

# AMC

## AIRBORNE MOLECULAR CONTAMINATION *Solutions*



### REDEFINE PRODUCTIVITY

Airborne Molecular Contamination (AMC) in the form of vapors or aerosols can have a detrimental effect on products or processes. These chemicals include organics, acids, bases, metals, and dopants. AMC can cause the formation of particles or films that affect adhesion, bonding, conductivity, corrosion and hazing of optics, lasers, masks and reticles.

### CHEMICAL FILTER UNITS (CFUs) FOR MINIENVIRONMENTS AND ATMOSPHERIC TOOLS

#### MINIENVIRONMENT FFUs

- Adding AMC filtration to existing or new FFUs to remove AMCs from the controlled area.



- Matched to FFU Flow Rates
- Custom media selections
- Designed for serviceability
- Test and Balance Expertise

### AMC PROBLEMS CAN OCCUR AT PPBV LEVELS AND MUST BE CONTROLLED!

The sources of AMC's are Cleanroom construction materials, Process Chemicals, Recirculation from other parts of the fab, Process Tools, outside makeup air, Cleanroom consumable materials, and Cleanroom personnel. Traditional HEPA/ULPA filters do not remove AMC.

Pentagon Technologies is uniquely qualified to provide, integrate, and test your AMC solutions, with our industry leading experience in providing custom Fan/Filter Units for process tools, Minienvironment tool acceptance testing, and Cleanroom certification.

Our solutions include selecting the right AMC media type for your application, integrating the media with the FFU, installing the system, and performing a final test.

#### THE AMC FILTER SELECTION CRITERIA INCLUDES:

- Airflow Rate
- Efficiency required
- Contaminant concentration
- Filter life

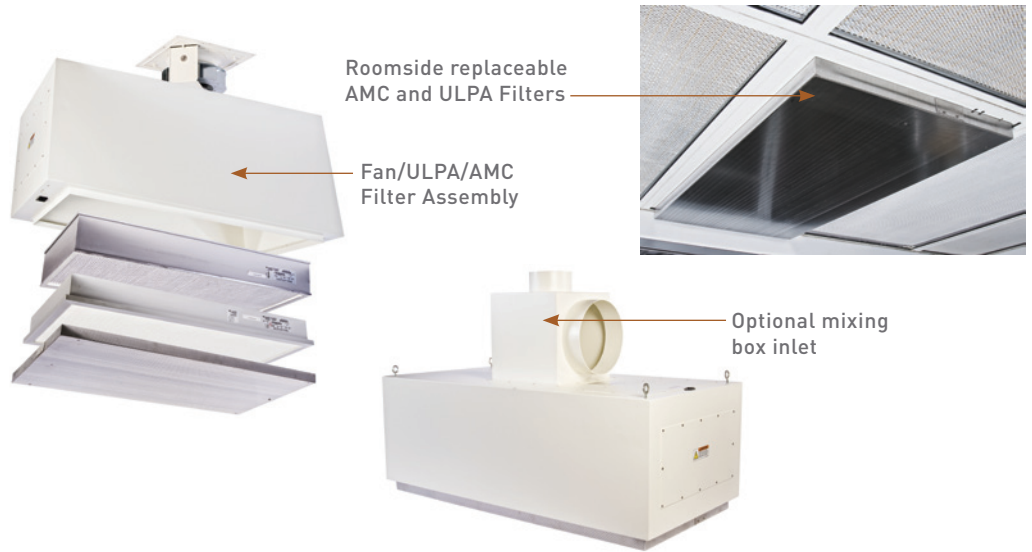
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## AIRBORNE MOLECULAR CONTAMINATION Solutions

### CREATING AN AMC CONTROLLED ENVIRONMENT WITH 2X4AMC/ULPA FAN POWERED MODULES

#### AMC ROOM CONTROL: 2X4AMC/ULPA FFUs

By installing our 2x4 AMC/ULPA Fan Filter Units, you can create a cleanroom where the air is continuously treated for AMC contamination.



### AMC CONTROLLED ASSEMBLY STATION

Isolates the product from the room and the operators!

#### ISOLATING THE PRODUCT FROM AMC CONTAMINATION

In many cases, the best solution is to provide an ULPA filtered work station that in addition to particle filtration, has an integrated AMC filtration system. Product can be worked on or stored in this AMC controlled environment, while being isolated from the ambient areas.

