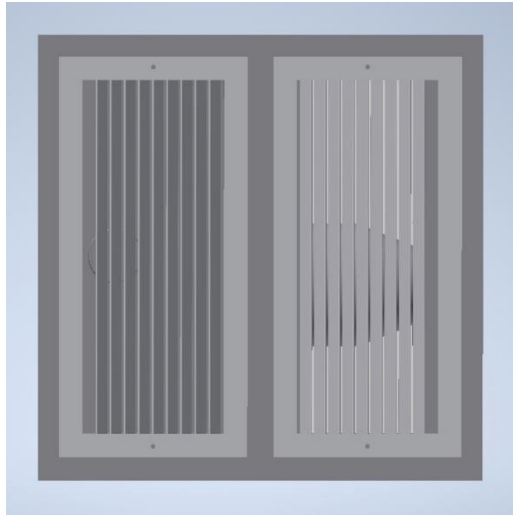


## Application

The Isotech Design Integrated Room Decontamination System is an advanced automated and energy efficient vapor phase hydrogen peroxide system that is easily integrated into clean rooms and pass through chambers. For most installations only nominal interface to the room HVAC system is required. Ideal for existing rooms and pass throughs.



**TYPICAL CEILING INSTALLATION**

## Key Features of the Isotech Design Room DECON System

- Fully Integrateable System:** The generator is fully automated allowing precise control of test conditions (hydrogen peroxide concentration, water vapor concentration), and exposure times. The integrated design also simplifies installation and setup. The liquid peroxide is housed outside the room with a remote HMI.
- Fully Automated Control:** Hydrogen peroxide and water vapor sensors (optionally integrated with the system) monitor and record the process conditions, with feedback control from the sensors, the vapor generator precisely maintains the concentration of hydrogen peroxide vapor, water vapor, and optionally the enclosure temperature and pressure.
- Intuitive User Interface:** Easy to use operation from User's laptop or via optional touch screen makes it simple to change process set points. The graphical data display makes it effortless for the user to confirm the conditions are in range during the cycle.
- Multiple Units:** For larger installations, several Decon and Aeration units can be linked to a common controller and user interface. The system is fully expandable to meet multiple room sizes.

## Decontamination Cycle and Method

Warmup:	The warmup phase warms (and optionally dehumidifies) the air, optimizing the environment for the introduction of the vapor phase hydrogen peroxide.
Conditioning:	The conditioning phase begins to introduce the vapor phase (dry) hydrogen peroxide into the room. During the process the intelligent automated controller monitors conditions to ensure the environment within the room remains well below the dewpoint. Once the desired hydrogen peroxide concentration is achieved the system will automatically progress to the decontamination phase.
Decontamination:	The intelligent automated controller monitors the room to maintain the desired conditions for the required decontamination period. The system will automatically adjust the injection rate to ensure the conditions in the room remain below the dewpoint. After the desired decontamination period has been achieved the system will automatically advance to the aeration phase.
Aeration:	The system stops injecting hydrogen peroxide and provides a flow of clean dry air into the room to reduce the concentration of hydrogen peroxide to an acceptable level. The exhaust from the room passes through a catalytic convertor where the hydrogen peroxide is reduced to harmless oxygen and water vapor. The system can be programmed to aerate until hydrogen peroxide levels are below 1 ppm. Connection to the room HVAC system may provide additional aeration.

## Standards

Underwriters Laboratory (UL): 61010-1, 61010-2-040  
Canadian Standards Association (CSA): C22.2 61010-1, 61010-2-040  
Conformité Européenne (CE): EMC 2014/30/EU; Low Voltage Directive (2014/35/EU, 2014/30/EU)(PENDING)

## Preventative Maintenance and Installation

DSE can perform the complete design, installations, start-up, and validation of the system.

DSE Decon Systems are designed to reduce preventative maintenance requirements. Sensor bundles should be shipped to DSE for calibration and refurbishment every 12 months; typical sensor life is 5 years. Modular subassemblies allow easy field service.

DSE has maintenance and calibration program available.

TECHNICAL SPECIFICATIONS\*

MODEL	PORTABLE DECON SYSTEM
WEIGHT	16 kg (35 lbs) per unit
DIMENSIONS	24 (609) x 24 (609) x 12 (305) in (mm)
CONTROLLER/HMI	Siemens Color Touch Screen or PC
Compressed Air	Not Required
Power	240 V, 10 A, 50/60 Hz
Volume	Up to 300 m <sup>3</sup> (10,000 ft <sup>3</sup> )**
Injection Rate	.5 to 24 g/min

\*Specifications can be customized per individual user requirements.

\*\*Typical room volume per single unit, virtually any size room can be accommodated

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About **Isotech design Inc** –

Since 1994, IsoTech Design is a leading designer and manufacturer of USP <797> clean air solutions, such as isolators and modular cleanrooms. We have been serving pharmacies for 20 years in sterile compounding, chemo compounding, hormone compounding and sterility testing. We have over 1000 certified facilities across the United States & Canada, who are using our clean air solutions for sterile and chemo compounding while complying with the USP <797>, their state board of pharmacies, OSHA and NIOSH regulations and requirements. Also, pharmacy facilities in 15 countries & 5 continents use our clean air solutions, which have been validated and certified according to their respective norms and regulations.