The Spire CURIS Decontamination System Model 2200C is a dedicated air-tight chamber with integrated industry leading hydrogen peroxide vapor distribution designed to re-process products and equipment that are heat and moisture sensitive. This system was designed and validated for medical reprocessing, not just a recycled shipping container.\(^*\)

Our unique reprocessing system for N95 respirators - the TRU Mask™ Individual Mask Management System – ensures hospital and research facility staff protection through safety and personal identification.

In a world where budgets are stretched, maximum use of capital purchases is critical, and personnel safety is paramount, the Spire decontamination chamber with CURIS technology is a game-changing tool.

**Safety for your personnel with the TRU Mask™ System**

**Key Features and Benefits**

- SPD Reprocessing of sealed medical procedure equipment
- CURIS HHP™ Generator provides thorough reprocessing with superior efficacy
- Sporicidal Disinfection – kills 99.9999% of C. diff in a tri-part soil load
- EPA-registered and on the EPA Lists K & N for use against SARS-CoV-2 (COVID-19)
- Modular design for quick assembly in immediate response applications

*FDA approval for reprocessing of N95 respirators pending.*
Beyond PPE
Our process utilizes CURIS’ patented Hybrid Hydrogen Peroxide™ technology for decontamination and disinfection of:

- Material handling racks
- Carts
- PPE (N95 Respirators)
- Beds / rails
- Wheelchairs/ IV poles
- Electronics / computers
- Medical devices
- Instrumentation
- Other miscellaneous items

Versatile System
This collapsible, self-contained, and automated decontamination chamber creates a sealed space ideal for reprocessing a wide variety of hospital or laboratory items, saving money and resources. Additionally, the CURIS disinfection generator is easily be ported into the chamber or detached to stand alone and treat different spaces like patient rooms or labs.

Knocked Down Shipment
Units are designed in sections for quick assembly and disassembly. It can be placed in a temporary location for immediate response applications and then disassembled and reassembled for easy movement into its final location within the facility structure or for storage. This is a thoughtfully designed system for reprocessing not just racks in a shipping container. Uncrated sections fit through a 3'-0” x 6'-8” standard doorway*.

Construction
Units are constructed from stainless steel insulated panels or individual aluminum insulated quick connect sealing panels, with a floor deck and ceiling. They can be floor mounted inside or outside a facility. The heavy-duty chamber is designed for large capacity, high throughput re-processing.

* depending on chamber size
The Spire CURIS Difference

CURIS Hybrid Hydrogen Peroxide™ (HHP™) Generator
Combining the best of both worlds, HHP™ uses a combination of vapor and aerosol to thoroughly penetrate the area and its contents. This safer VHP process ensures proper application with superior efficacy. CURIS ports into the Spire chamber in the far wall opposite the door to introduce HHP™ throughout the chamber.

Patented Pulse™ Technology
The CURIS System is a patented Pulse™ device combined with a proprietary 7% Hydrogen Peroxide (H2O2) solution which together are EPA-registered and on the EPA Lists K & N for use against SARS-CoV-2.

How It Works
CURIS Pulse™ automatically cycles on and off ensuring treated spaces maintain the necessary environment to achieve the highest level of efficacy.

Smart Flow
The 2200C can be configured in single and multi-flow internal locking door configuration. The “SMART FLOW” flexibility is provided with ease in the user set-up menu of the PLC.

PLC Controlled/Communication
The chamber can be configured to have communication connections with the CURIS Hybrid Hydrogen Peroxide™ generator to connect and communicate with the Spire PLC. Door safety and process control are monitored through the color touch screen HMI. Reports of each treatment are be available from the CURIS database. Process steps and run or abort signals are controlled by the HMI and are viewed remotely by the CURIS Application via iPad, mobile phone, and/or laptop if desired.

Sporicidal Disinfection in a Tri-Part Soil Load
As a sporicidal disinfectant, CURIS kills 99.9999% of hospital superbug C. diff. CURIS’ innovative Pulse™ technology ensures high-level disinfection by intermittently injecting solution to the space, maintaining an optimal concentration of H2O2 for a set dwell time.

