Isolators

ISOLATOR GENERAL INFORMATION

Isolators are designed to the challenges and market requirements for low OEL containment systems in Pharmaceutical, Biotechnology, Medical devices, Radiopharmaceutical and Nuclear industries. This technology is providing a safe working environment, both ergonomically and safety for operators in research, manufacture, testing and handling hazardous materials. For the aseptic application, ICS will deliver an environment capable of delivering a confident Class 100 (ISO5) or better working environment. This equipment can be portable or stationary systems or grouped to other isolators to form a “production system” or complete containment solution. Isolators are designed to be tested and certified by their respective industry standards. Our experienced staff has over 50 years of containment experience. They serve on many professional societies boards and standards committees to keep in pace with new technology and industry requirements.

ASEPTIC ISOLATORS

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This isolation technology is used for applications for sterility testing, fill lines and other advanced aseptic applications including aseptic containment systems

Isolators are manufactured with minimal cracks and crevices to aid in the distribution of the hydrogen peroxide gas and minimize occluded areas.

Equipment is designed to allow only the wetted surfaces inside the isolator. Greyside equipment is placed outside this area

The Allen-Bradley PLC system is used to control the validated startup of the equipment and interface to the VHP unit

Class 100 airflow (ISO 5) for better hydrogen peroxide distribution and quicker aeration

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A Rotary carousel can be installed for ergonomics. This allows the use of foot pedals to rotate the shelving to the operator and reduces back strain.

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The PLC is integrated to the VHP unit for safety. If a failure occurs with the VHP unit, the PLC can go to a safe mode. The portable VHP unit can also be integrated to the isolator PLC.

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Airlocks for aseptic transfers of production equipment items, sterility testing supplies or samples

Typical Aseptic Isolators

- Sterile Filtering

- Ampoule Filling

- Syringe Filling

- Sampling

- Sample Testing

- Sterility Testing

CONTAINMENT ISOLATORS

- Used for Low OEL processing of cytotoxic, potent and toxic (acute or chronic) hazards

- Isolators supplied for every operation from research to final production of a product

- Design and build capabilities

- Interface and integrate with existing or new equipment

- Mockups supplied for ergonomics

- Explosion Proof applications

- Analytical balance installations without granite blocks

- Aseptic-Containment applications where positive pressure and revert to a negative pressure environment to protect the facility

- CIP and WIP design into an isolator with validated cycles

- Interface with CIP Skids

- Allen-Bradley PLC units to implement and control the isolator and its safety functions

- PLC to reduce personnel SOPs at startup and increase safety

- Lock out of doors and equipment if the unit is not safe to be used

- Real time filter testing with PLC and particle counter

- Automatic pressure testing with startup of the isolator or every 21 hours

- Battery backup systems

- Portable powered isolators

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Safe change filters

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Bagging ports for waste and disposal in a contained manner

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Drum handling isolators and support equipment, portable or post hoists

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Bins, washers and other equipment supplied as a turn key application from sample to tablets

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Designed to applicable requirements of the American Glovebox Society

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Supply split valves, Rapid Transfer Ports and other transfer equipment

Typical Containment Isolators

- Laboratories, both analytical and chemical analysis
- Drum Sampling
- Sample testing
- Milling
- Micronize
- Drum Dispensing
- IBC Blending
- Fluid Bed Dryers
- Vacuum Ovens
- Reactor Charging
- Subdivision
- Documentation
- Tablet Press
- Tablet Test
- Tablet IBC shipping
- Blister Packaging
- Capper Containment