

Hepa Filter Replacement for Biological Safety Cabinet (BSC)

HEPA Filters

HEPA filters, whether part of a building exhaust system or part of a cabinet, will require replacement when they become loaded to the extent that sufficient airflow can no longer be maintained. In most instances, filters must be decontaminated before removal. To contain the formaldehyde gas typically used for microbiological decontamination, exhaust systems containing HEPA filters require airtight dampers to be installed on both the inlet and discharge side of the filter housing. This ensures containment of the gas inside the filter housing during decontamination. Access panel ports in the filter housing also allow for performance testing of the HEPA filter.

A bag-in/bag-out filter assembly can be used in situations where HEPA filtration is necessary for operations involving biohazardous materials and hazardous or toxic chemicals. The bag-in/bag-out system is used when it is not possible to gas or vapor decontaminate the HEPA filters, or when hazardous chemicals or radionuclides have been used in the BSC, and provides protection against exposure for the maintenance personnel and the environment. Note, however, that this requirement must be identified at the time of purchase and installation; a bag-in/bag-out assembly cannot be added to a cabinet after-the-fact without an extensive engineering evaluation.

Step Of Change Hepa Filter:

1 Gas Decontamination

BSCs that have been used for work involving infectious materials must be decontaminated before HEPA filters are changed or internal repair work is done. Before a BSC is relocated, a risk assessment considering the agents manipulated within the BSC must be performed to determine the need and method for decontamination. The most common decontamination method uses formaldehyde gas, although more recently, hydrogen peroxide vapor and chlorine dioxide gas have been used successfully.

2 Change Hepa Filter

Change hepa filter must be doing by the experience people so they install hepa with right because if not after installation can be leak on the BSC and also make the airflow not following the standard for the BSC.

3 BSC Certification

After installation the hepa filter, doing the certification. This testing to ensure that installation is right and meet the standard and BSC is safe to use and there is no leak with the hepa filter. Testing for: inflow, downflow, smoke pattern test, leak test hepa filter.