



Automatic Decontamination Technology

The process of decontamination of both interior surfaces and components used in compounding sterile products within the MIC in a consistent and repeatable way has been made possible by the use of vapor phase hydrogen peroxide (VHP).

The proven technology of VHP low temperature biodecontamination is now available for MIC-EDU.

- Portable unit ideal for biodecontamination
- 316L stainless steel construction
- Ergonomically designed for maximum operator comfort and safety
- Operator friendly touch-pad control with printer
- Disposable air drying systems permit continuous operation and rigid humidity control for easy validation

The VHP cycle operates in a closed-loop configuration where the enclosure is subjected to four phases:

Dehumidification phase - Reduction of relative humidity during this step the system reduces the relative humidity within the MIC to allow for maximum effectiveness of the VHP.

Condition phase - Rapid increase to desired hydrogen peroxide vapor concentration creates an environment that will effectively kill microorganisms. The VHP is effective over a wide range of organisms and has been shown in studies to kill effectively when applied at the proper concentration.

Biodecontamination phase – Provides the maintenance of desired hydrogen peroxide vapor concentration to assure an effective kill.

Aeration phase – During this phase the hydrogen peroxide vapor is broken down into H₂O and oxygen. The by products of the hydrogen peroxide are environmentally friendly.

The process is fully automated. All cycle parameters are monitored and each run verified for presence of VHP using chemical indicators. Cycle times for decontamination have validated to a six-log reduction using *Geobacillus stearothermophilus*.