TECH TIP

BOFA ADVANTAGE BASE 1 ORACLE - XUS 057

What is the BOFA ADVANTAGE Base 1 Filter System?

The BOFA ADVANTAGE Base 1 Oracle system is designed to scrub smoke and fumes generated by laser engraving systems. The unit has been designed so that a number of manufacturer's laser engravers can sit on top of the xtractor, effectively doubling it up as a work station.

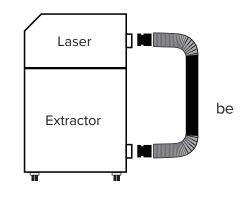
Why do you need a Filter System?

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 1μ (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 removed from the working environment to prevent bronchial or lung damage.



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



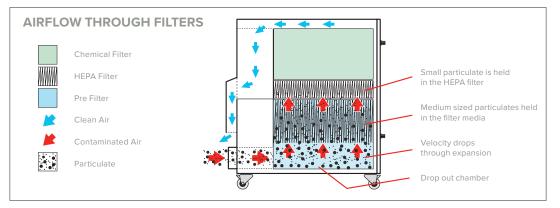
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The VOC's produced are a mixture of the following:

- 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 Base 1 Oracle Filer System work?

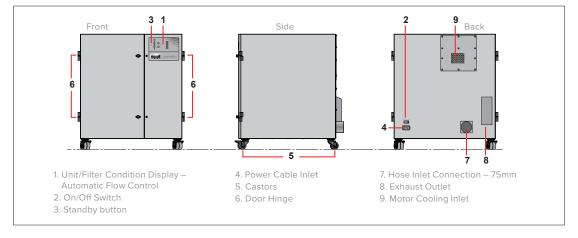
The revolutionary Auto-Voltage Sensing Turbine Automatically self adjusts to run on any voltage worldwide, whilst the Reverse Flow filter technology enhances filter performance and ensures longer filter life. Automatic Flow Control allows the user to preset correct flow rates, giving lower noise levels and further protection of both the Combined Filter and the DeepPleat DUO Pre Filter. The 'Easi-Seal' filter location makes filter change easy, quick and safe.



BOFA ADVANTAGE Base 1 Oracle Filter System Standard Features:

- Auto sensing voltage (90-257v) for global use
- Automatic flow control
- DeepPleat DUO pre filter
- Advanced Carbon Filter technology
- HEPA and Gas combined filter

- Reverse flow filter technology
- 'Easi-Seal' filter location
- Small footprint
- Low noise levels





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