Compartment Size
66" wide x 85" high x 92" long

Standard Overall Unit Size
88" wide x 94" high x 96" long

Note: Chamber can be designed to meet throughput requirements and customizable to fit specific applications.
Operation and Construction

**Operation**
Products to be decontaminated are placed on material handling racks in the chamber. The CURIS HHP™ generator and the chamber PLC adjust the chamber to ideal environmental conditions. Once these parameters are met, the system initiates the decontamination cycle. The cycle proceeds through the preprogrammed treatment schedule, and the entire cycle takes approximately an hour.

The 2200C is designed to be serviceable by placing all serviceable components on either the right hand or left-hand side of the chamber, as viewed from the load end.

Damper is fully open during exhaust and stand-by phases, and closed during decontamination operations. Damper is designed for vertical or horizontal connection to powered exhaust vent system.

**Construction**
The entire unit is constructed of stainless steel and insulated with chloride free fiberglass panels. The interior wall, top, and floor is a smooth stainless finish for a clean unobstructed flow for the hydrogen peroxide mist to move effectively. The complete unit is designed for quick installation and disassembly if needed for moving and/or storing.

Optionally, the entire unit can be constructed of 4” insulated aluminum panels, connected with camlocks. The interior wall, top, and floor is a smooth aluminum finish for a clean unobstructed flow for the hydrogen peroxide vapor to move effectively. The complete unit is designed for quick installation and disassembly if needed for moving and/or storing.

The chamber door(s) 48” x 84” are insulated and constructed of the same material, gasketed for sealing and equipped with heavy duty hinges, and a 14” x 14” tempered insulated double pane glass observation window. A door latch assembly provides easy access and exit from the chamber. In cases of outside installation the door entrance is covered with a weather hood and a low profile ramp for ease of loading and unloading caster wheeled carts.

The interior lighting is provided by LED 4000k lights for bright visibility.

**Placement**
Unit is placed inside the facility with or without HVAC integration or in a convenient outdoor location to vent to the outside.
Personnel Safety

Tru Mask™ Individual Mask Management System
Our unique reprocessing system for N95 respirators assures safety and personal identification for hospital and research facility staff. The system provides a combination of individualized baskets and stackable shelving that includes the mask owners name, QR code or standard bar code for identification.

Chamber
The safety system must pass the integrity of each limit switch and chamber environmental conditions before allowing the decontamination cycle to start. When all parameters are correct a tower light will turn green. If any of the safety systems are active a red light is illuminated and the system will not start.

A hydrogen peroxide monitor on the chamber checks for chamber safety prior to opening the chamber door. A red light will indicate if not safe to open initiating an exhaust parameter.

An emergency stop (ES) button is provided on the load-end control panel (and unload-end if pass-through unit). If either ES button is pressed, the safety system faults, and operation of the chamber will immediately stop, beginning an emergency exhausting. The operator must go through a sequence of equipment resets and alarm acknowledgments to restart the process.

An emergency cable stop inside the chamber allows an operator to immediately stop the unit if system is initiated. The magnetic door latch allows operator to easily push the door open from the inside. A cycle can not be started until the door is closed and sealed, signaling the PLC and CURIS system with a ready start prompt.

Onsite Validation
The decontamination process is validated using a biological indicator inoculated with 10^6 Geobacillus Stearothermophilus spores. These BI’s are available for onsite use and can be purchased through our website.

Solution
The Spire CURIS chamber incorporates a sporicidal 7% hydrogen peroxide for its treatment solution. The lower concentration of hydrogen peroxide, coupled with a lower PPM, provides a safer choice for efficacious disinfection.
Optional Features

- Pass-thru Unit
- Right or Left Hand Services
- Exhaust Fan
- Split Base
- Pass-thru Door Interlock System
- Air Compressor
- Seismic Tie Down
- Hand-held Hydrogen Peroxide Sprayer
- Extended Nozzle with Tripod
- Floor, Pit, or No-base Mounting

Accessories

- Transfer Cart
- Trolley
- Modular Walls
- Barrier Wall Flange(s)
Dimensional Drawings and Utilities

**Front View**

[Image of the front view of the equipment with dimensions 88" displayed]

**Top View**

[Image of the top view of the equipment with dimensions 96" displayed]

**Side View**

[Image of the side view of the equipment with dimensions 94" displayed]

Custom sizes available for additional throughput where needed.