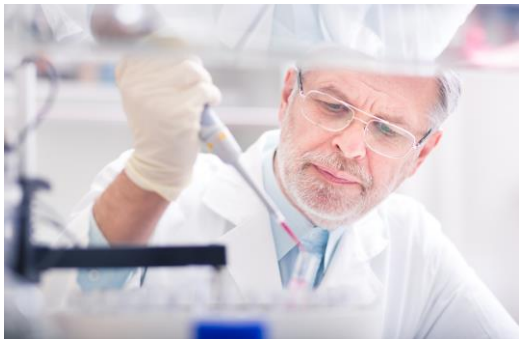
Product Introduction

Animal Research Workstations play an important role in providing operator, animal, and environmental protection during animal handling for clinical research. These workstations protect the operator from exposure to allergens and other potentially hazardous materials, as well as the animals inside the enclosure from exposure to airborne particulates.

Applications

Animal research and testing in the following industries:



Academic Research

Animal Behavioral Studies

Animal Breeding

Biotechnology

Cosmetics

Drug Development

Maintenance

Proper and timely maintenance is crucial to obtain optimal working performance of animal research workstations. Services such as preventive maintenance, annual certification, and decontamination, should be done by a professional field certifier.

A. Preventive Maintenance

It aims to prevent unexpected downtimes and failures through routine maintenance and early detection of problems for the cabinets to stay at optimal performance. The following are the procedures done when performing a preventive maintenance:

- Cleaning the work surfaces and walls with an appropriate disinfectant.
- Removing stubborn stains or spots on the worktop.
- Testing the audible and visual alarms.
- Checking the cabinet's mechanical and electrical functionality for any defect.

B. Certification

Certification of workstations must be done annually to lessen the risk of unanticipated failure and prevent the user from any danger. It is comprised of a series of tests in accordance with the manufacturer's specifications and relevant international standards.

- **Inflow Velocity Test**

  Measures the inlet volumetric flow rate on the front aperture at nominal operating speed.

- **Particle Count Test**

  Determines air quality by counting and sizing the number of particles in the air and classify the cleanliness level in a controlled environment.

- **Filter Integrity Test**

  Verifies the continued efficiency of the filter by introducing particulates and measuring the output.

- **Light Intensity Test**

  Determines light intensity from fluorescent/LED lamp in front to back centerline work surface level of the cabinet.

- **Noise Level Test**

  Determines noise level of the cabinet during normal operation in front of the work surface area, lower edge, and above the recessed work surface area.

- **UV Intensity Test**

  Determines the light intensity from UV lamp in front to back centerline work surface level of the workstation.

C. Decontamination

Gaseous decontamination guarantees ready and safe usage of Animal Research Workstations after installation, relocation, or filter replacement. It is done by using the following sterilants:

- Chlorine Dioxide
- Hydrogen Peroxide Vapour
- Formaldehyde (if requested by the client due to specific circumstances)

Note: This type of service is applied to Universal Animal Containment Workstation only.

Cleaning Procedure

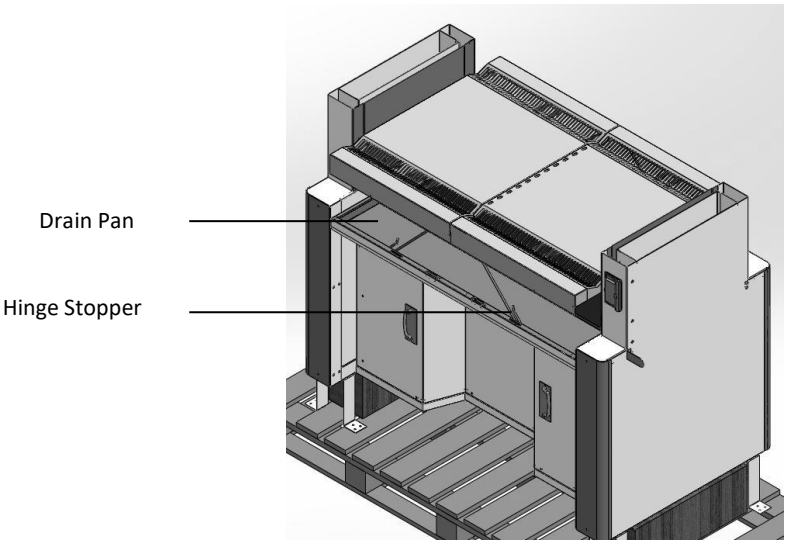
Cleaning the animal research workstation is important for containment and sterility. A periodic and thorough cleaning routine, including disinfection of all removable parts and surfaces, is recommended by the manufacturer to provide the utmost safety for personnel, samples, and the environment.

All these cleaning practices should be done on a regular schedule. It is recommended to surface decontaminate the work zone **daily** before and after using the cabinet with 70% isopropyl alcohol (IPA). Moreover, the following are the recommended general cleaning procedures for various parts of the cabinet:

- Clean the work surface and walls with appropriate disinfectant and soap water.
- Clean the sash window with appropriate disinfectant and glass cleaner.
- Use a damp cloth to clean the exterior surface of the workstation, particularly on the front and top to remove dust that has accumulated.
- Use sterile water to finish the cleaning and wash away any residue of disinfectant, soapy water, and glass cleaner.
- Ensure that the chemicals used for cleaning does not corrode the stainless steel work zone.

For removing stubborn stains or spots on the stainless steel surface, use **MEK (Methyl-Ethyl Ketone)**. In such cases, make sure that you wash the steel surface immediately afterward with sterile water and appropriate liquid detergent. Use a polyurethane cloth or sponge for washing. Regular cleaning of the stainless steel surface helps retain the attractive factory-finished appearance.

Cleaning the Drain Pan



1. Lift the work tray on both sides by using the handle on the air grille.
2. Prop it up by using the hinge stopper under the work tray to make it stable (inclined).
3. Remove sample wastes and clean with appropriate disinfectant–70% IPA solution (recommended).
4. Lower and reattach the work tray.

Note: This cleaning procedure is applied to Dual Access Containment Workstation only.

Working Safely with Animal Research Workstations

Work in the laboratory can be tedious and repetitive, and sometimes personnel tend to neglect the safety practices and protocols. These essential tips are part of good laboratory practices (GLP) to adhere to when working with animal research workstations.

- **Allow the purge cycles.** Leave the blower on for 5 minutes before & after use to purge the work zone of any contaminants.
- **Observe correct sash opening.** Follow the sash indicator on the workstation.
- **Stop using the workstation when alarms are activated.** Call your local representative for immediate service.
- **Do not block the grill.** Operate inside the safe working area only.
- **Do not store your stuff inside the workstation.** Overloading the workstation with unnecessary items can affect the workstation's airflow and containment.
- **Do not mix clean/sterile with contaminated items.** Create an invisible compartment in the work zone to separate sterile and used items.
- **Identify the proper location for the workstation.** External airflow disturbances (doors, excessive human traffic, windows, diffusers, air conditioner outlets) can compromise containment. Minimize disturbances to the airflow barrier.
- **Do not place an open flame inside the workstation.** The resulting buoyancy effect will affect the workstation's airflow and containment.
- **Wear Personal Protective Equipment (PPE) properly.** Wearing a back-fastened lab coat (to protect the operator from splashes) as well as double gloving (over the cuffs) should be practiced.

Safety starts with you.