#### INTRODUCTION

A **Biosafety Cabinet** is an equipment expected to deliver safety of the user and samples against biohazard and possible contaminants that may significantly affect one's scientific procedure.

A **Laminar Flow Cabinet** is designed to provide sterile working environment for products and processes from contamination. It should not be used in working with biological agents as it only provides sample protection.

Proper and timely maintenance is crucial to obtain optimal working performance for your Biosafety or Laminar Flow Cabinet. Taking care of your equipment is a must, just like how it takes care of your samples. These services include Preventive Maintenance, Annual Certification, and Decontamination (for BSC).

Our team is composed of experienced and qualified service representatives. We have the largest number of NSF BSC field certifiers with extensive technical skills ensuring that our service is on top of the line.





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Esco Biological Safety and Laminar Flow Cabinet Services

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#### **PREVENTIVE MAINTENANCE**

- Cleaning the work surface and walls with appropriate disinfectant agent.
- Removing stubborn stain or spots on working surface.
- Testing the audible and visual alarm.
- Checking the cabinet's mechanical and electrical functionality for any defect.

#### **CERTIFICATION**

# Inflow Velocity Test

Inflow velocity test measures the inlet volumetric flow rate on the front aperture at nominal operating speed.

Note: This test is applicable for BSC only.



## Downflow Velocity Test

Downflow velocity test measures the movement of air out of the cabinet and determines the performance of blower.



#### Particle Count Test

Particle count test determines the air quality by counting and sizing the number of particles in the air and classify cleanliness level in a controlled environment.

Note: This test is applicable for LFC only.

# • Filter Integrity Test

Filter integrity test verifies the continued efficiency of the filter by introducing particulates and measuring the output.



#### • Light Intensity Test

Light intensity test determines light intensity from fluorescent lamp in front to back centerline work surface level of the cabinet.



### Noise Level Test

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.

Note: This test is optional for field testing.



# • UV Intensity Test

UV intensity test determines the light intensity from UV lamp in front to back centerline work surface level of the cabinet.

Note: This test is optional for field testing.



#### DECONTAMINATION

Decontamination guarantees ready and safe usage of Biosafety Cabinets after installation, relocation, or filter replacement. It is done by using formaldehyde, hydrogen peroxide, or other agents by our trained service engineers.



Note: This service is applicable for BSC only.

## TROUBLESHOOTING AND PARTS REPLACEMENT

Esco provides replacements for consumable elements as well as any components that might fail while the product is in service or under warranty.

# IQ/QQ VALIDATION

Esco provides our customers instructions for Installation / Operation Qualification (IQ/OQ) protocol of our products. Esco can also perform these services directly on behalf of its customers or arrange them through independent approved local certifiers. The availability may vary from country to country and region to region. Also, Esco can train customer employees to perform IQ / OQ.

# **TRAINING AND WORKSHOPS**

Esco offers training for users of Biological Safety Cabinet and Laminar Flow Cabinet on the procedures in its User and Service Manuals.

## **SERVICES TO OTHER BRANDS**

Esco does not only provide services to its own product line but also for other brands. Esco assures that your Biological Safety Cabinet and Laminar Flow Cabinet will be properly checked according to your needs.