

BOFA ADVANTAGE 500 iQ — XUS 060

What is the BOFA ADVANTAGE 500 iQ Filter System?

It is a high volume unit designed to scrub smoke and fumes generated by larger size or multiple laser systems. The BOFA Advantage 500 iQ is a mid to high end range of laser extraction system which combines extremely large filter capacity with high airflows and pressure. This combination makes them ideal for heavy duty applications that generate large amounts of particulate and gaseous organic compounds.

Why do you need a BOFA ADVANTAGE 500 Filter System?

Laser Fume

Lasers are now an essential tool in industry for cutting, marking, engraving and welding a vast range of materials. Metals are the most commonly worked substrate but organic materials (plastics, paper, wood) are catching up fast.

In virtually all the above operations some form of fume is given off as the laser thermally decomposes the substrate to a greater or lesser degree. This fume is a mixture of particulate and gaseous matter. Fume from materials such as metals and glass is mainly particulate, the majority of which is less than 1 μ (micron) in diameter.

Organic materials, particularly plastics, produce much more complex fumes. The particle size distribution of the airborne particles relates to the majority of polymers. Most of the particles are spherical and roughly 90% by weight are less than 1 μ in diameter. These particles fall within the respirable range and need to be removed from the working environment to prevent bronchial or lung damage.

The gaseous organic compounds produced are known as Volatile Organic Compounds, VOC's.



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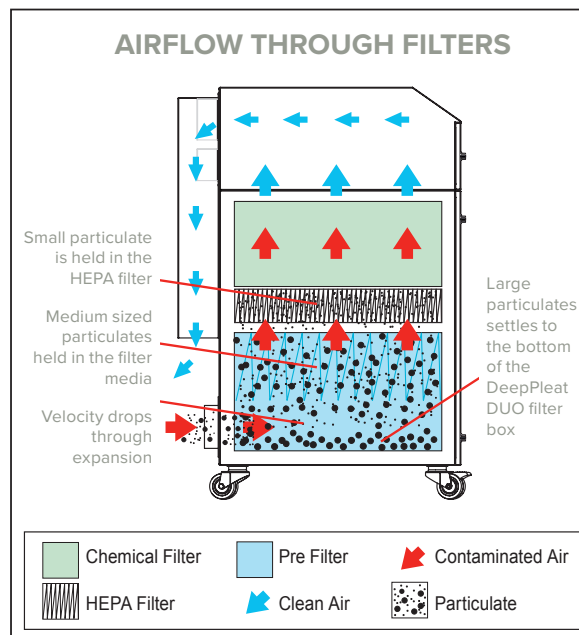
The VOC's produced are a mixture of the following:

- Aliphatic hydrocarbons: alkane, alkene
- Aromatic hydrocarbons: benzene, toluene, xylene
- Aldehyde: formaldehyde
- Polycyclic aromatic hydrocarbons: benzo(a)pyrene
- Additionally some materials have other specific groups e.g. PVC polymers generate HCl, 2 component epoxy polymers yield amines and PET generates THF.

How does the BOFA Advantage 500 iQ Filter System work?

This is a mid to high end laser fume extraction system combining extremely large filter capacity with high airflow and pressure rates, making it the ideal choice for heavy duty applications that generate large amounts of particulate and gaseous organic compounds.

Performance has been enhanced with individual filter status monitoring. The iQ operating system incorporates a method for monitoring the status of both the pre filter and combined (main) filter. Pre blockage warnings provide operators with ample time to prepare for a change by identifying which filter needs replacing, minimizing the potential for interrupting production for unplanned filter changes. No more guesswork.



Clever filter design delivers an extended filter life for the (more expensive HEPA) main filter that helps minimize the overall cost of ownership. BOFA's innovative and Patented DeepPleat filter technology is based on reverse airflow operation so more particulates are extracted early in the process, before reaching the main filter. The DeepPleat DUO filter process has a large size 15 liter volume capacity 'drop out chamber' that further boosts the removal of particulates.

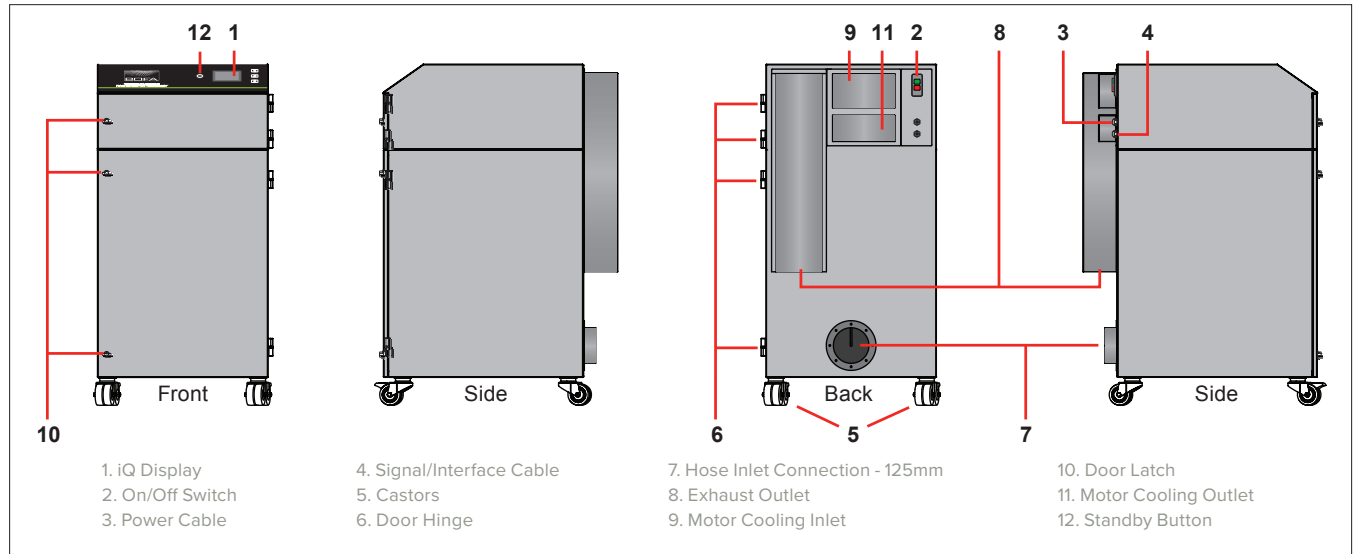
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BOFA ADVANTAGE 500 iQ Filter System Features:

- iQ Operating System
- High airflow and pressure rates
- Reverse Flow Air filter technology
- DeepPleat DUO pre filter
- Combined HEPA/Gas filter incorporating ACF technology
- Automatic flow control system
- Real time airflow reading
- Independent filter condition monitoring, display & warnings
- High contrast display
- 'Run safe' operation
- Remote diagnostics via USB
- Filters with long life & low replacement cost



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